GYF

Gain Your Favor

ISO9001 IATF16949 ISO14001

- 2022 -

PRODUCT

CATALOGUE

- POWER INDUCTOR
- COMMON MODE FILTER
- WIRE WOUND CHIP
- TRANSFORMER

Dedicated Integrity

Prompt Win-win

⚠ ATTENTIONS

本目录规格内容仅供参考，若有变更将不另行通知。未规定公差的尺寸仅代表通用规格。选用产品前请与格亚飞科技联络以取得最新产品资讯。

- 本公司的产品使用于音视频产品、家电、办公设备、车载、通讯、测量设备、机械工具及医疗器械等一般电子设备中.
- 当本公司产品非使用在一般电子设备场合时，请务必咨询我们的行销代表或产品工程人员。
- 谨此申明我们的制造过程不允许使用任何可破坏臭氧层的物质，我们的所有产品符合欧盟RoHS及REACH规范。
- 如您有特规的磁性元件需求，请联络我们。

- Specifications in this catalog are subject to change without notice. Any dimensions without tolerance is typical value, just for reference. Therefore, please contact GYF Technology to check for the latest information before practical application or usage of the products.

- GYF components are manufactured and promoted for use in general electronics devices such as audio-video equipment, home electric appliance, office automatic equipment, auto equipment, communication equipment, measurement hardware, machine accessory and medical equipment.

- In case of using the product for the purpose other than general electronics devices, please do not hesitate to consult with our sales representatives or product engineers.

- Hereby declare any ozone depleting substance isn’t permitted to use in our manufacturing process, and all of our products are in compliance with EU RoHS and REACH.

- Please contact GYF Technology if special magnetic components you need.

公司愿景

树立格亚飞品牌，成为您最钟意的合作伙伴！

成为磁性元件优秀的制造商和行业引领者！

为全球客户提供最优质的产品和服务！

Our Vision

Establish GYF brand and become your most preferred partner

To be the leader and excellent manufacturer of magnetic components

Provide the best quality and services for global clients

About Us 企业简介

格亚飞科技 是格亚飞（香港）科技有限公司在大陆投资成立的专注于电感类磁性元件之研制、生产及销售的公司，我们秉持**“ 诚信、专精、快捷、共赢 ”**的宗旨，并以不断革新的产品技术来服务客户。

格亚飞（香港）科技有限公司成立于2007年，一直致力于磁性元件的研制及销售，及半导体元件的分销与代理，为全球的EMS和OEM、ODM客户提供优质的物料供应服务。

格亚飞汇集来自于美系、德系及台系一线电感品牌厂商的高层管理精英及工程技术人才，全面性掌握电感元件的应用及设计优化与革新，可依据客户设计需要提供量身定制的产品及最佳的电感解决方案。

公司产品广泛应用于汽车电子、消费电子、网通、工控、医疗、安防、照明、智能电表等领域。无铅化制程及ROHS、REACH环保保证，并对材料、产品进行成份分析及信赖性验证，严格执行“GP”要求，是您忠实的绿色合作伙伴。

为了不断地提升产品竞争力，确保产品成本优势，公司积极投资于内地工厂，成立了重庆生产基地，以减缓客户端日益增长的成本压力，从而达到与客户互利双赢。

GYF Technology invested by GYF (HK) Technology is a company that focuses on design, production and marketing of magnetic components, and always adheres to the principle **“ Integrity, Dedicated, Quick & Mutual benefit“** and continuous mprovement to serve our customers.

GYF (HK) Technology was founded in 2007 and is always dedicated to designing & selling of magnetic components, and distributing of semiconductors. Provide high-quality materials and services for global EMS, OEM & ODM clients.

GYF gathered senior management elites & engineering technical talent who came from inductor brand manufacturers of America, Germany & Taiwan. Entirely mastered its applications, design optimization and innovation. We can provide the customized products and the best solutions for our customers. Our products are widely used in fields of automotive electronics, consumer electronics, LAN, IPC, medicine, security, lighting, smart meter, etc. With the guaranty of lead-free, RoHS&REACH certification, reliability verification and strictly implementing of GP, we would be your faithful and green partner.

In order to increase our competitiveness and ensure a good cost advantage, we invested an automatic production plant in Shenzhen, and a plant in Chongqing, so as to achieve the principle “Mutual Benefit“.

Notebook

LED Backlight
FNR series
FDRH series
FMDS series
FAMH series

WLAN Module
FCD series
FNR series
FSD series
FWHF series

Ethernet Port
FLT series

USB 2.0/3.0 & HDMI & IEEE
FSCM series

EMI Filter For Power Line
FDLW series

DC-DC Converter SSD/HDD
FCD series
FNR series
FMDS series
FCDN series

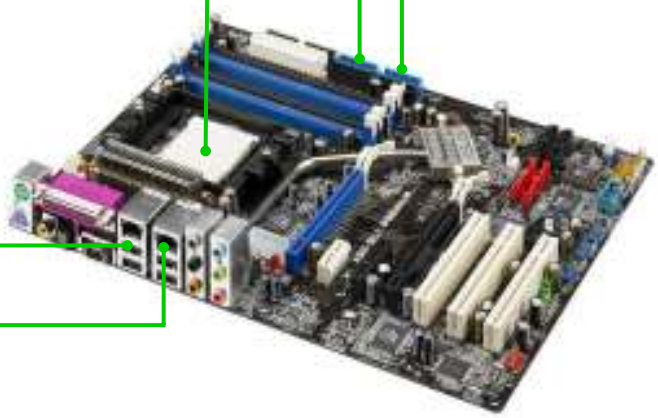
Power Supply For CPU
FMDS series
FAMH series

Power Supply For I/O
FCD series
FNR series

LED Lighting

DC-DC Converter
FCD series FDC series
FNR series FTR series

Main Board / Graphic Card



EMI Filter For Power In
FDLW series

Power Supply For CPU
FMDS series
FAMH series

Power Supply For I/O
FCD series
FNR series
FDRH series

USB 2.0/3.0 & HDMI & IEEE
FSCM series

Ethernet Port / WLAN Module
FCD series
FNR series
FSD series
FWHF series

Wireless Router / Modem / AP / EOC / PLC

Ethernet Port
FLT series

DC-DC Converter
FCD series
FNR series
FDO series
FMDS series
FCDN series
FCDM series
FDRH series
FDRM series

Switching Power
FTR series

EMI Filter For Power In
FDLW series
FDCM series

Signal Line
FWHF series
FWHC series

USB 2.0/3.0 & HDMI & IEEE
FSCM series

Security

DC-DC Converter
FCD series
FNR series
FMDS series
FCDN series
FCDM series
FDRH series
FDRM series

WLAN Module
FCD series
FNR series
FSD series
FWHF series

EMI Filter For Power In
FDLW series
FDCM series

USB 2.0/3.0 & HDMI & IEEE
FSCM series

Game Machine

DC-DC Converter For SSD/HDD
FCD series FMDS series
FNR series FCDN series

Switching Power Supply
FTR series FDCM series
FDC series

DC-DC Converter
FCD series FCDM series
FNR series FDRH series
FDO series FDRM series
FMDS series FAMH series
FCDN series

DVD / HDD / Card Slot
FWHC series

EMI Filter For Power In
FDLW series
FDCM series

WLAN/Bluetooth Module
FNR series
FWHC series
FWHF series

APPLICATIONS

TV / Panel / Monitor

RF Module
FWHF series

Camera Module
FNR series
FWHC series

WLAN Module
FCD series FWHF series
FNR series FCDN series
FSD series FLT series

Audio Circuit
FNR series
FWHF series

LED Backlight
FNR series FMDS series
FCDM series FCDN series
FDLW series FTR series
FEQ25 series

EMI Filter For Power In
FDLW series
FDCM series

Power Bank

DC-DC Converter
FCD series
FNR series
FMDS series
FCDN series
FCDM series
FDRH series
FDRM series
FTR series

EMI Filter For Power In
FDLW series

USB 2.0/3.0 & HDMI & IEEE
FSCM series

Automotive

Window Control
FCDM series
FDRH series
FDRM series

Bluetooth Device
FNR series
FWHC series

ETC System
FNR series
FWHC series
FCDN series

Multimedia
FNR series FWHF series
FCDM series FDLW series
FDRH series FDCM series
FDRM series

Parking Sensor
FCD series FCDS series
FNR series FWHC series
FSD series FTR series

Battery Control
FMDS series FDRH series
FCDN series FDRM series
FCDM series FSCM series
FTR series

Tyre Monitoring
FWHC series
FSCM series
FDLW series
FMDS series

Airbag System
FCD series
FNR series
FDRH series
FDRM series

ABS Control
FWHC series

Auto Lighting
FMDS series
FCDM series
FDRH series
FDRM series

Mobile Phone / PAD

Wifi / Bluetooth Module
FNR series
FWHF series
FWHC series

DC-DC Converter
FCD series
FNR series
FMDS series

EMI Filter For Power In
FDLW series
FDCM series

LED Backlight
FNR series
FMDS series

Switching Power
FNR series
FMDS series
FDLW series

USB 2.0/3.0 & HDMI & IEEE
FSCM series

Global Position System (GPS)

DC-DC Converter
FCD series
FNR series
FMDS series

EMI Filter For Power In
FDLW series
FDCM series

Panel Backlight
FNR series
FMDS series

ETC System
FSCM series

Audio/Video Circuit
FNR series
FWHC series

Printer

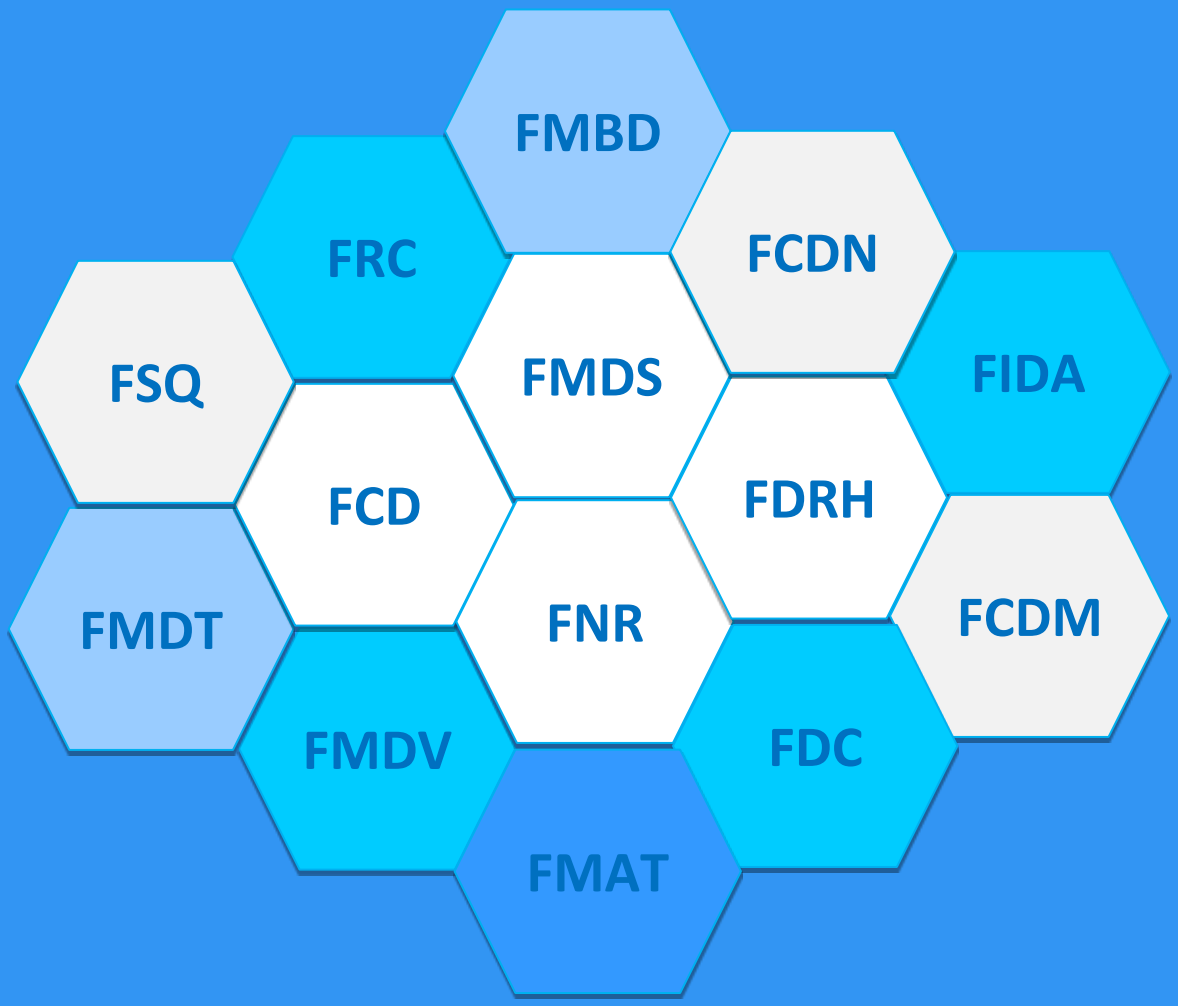
Signal Line
FWHF series
FWHC series

USB I/F
FSCM series
FDLW series

Switching Power
FDC series
FTR series

DC-DC Converter
FCD series
FNR series
FDO series
FMDS series
FAMH series
FCDM series
FDRH series
FDRM series

Paper
FSCM series


FMBD
FRC
FCDN
FSQ
FMDS
FIDA
FCD
FDRH
FMDT
FNR
FCDM
FMDV
FDC
FMAT

>> PRODUCT

PRODUCT INDEX

SMD Power Inductor - Unshielding Type

Series Name		Part Name	Size (mm)			Inductance Range (uH)							Rated Current (Amp)	Page
			A	B	C	0.1	1.0	10	100	1000	10000	20000		
FCD		FCD31	3.5	3.0	1.6								0.05 ~ 1.60	19~21
		FCD32	3.5	3.0	2.0								0.10 ~ 3.34	
		FCD43	4.5	4.0	3.2								0.08 ~ 3.80	
		FCD52	5.8	5.2	2.5								0.17 ~ 4.20	
		FCD53	5.8	5.2	3.2								0.15 ~ 4.50	
		FCD54	5.8	5.2	4.5								0.15 ~ 5.00	
		FCD73	7.8	7.0	3.5								0.28 ~ 7.00	
		FCD75	7.8	7.0	5.0								0.10 ~ 7.50	
		FCD77	7.8	7.0	7.0								1.00 ~ 2.70	
		FCD104	10.0	9.0	4.2								0.32 ~ 8.70	
		FCD105	10.0	9.0	5.5								0.30 ~ 8.63	
		FCD106	10.0	9.0	6.6								0.35 ~ 4.00	
		FCD107	10.0	9.0	7.2								0.35 ~ 9.50	
		FCD108	10.0	9.0	8.0								1.90 ~ 3.00	
FMCD		FMCD75	7.5	8.0	5.5								0.18 ~ 2.00	22
FDO		FDO0402	6.6	4.5	2.9								0.07 ~ 2.90	23~26
		FDO0802	12.3	9.3	3.0								0.05 ~ 2.00	
		FDO0804	13.0	9.4	5.2								0.30 ~ 6.80	
		FDO0810	13.0	9.4	11.4								0.10 ~ 9.20	
		FDO1306	18.5	15.2	7.1								0.56 ~ 8.60	
FDOH		FDOH0503	9.0	6.2	4.9								0.72 ~ 4.40	27~28
		FDOH0804	13.4	10.0	6.4								4.80 ~ 12.00	
		FDOH1608	22.3	16.3	8.0								0.60 ~ 15.00	

SMD Power Inductor - Shielding Type

Series Name		Part Name	Size (mm)			Inductance Range (uH)							Rated Current (Amp)	Page
			A	B	C	0.1	1.0	10	100	1000	10000	20000		
FNR		FNR201610/H	1.6	2.0	1.1								0.60 ~ 3.00	29~40
		FNR252010/H	2.0	2.5	1.1								0.50 ~ 3.70	
		FNR252012/H	2.0	2.5	1.2								0.38 ~ 4.50	
		FNR3010	3.0	3.0	1.0								0.38 ~ 1.45	
		FNR3012/H	3.0	3.0	1.2								0.35 ~ 2.90	
		FNR3015/H	3.0	3.0	1.5								0.35 ~ 5.90	
		FNR4012/H	4.0	4.0	1.3								0.37 ~ 3.20	
		FNR4018	4.0	4.0	1.8								0.17 ~ 2.50	
		FNR4020/H	4.0	4.0	2.1								0.35 ~ 7.00	
		FNR4030	4.0	4.0	3.0								0.45 ~ 3.50	
		FNR5020	5.0	5.0	2.0								0.53 ~ 3.70	
		FNR5030	5.0	5.0	3.0								0.45 ~ 5.00	
		FNR5040	5.0	5.0	4.0								0.40 ~ 4.90	
		FNR6015	6.0	6.0	1.5								1.00 ~ 2.80	
		FNR6020	6.0	6.0	2.0								1.00 ~ 3.50	
		FNR6028	6.0	6.0	2.8								0.60 ~ 4.60	
		FNR6045	6.0	6.0	4.5								0.20 ~ 5.10	
		FNR8040	8.0	8.0	4.0								0.55 ~ 6.30	
		FNR8065	8.0	8.0	6.5								0.90 ~ 3.50	
		FNR1050	10.0	10.0	5.0								1.10 ~ 3.50	
FCDL		FCDL6045	6.2	6.0	4.8								0.08 ~ 4.80	41~44
		FCDL7030	7.5	7.5	3.0								0.85 ~ 6.50	
		FCDL7040	7.5	7.5	4.0								0.65 ~ 8.00	
		FCDL7045	7.5	7.5	4.5								0.55 ~ 8.00	
		FCDL7060	7.5	7.5	6.0								0.55 ~ 6.60	
FCDM		FCDM104	10.2	10.2	4.5								0.40 ~ 8.50	45~47
		FCDM105	10.2	10.2	5.1								0.45 ~ 8.30	

PRODUCT INDEX

SMD Power Inductor - Shielding Type

Series Name		Part Name	Size (mm) A	Size (mm) B	Size (mm) C	Inductance Range (uH) 0.1 / 1.0 / 10 / 100 / 1000 / 10000 / 20000	Rated Current (Amp)	Page
FCDZ		FCDZ104	10.2	10.2	4.5		1.4 ~ 12.0	48~49
		FCDZ105	10.2	10.2	5.1		1.0 ~ 15.0	
FCDN	S-type R-type	FCDN32	3.7	3.7	1.8		0.15 ~ 1.60	50~52
		FCDN42	4.7	4.7	2.0		0.14 ~ 1.72	
		FCDN43	4.7	4.7	3.0		0.13 ~ 2.56	
		FCDN52	5.7	5.7	2.0		0.18 ~ 2.60	
		FCDN53	5.7	5.7	3.0		0.20 ~ 2.60	
		FCDN62	6.7	6.7	2.0		0.65 ~ 2.60	
		FCDN63	6.7	6.7	3.0		0.21 ~ 4.10	
		FCDN64	6.7	6.7	4.1		0.32 ~ 4.20	
		FCDN83	8.0	8.0	3.0		0.51 ~ 4.26	
		FCDN84	8.0	8.0	4.0		0.83 ~ 5.80	
		FCDN85	8.0	8.0	4.5		0.90 ~ 5.15	
		FCDN86	8.0	8.0	6.0		0.70 ~ 6.00	
FCDS		FCDS310	3.3	3.3	1.1		0.21 ~ 0.73	53~54
		FCDS312	3.3	3.3	1.3		0.22 ~ 0.90	
		FCDS315	3.3	3.3	1.6		0.25 ~ 1.95	
		FCDS320	3.2	3.2	2.0		0.70 ~ 5.35	
		FCDS418	4.2	4.2	1.8		0.26 ~ 1.68	
FDOS		FDOS0402	6.6	4.5	2.9		0.07 ~ 0.20	55~57
		FDOS0804	13.0	9.4	5.1		0.17 ~ 5.00	
		FDOS1306	18.5	15.2	7.6		0.53 ~ 3.90	
FDRH		FDRH62	6.3	6.3	3.0		0.19 ~ 1.94	58~60
		FDRH64	6.3	6.3	5.0		0.14 ~ 2.20	
		FDRH73	7.3	7.3	3.5		0.16 ~ 3.40	
		FDRH74	7.3	7.3	4.5		0.18 ~ 5.50	
		FDRH105	10.0	10.0	5.8		0.50 ~ 7.80	
		FDRH124	12.0	12.0	4.5		0.50 ~ 7.80	
		FDRH125	12.0	12.0	6.0		0.40 ~ 8.50	
		FDRH127	12.0	12.0	8.0		0.55 ~ 10.40	
		FDRH129	12.0	12.0	10.0		0.52 ~ 16.00	
FDRC		FDRC74	7.3	7.3	4.6		0.20 ~ 3.06	61~63
		FDRC104	10.0	10.0	5.0		0.70 ~ 3.10	
		FDRC125	12.0	12.0	6.5		0.90 ~ 2.80	
		FDRC127	12.0	12.0	8.5		0.60 ~ 8.10	
FDRM		FDRM74	7.8	7.8	4.5		0.38 ~ 8.40	64~69
		FDRM125	12.5	12.5	6.0		0.56 ~ 9.00	
		FDRM127	12.5	12.5	8.0		0.35 ~ 11.00	
		FDRM129	12.5	12.5	10.0		0.85 ~ 10.00	
		FDRM157	15.8	15.8	7.6		3.00 ~ 4.20	
		FDRM1510	15.8	15.8	10.8		3.20 ~ 4.00	
FLPS		FLPS5015	5.0	5.0	1.5		0.18 ~ 2.65	70~72
		FLPS5020	5.0	5.0	2.0		0.37 ~ 6.00	
		FLPS5030	5.0	5.0	3.0		0.20 ~ 2.65	
FMWC		FMWC3225	3.2	2.5	2.2		0.05 ~ 0.77	73~76
		FMWC4532	4.5	3.2	3.2		0.03 ~ 1.05	
FSD		FSD31	3.9	3.9	1.3		0.11 ~ 1.60	77~78
		FSD32	3.9	3.9	2.0		0.08 ~ 1.84	
		FSD33	3.9	3.9	3.0		0.08 ~ 1.90	
		FSD52	5.0	5.0	2.0		0.19 ~ 2.33	
		FSD53	5.0	5.0	3.0		0.19 ~ 4.00	
FSL		FSL63	6.2	6.2	3.0		0.19 ~ 2.50	79~83
		FSL73	7.4	7.4	3.5		0.41 ~ 3.12	
		FSL74	7.4	7.4	4.5		0.27 ~ 2.88	
		FSL104	10.4	10.4	4.8		0.22 ~ 3.60	
		FSL126	12.8	12.8	5.8		0.29 ~ 3.60	
		FSL127	12.8	12.8	6.8		1.00 ~ 10.00	
		FSL128	12.8	12.8	7.8		1.30 ~ 13.00	

PRODUCT INDEX

High Current Inductor - Assembly Type

Series Name		Part Name	Size (mm)			Inductance Range (uH)							Rated Current (Amp)	Page
			A	B	C	0.1	1.0	10	100	1000	10000	20000		
FMAT		FMAT6030	7.0	6.9	3.3								6.5 ~ 22.0	84~87
		FMAT6040	7.0	6.9	4.0								6.0 ~ 21.0	
		FMAT6050	7.0	6.9	5.0								3.5 ~ 20.0	
		FMAT1030	10.5	10.2	3.1								9.0 ~ 22.0	
		FMAT1040	10.5	10.2	4.2								8.0 ~ 25.0	
		FMAT1050	10.5	10.2	5.0								5.0 ~ 25.0	
		FMAT1335	13.0	12.8	3.5								12.0 ~ 24.0	
		FMAT1350	13.0	12.8	5.0								8.5 ~ 29.0	
		FMAT1365	13.0	12.8	6.5								6.0 ~ 32.0	
		FMAT1890	18.3	18.2	9.2								6.8 ~ 41.5	
		FMAT2212	22.5	22.0	12.4								7.0 ~ 29.0	
FMDV		FMDV4040	4.0	4.0	4.0								19.0	88~91
		FMDV7032	7.4	6.6	3.2								28.0	
		FMDV7050	7.0	7.0	5.0								43.0	
		FMDV8050	7.6	7.5	5.0								65.0	
		FMDV9080	9.6	6.4	8.0								51.0	
		FMDV1050	10.2	7.0	5.0								53.0	
		FMDV1070	10.5	8.0	7.0								61.0	
		FMDV1080	10.2	8.0	8.0								68.0	
		FMDV1175	11.2	7.2	7.5								55.0	
FAMH		FAMH1052	10.6	10.6	5.2								11.5 ~ 16.3	92~94
		FAMH1360	13.0	13.5	5.8								7.2 ~ 16.9	
		FAMH1390	13.0	13.5	9.0								7.7 ~ 9.2	
		FAMH1480	14.9	15.1	8.3								8.3 ~ 13.0	
		FAMH1412	14.9	15.1	12.2								11.5 ~ 16.3	
		FAMH1250	12.8	10.5	5.5								23.0	
FAME		FAME2612	26.5	21.2	12.5								12.0 ~ 45.0	95~97
		FAME2012 FAME2014 FAME2016	20.9	14.5	12 14 16									
FIDA	DIP	FIDA1010	10.5	10.5	6.4								4.8 ~ 5.5	98~101
		FIDA1315	13.0	15.0	8.4								5.5 ~ 8.5	
		FIDA1416	14.0	16.0	9.6								5.0 ~ 8.0	
		FIDA1516	14.5	16.0	16.5								4.5 ~ 7.0	
		FIDA1616	16.5	16.0	21.5								5.0 ~ 6.0	
	SMD	FIDA0910	9.0	10.0	10.0								2.5 ~ 4.5	102~103
		FIDA1010	10.5	10.5	12.8								4.1 ~ 7.2	
FMAS		FMAS0807	8.4	7.9	7.0								14.0 ~ 20.5	104~105
		FMAS1009	10.9	10.0	9.3								9.0 ~ 21.5	
		FMAS1210	12.1	11.4	9.5								9.0 ~ 27.0	
FMAC		FMAC080806	8.0	8.0	6.5								16.0 ~ 25.0	106~107
		FMAC100609	10.3	6.3	9.5								35.0	
		FMAC101009	10.2	10.2	9.3								18.0 ~ 40.0	
		FMAC121209	12.2	12.2	9.5								15.0 ~ 25.0	
		FMAC131210	13.0	12.0	10.8								17.0 ~ 30.0	

PRODUCT INDEX

High Current Inductor - Molding Type

Series Name		Part Name	Size (mm)			Inductance Range (uH)							Rated Current (Amp)	Page
			A	B	C	0.1	1.0	10	100	1000	10000	20000		
FMDA		FMDA4020	4.1	4.4	2.0								1.5 ~ 8.0	108~113
		FMDA5015	5.2	5.6	1.5								1.8 ~ 5.0	
		FMDA5018	5.2	5.6	1.8								1.8 ~ 5.0	
		FMDA5020	5.2	5.6	2.0								1.8 ~ 7.0	
		FMDA5030	5.2	5.6	3.0								0.8 ~ 8.0	
		FMDA5040	5.2	5.6	4.0								1.0 ~ 5.0	
		FMDA6018	6.6	7.1	1.8								3.0 ~ 10.0	
		FMDA6020	6.6	7.1	2.0								2.0 ~ 10.0	
		FMDA6024	6.6	7.1	2.4								2.5 ~ 12.0	
		FMDA6030	6.6	7.1	3.0								1.0 ~ 18.0	
		FMDA6040	6.6	7.1	4.0								1.5 ~ 15.0	
		FMDA6050	6.6	7.1	5.0								1.2 ~ 12.0	
		FMDA8050	8.0	8.5	5.0								2.5 ~ 33.0	
		FMDA1030	10.2	11.0	3.0								4.0 ~ 13.0	
		FMDA1040	10.2	11.0	4.0								1.8 ~ 28.0	
		FMDA1045	10.2	11.0	4.5								2.0 ~ 4.0	
		FMDA1050	10.2	11.0	5.0								2.0 ~ 7.0	
		FMDA1235	12.8	14.0	3.5								13.0 ~ 28.0	
		FMDA1240	12.8	14.0	4.0								4.0 ~ 12.0	
		FMDA1250	12.8	14.0	5.0								3.0 ~ 32.0	
		FMDA1260	12.8	14.0	6.0								6.0 ~ 16.0	
		FMDA1265	12.8	14.0	6.5								2.5 ~ 5.0	
		FMDA1770	17.1	17.3	7.0								3.0 ~ 42.0	
FMDB		FMDB201610	2.0	1.6	1.0								1.3 ~ 4.0	114~120
		FMDB201612	2.0	1.6	1.2								1.3 ~ 4.2	
		FMDB252010	2.5	2.0	1.0								1.0 ~ 4.5	
		FMDB252012	2.5	2.0	1.2								2.0 ~ 4.1	
		FMDB322510	3.2	2.5	1.0								2.2 ~ 3.6	
		FMDB322512	3.2	2.5	1.2								2.4 ~ 5.0	
FMDC		FMDC101008	10.8	10.0	8.0								2.6 ~ 5.0	121
FMDL		FMDL201610	2.0	1.6	1.0								1.7 ~ 5.0	122~125
		FMDL252010	2.5	2.0	1.0								1.3 ~ 5.9	
		FMDL252012	2.5	2.0	1.2								1.6 ~ 4.6	
FMDS		FMDS3020	3.6	3.2	2.0								1.0 ~ 5.0	126~133
		FMDS4020	4.9	4.4	2.0								1.2 ~ 12.0	
		FMDS5020	5.9	5.2	2.0								2.0 ~ 6.0	
		FMDS5030	5.9	5.2	3.0								1.5 ~ 7.0	
		FMDS6020	7.6	6.9	2.0								2.8 ~ 7.0	
		FMDS6024	7.6	6.9	2.4								2.0 ~ 20.0	
		FMDS6030	7.6	6.9	3.0								2.5 ~ 20.0	
		FMDS6040	7.6	6.9	4.0								3.2 ~ 23.0	
		FMDS6050	7.9	7.0	5.0								2.0 ~ 18.0	
		FMDS8060	9.5	8.5	6.2								1.2 ~ 16.0	
		FMDS1030	11.8	10.8	3.0								5.0 ~ 23.0	
		FMDS1040	11.8	10.8	4.0								3.0 ~ 30.0	
		FMDS1050	11.8	10.8	5.2								3.0 ~ 16.0	
		FMDS1055	11.8	10.8	5.8								5.5 ~ 14.0	
		FMDS1080	11.8	10.8	8.2								3.5 ~ 8.0	
		FMDS1235	14.5	13.0	3.5								10.0 ~ 25.0	
		FMDS1240	14.5	13.0	4.0								7.0 ~ 19.0	
		FMDS1250	14.5	13.0	5.0								6.0 ~ 32.0	
		FMDS1260	14.5	13.0	6.0								5.0 ~ 46.0	
		FMDS1265	14.5	13.0	6.8								2.5 ~ 41.0	
		FMDS1285	14.5	13.1	8.6								7.0 ~ 8.5	
		FMDS1770	19.0	17.5	7.0								2.5 ~ 41.0	
		FMDS2213	23.0	22.2	13.0								9.0 ~ 48.0	

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High Current Inductor - Molding Type

Series Name		Part Name	Size (mm)			Inductance Range (uH)							Rated Current (Amp)	Page
			A	B	C	0.1	1.0	10	100	1000	10000	20000		
FMDT		FMDT201610	2.0	1.6	1.0								2.1 ~ 6.0	134
		FMDT252010	2.5	2.0	1.0								4.1	
		FMDT252012	2.5	2.0	1.2								2.2 ~ 3.3	
		FMDT4020	4.1	4.1	1.9								5.6 ~ 18.0	135~139
		FMDT4030	4.4	4.1	2.8								3.9 ~ 10.0	
		FMDT5020	5.5	5.3	1.9								8.8 ~ 18.8	
		FMDT5030	5.5	5.3	2.9								5.9 ~ 22.2	
		FMDT5050	5.5	5.3	4.8								5.0 ~ 7.2	
		FMDT6030	6.6	6.4	2.9								6.0 ~ 32.0	
		FMDT6050	6.6	6.4	4.8								6.2 ~ 21.0	
		FMDT6060	6.6	6.4	5.8								5.0 ~ 11.0	
		FMDT7030	7.8	7.6	2.9								5.9 ~ 21.8	
		FMDT7070	7.8	7.6	6.7								9.2 ~ 15.1	
		FMDT1580	16.5	15.5	7.7								19.0 ~ 40.0	
		FMDT1510	16.5	15.5	9.7								12.0 ~ 29.0	
FMDI		FMDI76	7.5	9.5	8.5								7.0 ~ 13.0	140~151
		FMDI1210	10.5	12.5	11.0								7.0 ~ 21.0	
		FMDI1316	13.3	14.6	16.9								7.0 ~ 15.0	
		FMDI0707	7.4	7.4	7.5								7.0 ~ 13.0	
		FMDI0910	9.0	9.0	10.0								4.0 ~ 7.0	
		FMDI0808R	8.8	8.5	10.0								4.0 ~ 5.0	
		FMDI1010R	11.0	10.0	11.0								4.5 ~ 9.0	
		FMDI1215	13.0	11.9	15.0								10.0 ~ 12.0	
		FMDI0808H	8.0	8.0	10.0								4.0 ~ 5.0	
		FMDI1010H	10.0	10.0	10.0								4.5 ~ 7.5	
		FMDI1810	17.8	17.8	10.0								12.0 ~ 17.0	
		FMDI1812	17.8	17.8	12.0								9.0 ~ 13.0	
		FMDI4424	44.0	44.0	24.0								50.0 ~ 56.0	

SMD Power Inductor- High Current

Series Name		Part Name	Size (mm)			Inductance Range (uH)							Rated Current (Amp)	Page
			A	B	C	0.1	1.0	10	100	1000	10000	20000		
FAIS		FAIS1811	10.9	11.2	6.0								2.6 ~ 8.9	152~154
		FAIS1811	18.5	18.5	11.5								3.6 ~ 43.0	
		FAIS1814	18.5	18.5	14.5								4.2 ~ 72.0	
		FAIS2213	22.5	23.0	13.5								4.6 ~ 54.0	
FHIS		FHIS2213	21.7	22.8	13.5								5.7 ~ 20.0	155
FSIS		FSIS1811	18.0	18.0	11.5								3.3 ~ 36.2	156~158
		FSIS1814	18.0	18.0	14.5								3.7 ~ 14.8	
		FSIS2408	24.0	24.0	8.6								4.5 ~ 20.5	
		FSIS2410	24.0	24.0	10.6								5.0 ~ 30.0	
		FSIS2413	24.0	24.0	13.6								3.5 ~ 32.0	

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Wire Wound Chip Inductor

Series Name		Part Name	Size (mm)			Inductance Range (uH)							Rated Current (Amp)	Page
			A	B	C	0.1	1.0	10	100	1000	10000	20000		
FWHC		FWHC0603	1.80	1.20	1.00								0.40 ~ 1.80	159~163
		FWHC0805	2.40	1.65	1.20								0.10 ~ 1.40	
		FWHC1008	2.90	2.54	2.00								0.11 ~ 2.60	
		FWHC1210	3.60	2.90	2.40								0.05 ~ 3.00	
FWHF		FWHF0402	1.27	0.76	0.61								0.05 ~ 1.36	164~168
		FWHF0603	1.80	1.20	1.02								0.08 ~ 0.70	
		FWHF0805	2.40	1.65	1.45								0.16 ~ 0.80	
		FWHF1008	2.90	2.54	2.03								0.15 ~ 1.70	
FLQH		FLQH20L	2.0	0.8	2.0								0.40 ~ 1.42	169~174
		FLQH20	2.0	0.8	1.8								0.02 ~ 4.24	
		FLQH25L	2.5	1.0	2.5								0.46 ~ 1.90	
		FLQH25	2.5	0.8	2.8								0.09 ~ 0.35	
		FLQH32	3.2	1.2	3.5								0.03 ~ 0.70	
		FLQH43	4.3	1.8	4.2								0.09 ~ 1.08	
		FLQH56	5.0	1.9	6.5								0.05 ~ 6.00	
FRFD		FRFD6626	6.6	2.6	2.1								**SRF**: 300 ~ 1000KHz	175

Common Mode Filter- Wide Impedance

Series Name		Part Name	Size (mm)			Impedence Range (ohm @100MHz)							Rated Current (Amp)	Page
			A	B	C	0.1	1.0	10	100	1000	10000	20000		
FCMC		FCMC4520	4.7	4.5	2.0								1.9 ~ 3.2	176~185
		FCMC7060	7.0	6.0	3.8								0.9 ~ 15.0	
		FCMC9070	9.0	7.0	4.8								2.0 ~ 6.0	
		FCMC1211	12.0	10.8	6.4								1.5 ~ 10.0	
		FCMC1513	15.0	13.0	6.6								5.0 ~ 13.0	
		FCMC7060	7.5	6.0	3.8								2.0	
		FCMC1008	10.0	8.0	5.5								4.0 ~ 5.0	
		FCMC1210	12.0	10.0	6.5								4.0 ~ 6.0	
FSCM		FSCM1210	1.2	1.0	0.8								0.26 ~ 0.43	186~187
		FSCM1608	1.6	0.8	1.1								0.30 ~ 0.50	
		FSCM2012	2.0	1.2	1.2								0.05 ~ 0.40	
		FSCM3216	3.2	1.6	1.8								0.20 ~ 0.37	
		FSCM3225	3.2	2.5	2.2								0.35 ~ 1.00	
		FSCM4532	4.5	3.2	2.8								0.70 ~ 3.00	
		FSCM3225B	3.2	2.5	2.5								0.15 ~ 0.30	188~189
		FSCM4532B	4.5	3.2	2.8								0.10 ~ 0.25	190
		FSCM9583	9.5	8.3	5.3								1.40 ~ 5.00	191
FDLW		FDLW0502	5.0	4.8	2.5								1.50 ~ 6.00	192~195
		FDLW0504	5.0	4.8	4.5								0.20 ~ 5.00	

PRODUCT INDEX

Common Mode Filter- Wide Inductance

Series Name		Part Name	Size (mm) A	Size (mm) B	Size (mm) C	Inductance Range (uH) 0.1 / 1.0 / 10 / 100 / 1000 / 10000 / 20000	Rated Current (Amp)	Page
FCMC		FCMC0906	9.0	11.4	6.0		0.5 ~ 6.0	196~197
		FCMC1006	10.0	8.7	6.5		0.3 ~ 4.0	198~200
		FCMC1207	11.5	11.5	7.5		0.7 ~ 5.7	201~202
		FCMC1609	16.4	14.2	8.9		0.5 ~ 1.5	203
		FCMC9050	9.2	6.0	5.0		0.3 ~ 1.6	204~205
FSCM		FSCM0503	6.0	3.3	3.3		0.30	206
		FSCM0602S	6.5	3.6	1.6		0.30	207
		FSCM0805T	8.8	8.5	5.5		0.25 ~ 4.00	208~209
		FSCM0903B	9.0	7.0	3.5		0.50 ~ 1.20	210
		FSCM0903C	9.4	7.2	3.0		3.10 ~ 7.00	211
		FSCM0904	9.5	5.6	5.2		0.20 ~ 0.50	212~214
FSQ	Dip-type (Vertical)	FSQ0810	16.0	9.5	12.0		1.5	215~216
		FSQ1212	19.5	12.5	17.0		1.0 ~ 5.0	
		FSQ1515	20.5	11.5	18.5		1.3 ~ 5.0	
		FSQ1515B	21.0	14.5	19.0		1.2 ~ 4.5	
		FSQ1515C	21.0	14.5	19.0		1.3 ~ 5.0	
		FSQ1918	23.0	17.0	25.0		1.2 ~ 4.5	
		FSQ1918B	22.5	14.0	26.0		1.2 ~ 4.5	
		FSQ2418	23.0	17.0	32.0		3.0 ~ 10.5	
		FSQ2820	25.0	14.5	35.0		3.0 ~ 8.2	
	Dip-type (Horizontal)	FSQ1212	18.0	15.0	12.0		1.0 ~ 5.0	
		FSQ1515	22.0	18.0	14.0		1.3 ~ 5.0	
		FSQ1918	23.0	23.5	14.0		1.2 ~ 4.5	
		FSQ1918B	22.5	20.5	13.0		1.2 ~ 4.5	
		FSQ2418	23.0	26.0	14.5		3.0 ~ 10.5	
		FSQ2820	27.0	30.0	18.0		3.0 ~ 8.2	
	SMD-type	FSQ1212	20.0	17.0	9.0		1.5 ~ 3.0	217
		FSQ1515	23.0	20.5	10.5		1.5 ~ 3.5	
FUCM	Vertical	FUCM1712	17.0	12.5	17.0		n/a	218~219
		FUCM2117	18.5	17.5	22.5		n/a	
	Horizontal	FUCM2422	24.5	22.5	21.0		n/a	
FDCM	Customized （Pls refer to the **Appendix** for selection）						220

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Dip Inductor

Series Name		Part Name	Size (mm)			Inductance Range (uH)							Rated Current (Amp)	Page
			A	B	C	0.1	1.0	10	100	1000	10000	20000		
FDC		FDC0406	6.0	7.5	15.0								0.10 ~ 2.00	221~227
		FDC0608	8.0	10.0	15.0								0.14 ~ 3.00	
		FDC0810	10.0	11.5	15.0								0.14 ~ 4.50	
		FDC0912	11.0	13.5	15.0								0.13 ~ 5.00	
		FDC1012	12.0	13.5	15.0								0.30 ~ 6.00	
		FDC1016	12.5	18.0	15.0								0.70 ~ 5.80	
FDCS		FDCS0810	9.0	11.5	15.0								0.10 ~ 3.50	228~231
		FDCS1012	11.0	13.0	15.0								0.20 ~ 6.00	
		FDCS1014	11.0	15.0	15.0								0.20 ~ 6.00	
		FDCS1214	13.0	15.0	15.0								0.30 ~ 9.00	
		FDCS1518	16.0	19.5	15.0								0.50 ~ 12.00	
FRC	Customized (Pls refer to the **Appendix** for selection)													232

Multilayer Chip Inductor- High Frequency / High Current

Series Name		Part Name	Size (mm)			Inductance Range (uH)							SRF / IDC	Page
			A	B	C	0.1	1.0	10	100	1000	10000	20000		
FMCC		FMCC0603	0.6	0.3	0.3								1000 ~ 10000 MHz	233~237
		FMCC1005	1.0	0.5	0.5								600 ~ 10000 MHz	
		FMCC1608	1.6	0.8	0.8								250 ~ 10000 MHz	
		FMCC2012	2.0	1.2	0.9								200 ~ 6000 MHz	
FMBL		FMBL100505	1.0	0.5	0.5								35 ~ 220 MHz	238~244
		FMBL160808	1.6	0.8	0.8								12 ~ 260 MHz	
		FMBL201209	2.0	1.3	0.9								16 ~ 320 MHz	
		FMBL201212	2.0	1.3	1.3								15 ~ 16 MHz	
		FMBL321609	3.2	1.6	0.9								13 ~ 320 MHz	
		FMBL321611	3.2	1.6	1.1								8 ~ 12 MHz	
		FMBL322513	3.2	2.5	1.3								5 ~ 70 MHz	
		FMBL453215	4.5	3.2	1.5								6 ~ 50 MHz	
		FMBL160808/H	1.6	0.8	0.8								IDC: 0.08 ~ 0.9 A	
		FMBL201209/H	2.0	1.3	0.9								IDC: 0.28 ~ 1.0 A	
		FMBL201610/H	2.0	1.6	0.9								IDC: 1.10 ~ 1.4 A	
		FMBL252010/H	2.5	2.0	0.9								IDC: 1.10 ~ 1.6 A	
		FMBL321609/H	3.2	1.6	0.9								IDC: 0.67 ~ 1.3 A	

Multilayer Chip Inductor- Wide Impedance

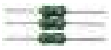
Series Name		Part Name	Size (mm)			Impedence Range (ohm @100MHz)							Rated Current (Amp)	Page
			A	B	C	0.1	1.0	10	100	1000	10000	20000		
FMBD		FMBD060303	0.6	0.3	0.3								0.20	245~257
		FMBD100505	1.0	0.5	0.5								0.02 ~ 1.80	
		FMBD160808	1.6	0.8	0.8								0.05 ~ 6.00	
		FMBD201209	2.0	1.3	0.9								0.05 ~ 6.00	
		FMBD321609	3.2	1.6	0.9								0.03 ~ 6.00	
		FMBD321611	3.2	1.6	1.1								0.20 ~ 3.00	
		FMBD322513	3.2	2.5	1.3								0.30 ~ 5.00	
		FMBD451616	4.5	1.6	1.6								0.20 ~ 6.00	
		FMBD453215	4.5	3.2	1.5								0.20 ~ 6.00	
		* Letter codes' meaning: A- normal; H- high current; S- super current; U- ultra current												
FBCF		FBCF323023	3.1	2.9	2.2								15.0	258~259
		FBCF403025	4.7	3.1	2.9								14.0	
		FBCF853225	9.0	3.1	2.8								13.0	
FBCH		FBCH1012	1.3	1.0	0.6								0.3	260~261
FBCM		FBCM455625	4.5	5.6	2.8								10.0	262
		FBCM855625	8.5	5.6	2.8								6.0	
FMBA		FMBA201005	2.0	1.0	0.5								0.100 ~ 0.200	263~266
		FMBA321608	3.2	1.6	0.8								0.035 ~ 0.200	

PRODUCT INDEX

Wire Wound Chip Inductor (new arrival)

Series Name		Part Name	Size (mm)			Inductance Range (uH)							Rated Current (Amp)	Page
			A	B	C	0.1	1.0	10	100	1000	10000	20000		
FWHA		FWHA0603	1.8	1.3	1.3								0.16 ~ 0.72	267

Axial Lead Inductor

Series Name		Part Name	Size (mm)			Inductance Range (uH)							Rated Current (Amp)	Page
			A	B	C	0.1	1.0	10	100	1000	10000	20000		
FAL		FAL0204	Φ2.8	4.8	Φ0.45								0.025 ~ 0.400	268~275
		FAL0307	Φ3.2	7.0	Φ0.50								0.040 ~ 0.740	
		FAL0410	Φ4.0	10.5	Φ0.60								0.030 ~ 0.980	
		FAL0412	Φ4.5	12.7	Φ0.65								0.052 ~ 3.300	
		FAL0510	Φ5.0	11.1	Φ0.60								0.010 ~ 0.900	
		FAL0512	Φ5.0	12.0	Φ0.60								0.025 ~ 0.550	
		FAL0514	Φ5.5	14.0	Φ0.65								0.060 ~ 3.800	

UF Buckle Core

Series Name		Part Name	Size (mm)			Impedence Range (ohm @100MHz)							Rated Current (Amp)	Page
			A	B	C	0.1	1.0	10	100	1000	10000	20000		
FUF		FUF070A	15.5	14.0	7.0								-	276
		FUF090A	20.0	-	9.0								-	
		FUF110B	20.5	20.5	11.0								-	
		FUF130B	30.0	-	13.0								-	

Customized

FWC (Wireless Charging Coil)		277~280
FTR (Transformer)		281

【Appendix】:

Appendix 1- Selection Guide By Dimension ---------- 282~283

Appendix 2- Selection Guide By Ring Core ---------- 284~288

Appendix 3- Reliability & Recommendation ---------- 289~292

FCD Series (Rev. 5.0)

Various high power surface mountable type inductors provide superior high saturation. Magnetic shielding also protects against radiation.

Features

* RoHS compliant
* High saturation open type wire wound power inductor
* Suitable for large currents
* Ideal for DC – DC converter applications

Applications

* Power supply for VTRs
* OA equipment
* LCD televisions
* Notebook PCs
* Portable communication devices
* DC / DC converters, etc

Product Identification

FCD	32	-	4R7	M	S
1	2		3	4	5

1. Product Code
2. Size Code
3. Inductance: 4.7uH
4. Tolerance: K= ±10%, M= ±20%, N= ±30%
5. S: special

Operating & Storage Condition

* Operating Temp. : -40 to +85°C
* Storage Temp. : -25 to +35°C
* Storage Life Time : 12 Months @25°C , RH 65%

Test Equipment

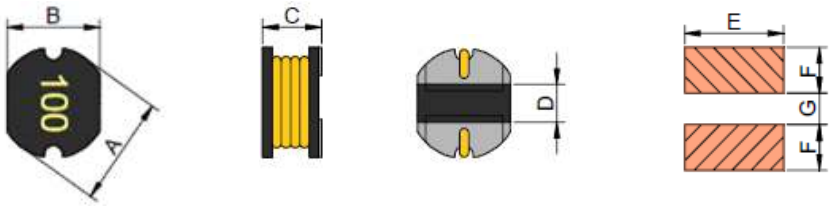
* Wayne kerr 3260B/G LCR Meter
* Wayne kerr 3265B Bias Current Source

Standard Atmospheric Conditions

Ambient Temp : 20+/-15°C
Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Top View | Side View | Bottom View | Recommended PAD Layout



Size Code	A(±0.3)	B(±0.3)	C(±0.3)	D(ref.)	E(ref.)	F(ref.)	G(ref.)
31	3.5	3.0	1.6	1.2	3.2	1.5	1.0
32	3.5	3.0	2.0	1.2	3.2	1.5	1.0
43	4.5	4.0	3.2	1.2	4.5	2.0	1.0
52	5.8	5.2	2.5	1.2	5.6	2.6	1.1
53	5.8	5.2	3.2	1.3	5.6	2.6	1.1
54	5.8	5.2	4.5	1.3	5.6	2.6	1.1
73	7.8	7.0	3.5	2.1	7.4	3.3	1.7
75	7.8	7.0	5.0	2.1	7.4	3.3	1.7
77	7.8	7.0	7.0	2.1	7.4	3.3	1.7
104	10±0.4	9.0	4.2	2.5	9.6	4.5	2.1
105	10±0.4	9.0	5.5	2.5	9.6	4.5	2.1
106	10±0.4	9.0	6.6	2.5	9.6	4.5	2.1
107	10±0.4	9.0	7.2	2.5	9.6	4.5	2.1
108	10±0.4	9.0	8.0	2.5	9.6	4.5	2.1

FCD Series (Rev. 5.0)

Electrical Characteristics

L Code	L (uH)	DCR(Ω) max. / IDC (A) max.													
		31		32		43		52		53		54		73	
1R0	1.0	0.048	1.60	0.045	3.34	0.033	3.80	0.050	4.20	0.030	4.50	0.020	5.00	0.018	7.00
1R2	1.2			0.048	3.10	0.035	3.60	0.060	4.00	0.030	4.20				
1R5	1.5	0.062	1.55	0.050	2.60	0.039	3.20	0.060	3.70	0.030	4.10	0.025	5.00	0.020	6.00
1R8	1.8			0.065	2.35	0.042	2.91	0.070	3.50	0.030	3.70	0.025	5.00		
2R2	2.2	0.078	1.47	0.080	2.00	0.047	2.60	0.080	3.20	0.030	3.50	0.027	4.50	0.023	5.00
2R7	2.7			0.090	1.92	0.052	2.43	0.100	2.70	0.040	3.20	0.030	3.50		
3R3	3.3	0.126	1.34	0.100	1.83	0.058	2.15	0.120	2.40	0.050	2.80	0.034	3.00	0.025	4.00
3R6	3.6											0.036	3.00		
3R9	3.9	0.140	1.24	0.140	1.64	0.076	1.98	0.140	2.00	0.060	2.60	0.038	3.00		
4R7	4.7	0.158	1.22	0.160	1.50	0.094	1.70	0.150	1.80	0.070	2.50	0.050	3.00	0.039	3.50
5R6	5.6	0.186	1.09	0.180	1.36	0.101	1.60	0.160	1.50	0.080	2.40				
6R8	6.8	0.213	0.96	0.205	1.22	0.117	1.41	0.170	1.40	0.090	2.20	0.080	2.50	0.040	2.80
8R2	8.2	0.238	0.84	0.240	1.09	0.132	1.26	0.200	1.30	0.100	2.00				
100	10	0.307	0.70	0.320	0.95	0.182	1.15	0.230	1.10	0.120	1.80	0.100	1.44	0.080	1.44
120	12	0.372	0.65	0.350	0.88	0.210	1.05	0.250	1.05	0.130	1.75	0.120	1.40	0.090	1.39
150	15	0.466	0.59	0.500	0.82	0.235	0.92	0.300	1.00	0.150	1.70	0.140	1.30	0.100	1.24
180	18	0.515	0.54	0.600	0.76	0.338	0.84	0.350	0.90	0.180	1.60	0.150	1.23	0.110	1.12
220	22	0.656	0.48	0.760	0.63	0.378	0.76	0.400	0.85	0.220	1.50	0.180	1.11	0.130	1.07
270	27	0.774	0.43	0.850	0.62	0.522	0.71	0.500	0.75	0.240	1.40	0.200	0.97	0.150	0.94
330	33	1.021	0.37	0.900	0.56	0.540	0.64	0.550	0.70	0.300	1.10	0.230	0.88	0.170	0.85
390	39	1.122	0.32	1.100	0.51	0.587	0.59	0.650	0.60	0.400	1.00	0.320	0.80	0.220	0.74
470	47	1.509	0.26	1.560	0.47	0.844	0.54	0.750	0.55	0.430	0.90	0.370	0.72	0.250	0.68
560	56	1.675	0.24	1.650	0.42	0.937	0.50	0.950	0.50	0.500	0.85	0.420	0.68	0.280	0.64
680	68	1.919	0.23	1.920	0.38	1.117	0.46	1.200	0.45	0.600	0.80	0.460	0.61	0.330	0.59
820	82	2.644	0.21	2.440	0.34	1.180	0.43	1.400	0.40	0.800	0.65	0.600	0.58	0.410	0.54
101	100	2.870	0.19	2.840	0.31	1.190	0.41	1.750	0.35	0.900	0.60	0.700	0.52	0.480	0.51
121	120	4.084	0.17	3.190	0.28	1.220	0.38	2.000	0.25	1.000	0.58	0.930	0.48	0.540	0.49
151	150	4.774	0.16	4.200	0.16	1.400	0.35	2.600	0.22	1.300	0.43	1.100	0.40	0.750	0.40
181	180	5.699	0.14	5.110	0.15	1.850	0.31	3.000	0.20	1.500	0.41	1.380	0.38	1.020	0.36
221	220	9.000	0.12	6.560	0.14	2.156	0.29	3.700	0.18	2.000	0.38	1.570	0.35	1.200	0.31
271	270			8.240	0.12	2.890	0.26	4.000	0.18	2.500	0.35			1.310	0.29
331	330			10.190	0.10	3.760	0.20	4.200	0.17	4.000	0.28	2.200	0.30	1.500	0.28
391	390					5.500	0.17								
471	470					7.200	0.15					3.200	0.23		
561	560											3.000	0.20		
681	680											3.500	0.18		
102	1000	34.0	0.07			16.000	0.08			12.000	0.15	6.240	0.15		
122	1200	35.0	0.057												
222	2200											14.50	0.15		

* Test Freq.: @100KHz / 0.1V
* Tolerance: K= ±10%, M= ±20%, N= ±30%
* IDC : This indicates the value of current when the inductance is 10% lower than it's initial value at D.C. superimposition or D.C.current when at ΔT=40°C,whichever is lower. (Ta=20°C)

FCD Series (Rev. 5.0)

Electrical Characteristics

L Code	L (uH)	DCR (Ω) max. / IDC (A) max.													
		75		77		104		105		106		107		108	
1R0	1.0	0.013	7.50			0.012	8.70					0.008	9.50		
1R2	1.2	0.015	7.20			0.014	8.00	0.009	8.63						
1R5	1.5	0.016	6.50			0.016	7.48	0.014	8.00						
1R8	1.8	0.020	6.00			0.018	6.80					0.011	8.60		
2R2	2.2	0.023	5.30			0.020	5.40	0.016	7.20			0.012	8.00		
2R7	2.7					0.024	3.20								
3R3	3.3	0.028	4.50			0.028	2.85	0.018	6.50			0.016	6.80		
3R6	3.6														
3R9	3.9	0.030	4.20			0.030	2.80					0.017	6.35		
4R7	4.7	0.045	4.00			0.038	2.75	0.022	4.60			0.019	5.45		
5R6	5.6	0.048	3.60			0.040	2.70	0.024	4.00			0.024	4.30		
6R8	6.8	0.058	3.20			0.042	2.65	0.040	3.60			0.035	3.52		
8R2	8.2	0.070	2.80			0.048	2.60	0.045	3.20			0.045	3.51		
100	10	0.070	2.60			0.050	2.38	0.060	2.58			0.060	3.50		
120	12	0.080	2.00			0.060	2.13	0.070	2.44			0.070	3.40		
150	15	0.090	1.80			0.070	1.87	0.070	2.26	0.060	4.00	0.080	3.10		
180	18	0.100	1.60			0.080	0.73	0.080	2.13			0.090	3.00		
220	22	0.110	1.50	0.095	2.70	0.090	1.60	0.080	1.93	0.080	3.60	0.100	2.60		
220S	22	0.110	2.50					0.080	3.20						
270	27	0.120	1.30			0.100	1.44	0.100	1.74			0.110	2.40		
330	33	0.130	1.20	0.140	2.40	0.120	1.26	0.110	1.46	0.106	3.00	0.120	2.30	0.100	3.00
330S	33	0.160	2.00					0.110	2.60						
390	39	0.160	1.10			0.150	1.20	0.120	1.36			0.140	2.10		
470	47	0.180	1.10	0.200	2.00	0.170	1.10	0.140	1.26	0.118	2.80	0.170	1.95	0.117	3.00
470S	47	0.230	1.80					0.160	2.10						
560	56	0.240	0.94			0.200	1.01	0.190	1.15			0.190	1.85		
680	68	0.280	0.85			0.220	0.91	0.210	1.10	0.160	2.50	0.220	1.65	0.240	1.90
680S	68	0.350	1.50					0.260	1.90						
820	82	0.370	0.78			0.250	0.85	0.280	0.98			0.250	1.50		
101	100	0.430	0.72	0.450	1.50	0.340	0.74	0.340	0.95	0.200	1.80	0.350	1.40		
101S	100	0.480	1.20					0.370	1.50						
121	120	0.470	0.66			0.400	0.69	0.370	0.87			0.400	1.30		
121S	120	0.660	1.10												
151	150	0.640	0.58	0.600	1.20	0.540	0.61	0.510	0.74			0.470	1.20		
151S	150	0.680	1.00												
181	180	0.710	0.51			0.620	0.56	0.570	0.70			0.630	1.00		
221	220	0.960	0.49	0.810	1.00	0.720	0.53	0.780	0.65			0.730	0.95		
221S	220	0.980	0.80					0.780	1.00						
271	270	1.110	0.42			0.950	0.45	0.870	0.54			0.970	0.90		
331	330	1.850	0.56			1.100	0.42	1.200	0.50			1.150	0.80		
391	390	1.770	0.36			1.240	0.38	1.340	0.46			1.300	0.75		
471	470	1.960	0.34			1.530	0.35	1.500	0.40			1.480	0.65		
561	560					1.900	0.32	1.900	0.33			1.900	0.60		
681	680	2.480	0.30					2.250	0.30			2.250	0.50		
102	1000	5.000	0.17							2.800	0.50	3.000	0.46		
122	1200	5.000	0.17									3.500	0.35		
222	2200	10.000	0.10												
252	2500									5.600	0.35				

* Test Freq.: @100KHz / 0.1V
* Tolerance: K= ±10%, M= ±20%, N= ±30%
* IDC : This indicates the value of current when the inductance is 10% lower than it's initial value at D.C. superimposition or D.C.current when at ΔT=40°C,whichever is lower. (Ta=20°C)

FMCD75 Series (Rev. 5.0)

Features

* Reduce resonance noise
* High flexibility & reliability
* Smaller size

Operating & Storage Condition

* Operating Temp. : -40 to +100℃
* Storage Temp. : -40 to +100℃
* Storage Life Time : 12 Months @25℃ , RH 65%

Product Identification

FMCD	75	-	250/801	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 25uH/ 800uH
4. Tolerance: M=±20%

Test Equipment

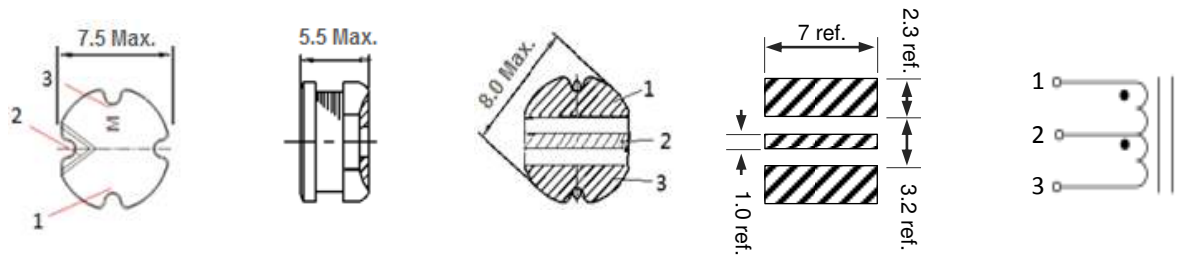
* HP484A,HP42841A-L,IDC.Q.RDC
* HP8753D Network Analyzer-SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15℃
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Top View	Side View	Bottom View	Pad Layout	Schematic



Electrical Characteristics

P/N	L (uH) ±20%		DCR (Ω) max.		IDC (A) max.		Wire (mm)
	Pin1-2	Pin2-3	Pin1-2	Pin2-3	Pin1-2	Pin2-3	
FMCD75-100/431M	10	430	0.22	2.28	2.00	0.25	ф0.16*1P
FMCD75-150/431M	15	430	0.26	2.28	1.80	0.25	ф0.16*1P
FMCD75-250/801M	25	800	0.50	4.00	1.30	0.20	ф0.14*1P
FMCD75-260/102M	26	1000	0.50	4.40	1.30	0.18	ф0.14*1P

* Test condition: @100KHz, 0.25V
* IDC : This indicates the value of current when the inductance is 30% lower than it's initial value at D.C. superimposition or D.C.current when at ΔT=40°C,whichever is lower. (Ta=20°C)

FDO Series (Rev. 5.0)

Applications

* Notebook, step-up & step-down converters
* Flash, memory programmers. Etc

Features

* RoHS compliant
* High energy storage and very low resistance
* Smallest size and high performance

Operating & Storage Condition

* Operating Temp. : -55 to +125℃
* Storage Temp. : -25 to +35℃
* Storage Life Time : 12 Months @25℃ , RH 65%

Product Identification

FDO	0804	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance : 10uH
4. Tolerance: M=±20%

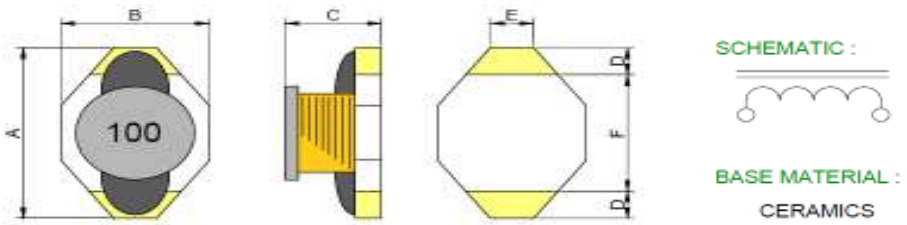
Test Equipment

* HP4284A，HP42841A-L,IDC,Q.RDC
* HP8573D Netwok Analyzer-SRF

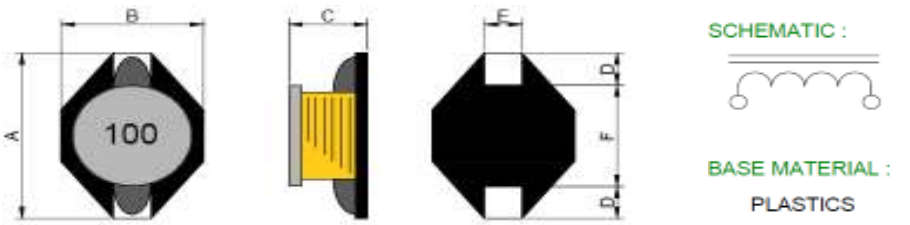
Standard Atmospheric Conditions

* Ambient Temp : 20+/-15℃
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]



Size Code	A(max.)	B(max.)	C(max.)	D(±0.3)	E(±0.3)	F(±0.5)
0402	6.6	4.5	2.9	1.0	1.0	4.4



Size Code	A(max.)	B(max.)	C(max.)	D(±0.3)	E(±0.3)	F(±0.1)
0802	12.3	9.3	3.0	2.6	1.2	7.2
0804	13.0	9.4	5.2	2.5	2.5	7.2
0810	13.0	9.4	11.4	2.5	2.5	7.2
1306	18.5	15.2	7.1	2.5	2.5	12.7

FDO Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH) ±20%	DCR (Ω) max.	SRF (MHz) typ.	Isat (A) typ.	Irms (A) typ.
FDO0402-1R0M	1.0	0.05	130.0	2.90	2.90
FDO0402-1R5M	1.5	0.05	115.0	2.60	2.80
FDO0402-2R2M	2.2	0.07	90.0	2.30	2.40
FDO0402-2R7M	2.7	0.07	80.0	2.20	2.20
FDO0402-3R3M	3.3	0.08	70.0	2.00	2.00
FDO0402-4R7M	4.7	0.09	50.0	1.50	1.50
FDO0402-6R8M	6.8	0.13	45.0	1.20	1.40
FDO0402-100M	10.0	0.16	35.0	1.10	1.30
FDO0402-150M	15.0	0.23	30.0	0.90	1.20
FDO0402-220M	22.0	0.37	20.0	0.70	0.80
FDO0402-330M	33.0	0.51	15.0	0.58	0.60
FDO0402-470M	47.0	0.64	14.0	0.50	0.50
FDO0402-680M	68.0	0.86	11.0	0.40	0.40
FDO0402-101M	100.0	1.27	9.0	0.31	0.30
FDO0402-151M	150.0	2.00	6.0	0.27	0.25
FDO0402-221M	220.0	3.11	5.5	0.22	0.20
FDO0402-331M	330.0	3.80	5.0	0.18	0.16
FDO0402-471M	470.0	5.06	4.0	0.16	0.15
FDO0402-681M	680.0	9.20	3.0	0.14	0.12
FDO0402-102M	1000.0	13.80	2.0	0.10	0.07
FDO0802-100M	10.0	0.11	35.0	2.40	2.00
FDO0802-150M	15.0	0.15	33.0	2.00	1.50
FDO0802-220M	22.0	0.23	25.0	1.60	1.30
FDO0802-330M	33.0	0.30	19.0	1.40	1.10
FDO0802-470M	47.0	0.39	14.0	1.00	0.80
FDO0802-680M	68.0	0.66	12.0	0.90	0.70
FDO0802-101M	100.0	0.84	10.0	0.70	0.60
FDO0802-151M	150.0	1.20	8.0	0.60	0.50
FDO0802-221M	220.0	1.90	6.0	0.50	0.40
FDO0802-331M	330.0	2.70	5.0	0.40	0.30
FDO0802-471M	470.0	4.00	4.0	0.30	0.20
FDO0802-681M	680.0	5.30	3.0	0.20	0.10
FDO0802-102M	1000.0	8.40	2.5	0.10	0.05

* Test Freq.: @100KHz / 1.0V
* Inductance drop = 10% typ. at Isat.
* ΔT = 40°C rise typ at Irms.

FDO Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH) ±20%	DCR (Ω) max.	SRF (MHz) typ.	Isat (A) typ.	Irms (A) typ.
FDO0804-1R0M	1.0	0.009	100.0	9.00	6.80
FDO0804-1R5M	1.5	0.010	90.0	8.00	6.40
FDO0804-2R2M	2.2	0.012	80.0	7.00	6.10
FDO0804-3R3M	3.3	0.015	65.0	6.40	5.40
FDO0804-4R7M	4.7	0.018	45.0	5.40	4.80
FDO0804-6R8M	6.8	0.027	38.0	4.60	4.40
FDO0804-100M	10.0	0.038	30.0	3.80	3.90
FDO0804-150M	15.0	0.046	27.0	3.00	3.10
FDO0804-220M	22.0	0.085	19.0	2.60	2.70
FDO0804-330M	33.0	0.100	15.0	2.00	2.10
FDO0804-470M	47.0	0.140	12.0	1.60	1.80
FDO0804-680M	68.0	0.200	10.0	1.40	1.50
FDO0804-101M	100.0	0.280	9.0	1.20	1.30
FDO0804-151M	150.0	0.400	6.0	1.00	1.00
FDO0804-221M	220.0	0.610	5.0	0.80	0.80
FDO0804-331M	330.0	1.020	4.5	0.60	0.60
FDO0804-471M	470.0	1.270	3.5	0.50	0.50
FDO0804-501M	500.0	1.500	3.0	0.50	0.50
FDO0804-681M	680.0	2.020	2.5	0.40	0.40
FDO0804-102M	1000.0	3.000	2.0	0.30	0.30
FDO0810-1R0N	1.0	0.009	30.0	16.00	9.20
FDO0810-1R5M	1.5	0.010	28.0	15.00	8.00
FDO0810-2R0M	2.0	0.012	27.0	14.00	7.00
FDO0810-2R2M	2.2	0.012	27.0	14.00	7.00
FDO0810-3R3M	3.3	0.013	26.0	12.00	6.00
FDO0810-4R7M	4.7	0.018	25.0	10.00	4.00
FDO0810-6R3M	6.3	0.038	25.0	10.00	3.80
FDO0810-6R8M	6.8	0.039	23.0	9.00	3.60
FDO0810-8R2M	8.2	0.040	22.5	8.00	3.60
FDO0810-100M	10.0	0.040	22.0	8.00	3.50
FDO0810-150M	15.0	0.050	18.0	7.00	3.00
FDO0810-220M	22.0	0.070	11.0	5.50	2.50
FDO0810-330M	33.0	0.080	9.0	4.00	2.00
FDO0810-470M	47.0	0.110	8.0	3.80	1.60

* Test Freq.: @100KHz / 1.0V
* Inductance drop = 10% typ. at Isat.
* ΔT = 40°C rise typ at Irms.

FDO Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH) ±20%	DCR (Ω) max.	SRF (MHz) typ.	Isat (A) typ.	Irms (A) typ.
FDO0810-680M	68.0	0.170	7.0	3.00	1.20
FDO0810-101M	100.0	0.220	5.0	2.50	1.20
FDO0810-151M	150.0	0.340	4.0	2.00	0.90
FDO0810-221M	220.0	0.440	3.5	1.60	0.70
FDO0810-331M	330.0	0.700	2.5	1.20	0.60
FDO0810-471M	470.0	0.950	2.0	1.00	0.30
FDO0810-681M	680.0	1.200	2.0	1.00	0.20
FDO0810-102M	1000.0	2.000	1.5	0.80	0.10
FDO1306-1R0M	1.0	0.009	80.0	20.00	8.60
FDO1306-2R2M	2.2	0.014	60.0	16.00	7.10
FDO1306-3R3M	3.3	0.018	60.0	14.00	6.20
FDO1306-5R6M	5.5	0.020	40.0	12.00	5.30
FDO1306-100M	10.0	0.031	30.0	10.00	4.30
FDO1306-150M	15.0	0.036	22.0	8.00	4.00
FDO1306-220M	22.0	0.047	20.0	7.00	3.50
FDO1306-330M	33.0	0.066	15.0	5.50	3.00
FDO1306-470M	47.0	0.086	9.0	4.50	2.60
FDO1306-680M	68.0	0.130	8.0	3.50	2.30
FDO1306-101M	100.0	0.190	7.0	3.00	1.80
FDO1306-151M	150.0	0.250	6.0	2.60	1.50
FDO1306-221M	220.0	0.380	5.0	2.40	1.20
FDO1306-331M	330.0	0.560	4.0	1.90	1.00
FDO1306-471M	470.0	0.850	3.0	1.40	0.82
FDO1306-681M	680.0	1.100	2.5	1.20	0.72
FDO1306-102M	1000.0	1.800	2.0	1.00	0.56

* Test Freq.: @100KHz / 1.0V
* Inductance drop = 10% typ. at Isat.
* ΔT = 40°C rise typ at Irms.

FDOH Series (Rev. 5.0)

FDOH series is specially designed for high current, low voltage DC-DC converter applications.

Applications

* DC-DC converter/LCD TV/Notebook/DVD etc

Features

* High current & low DCR
* Carrier tape package for SMT reflow soldering process
* Unshielded power inductor

Operating & Storage Condition

* Operating Temp. : -55 to +125℃
* Storage Temp. : -25 to +35℃
* Storage Life Time : 12 Months @25℃ , RH 65%

Product Identification

FDOH	0503	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance : 10uH
4. Tolerance: M=±20%, N=±30%

Test Equipment

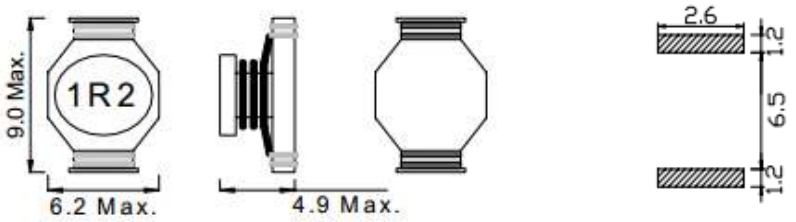
* HP4284A，HP42841A-L,IDC,Q.RDC
* HP8573D Netwok Analyzer-SRF

Standard Atmospheric Conditions

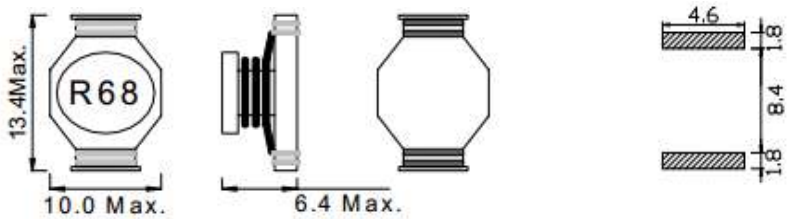
* Ambient Temp : 20+/-15℃
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

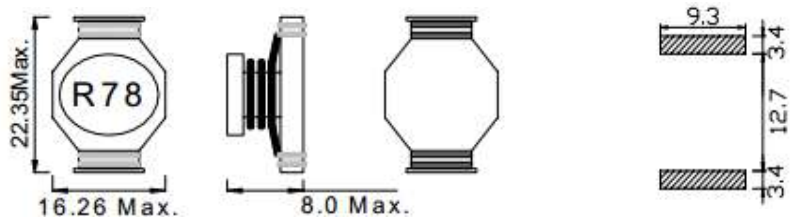
FDOH0503 Series



FDOH0804 Series



FDOH1608 Series



FDOH Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	DCR (Ω) max.	Isat (A) typ.	Irms (A) typ.
FDOH0503-1R2M	1.2	17.0	5.30	4.40
FDOH0503-2R2M	2.2	35.0	3.50	3.10
FDOH0503-3R3M	3.3	40.0	3.00	2.70
FDOH0503-4R7M	4.7	54.0	2.60	2.20
FDOH0503-6R8M	6.8	80.0	2.20	1.80
FDOH0503-100M	10.0	110.0	1.90	1.50
FDOH0503-150M	15.0	170.0	1.50	1.20
FDOH0503-220M	22.0	250.0	1.20	1.00
FDOH0503-330M	33.0	350.0	0.99	0.82
FDOH0503-470M	47.0	470.0	0.87	0.72
FDOH0804-R68N	0.68	5.0	13.0	12.0
FDOH0804-1R0M	1.00	6.0	11.0	10.0
FDOH0804-1R5M	1.50	8.0	9.0	9.0
FDOH0804-2R2M	2.20	11.0	7.8	7.4
FDOH0804-2R7M	2.70	12.0	7.0	6.6
FDOH0804-3R3M	3.30	14.0	6.4	5.9
FDOH0804-4R7M	4.70	18.0	5.4	4.8
FDOH1608-R78N	0.78	3.0	30.0	15.0
FDOH1608-1R5M	1.50	4.0	25.0	15.0
FDOH1608-2R2M	2.20	6.0	20.0	12.0
FDOH1608-3R3M	3.30	9.0	17.0	10.0
FDOH1608-3R9M	3.90	10.0	15.0	9.0
FDOH1608-4R7M	4.70	14.0	13.0	8.4
FDOH1608-6R0M	6.00	17.0	12.0	7.5
FDOH1608-7R8M	7.80	18.0	11.0	7.5
FDOH1608-100M	10.00	26.0	10.0	6.0
FDOH1608-150M	15.00	32.0	8.0	4.4
FDOH1608-220M	22.00	47.0	7.0	3.5
FDOH1608-330M	33.00	66.0	5.5	3.0
FDOH1608-470M	47.00	86.0	4.5	2.6
FDOH1608-680M	68.00	130.0	3.5	2.3
FDOH1608-101M	100.00	190.0	3.0	1.8
FDOH1608-151M	150.00	250.0	2.6	1.5
FDOH1608-221M	220.00	380.0	2.4	1.2
FDOH1608-331M	330.00	560.0	1.9	1.0
FDOH1608-471M	470.00	850.0	1.4	0.8
FDOH1608-681M	680.00	1100.0	1.2	0.7
FDOH1608-102M	1000.00	1800.0	1.0	0.6

* Test Condition: @1KHz / 0.1V
* The Isat is the current at which the inductance decreases by 10% from the initial value
* The Irms by Stand-Type is the current at which the temperature rise is △T≤40°C，whichever（Ta=20°C）
* Inductance tolerance: M=±20%, N=±30%

FNR Series (Rev. 5.0)

An automatic assembly constructed power inductor, shielded with magnetic resin and suitable for portable DC-DC converter applications.

Features

* RoHS compliant
* Highly accurate dimensions
* Terminals are highly resistant to external forces
* Highly reliable in environments of sudden temperature change and humidity
* Superior EMI characteristics with ultra low radiation

Applications

* LCD TV/ DSC/ Touch panel/ Monitor
* Ap router/ STB and smart phone
* Game console and other electronic devices

Operating & Storage Condition

* Operating Temp.: -40 to +105°C
* Storage Temp.: -25 to +125°C
* Storage Life Time : 6 months @20°C, RH65%

Test Equipment

* L: WK3260 LCR * RDC : Twintex TM8089A
* IDC: WK3260+3265B DC-Bias
* Temperature: TECPEL * Dimension: Mitutoyo

Product Identification

FNR	252012	-	100	M	H
1	2		3	4	5

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%, N=±30%
5. M/H/L: Medium/High current/Lower DCR

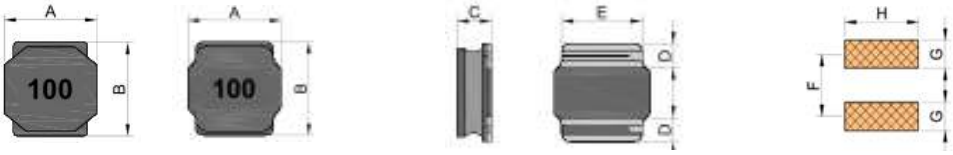
Standard Atmospheric Conditions

* Ambient Temp : 25+/-5°C
* Relative Humidity : 65+/-20%

Dimensions & Recommended PAD Layout: [mm]

FNR201610/252010/252012

FNR3010/3012/3015/4012/4018/4020/4030/5020/5030/5040/6015/6020/6028/6045/8040//8065/1050



Size Code	A(±0.2)	B(±0.2)	C(max.)	D	E(ref.)	F(ref.)	G(ref.)	H(ref.)
201610	1.6	2.0	1.0	0.6±0.2	1.2	1.3	0.8	1.6
252010	2.0	2.5	1.1	0.8±0.2	1.5	1.7	0.9	2.0
252012	2.0	2.5	1.2±0.2	0.8±0.2	2.0	1.7	0.9	2.0
3010	3.0	3.0	1.0	0.75±0.5	2.5	2.2	0.9	2.7
3012	3.0	3.0	1.2	0.80±0.2	2.5	2.2	0.9	2.7
3015	3.0	3.0	1.5	0.75±0.5	2.5	2.2	1.0	2.7
4012	4.0	4.0	1.3	0.95±0.2	3.3	2.8	1.2	3.7
4018	4.0	4.0	1.8±0.2	0.95±0.2	3.3	2.8	1.2	3.7
4020	4.0	4.0	2.1	0.95±0.2	3.3	2.8	1.2	3.7
4030	4.0	4.0	3.0	0.95±0.2	3.3	2.8	1.2	3.7
5020	5.0	5.0	2.0	1.30±0.2	4.0	3.8	1.4	4.2
5030	5.0	5.0	3.0	1.25±0.2	4.0	3.8	1.4	4.2
5040	5.0	5.0	4.0	1.25±0.2	4.0	3.8	1.4	4.2
6015	6.0±0.3	6.0±0.3	1.5±0.3	1.55±0.3	5.0	4.6	1.7	5.7
6020	6.0±0.3	6.0±0.3	2.2	1.7±0.3	5.0	4.6	1.7	5.7
6028	6.0±0.3	6.0±0.3	2.8	1.7±0.3	5.0	4.6	1.7	5.7
6045	6.0±0.3	6.0±0.3	4.5	1.7±0.3	5.0	4.6	1.7	5.7
8040	8.0±0.3	8.0±0.3	4.0±0.2	2.2±0.3	6.5	6.0	2.2	7.5
8065	8.0±0.3	8.0±0.3	6.5	2.1±0.3	6.5	6.0	2.2	7.5
1050	10.0±0.3	10.0±0.3	5.0	1.7±0.2	5.0	9.3	1.8	5.5

FNR Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Test Freq. (KHz/1.0V)	Tolerance (± %)	DCR (mΩ) ±30%	Isat (mA) max.	Irms (mA) typ.
FNR201610-R24M	0.24	1000	20	33.0	3700	2800
FNR201610-R33M	0.33	1000	20	41.0	3000	2400
FNR201610-R47M	0.47	1000	20	50.0	2300	2300
FNR201610-R68M	0.68	1000	20	63.0	1950	2000
FNR201610-1R0M	1.00	1000	20	96.0	1650	1450
FNR201610-2R2M	2.20	1000	20	215.0	1200	1050
FNR201610-3R3M	3.30	1000	20	345.0	1000	850
FNR201610-4R7M	4.70	1000	20	400.0	750	700
FNR201610-R24MH	0.24	1000	20	40.0 max.	4500	3000
FNR201610-R33MH	0.33	1000	20	49.0 max.	4400	2700
FNR201610-R47MH	0.47	1000	20	49.0 max.	4060	2700
FNR201610-R56MH	0.56	1000	20	53.0 max.	3800	2600
FNR201610-R68MH	0.68	1000	20	65.0 max.	3500	2500
FNR201610-1R0MH	1.00	1000	20	95.0 max.	3300	2000
FNR201610-1R5MH	1.50	1000	20	130.0 max.	1950	1700
FNR201610-2R2MH	2.20	1000	20	180.0 max.	1900	1400
FNR201610-3R3MH	3.30	1000	20	307.0 max.	1400	1100
FNR201610-4R7MH	4.70	1000	20	425.0 max.	1100	900
FNR201610-100MH	10.00	1000	20	875.0 max.	800	600
FNR252010-R24MH	0.24	1000	20	33.0 max.	6100	3700
FNR252010-R33MH	0.33	1000	20	39.0 max.	4800	3500
FNR252010-R47MH	0.47	1000	20	45.0 max.	4400	3200
FNR252010-R68MH	0.68	1000	20	59.0 max.	3200	2750
FNR252010-1R0MH	1.00	1000	20	85.0 max.	3100	2500
FNR252010-1R5MH	1.50	1000	20	106.0 max.	2600	2000
FNR252010-2R2MH	2.20	1000	20	155.0 max.	1900	1500
FNR252010-3R3MH	3.30	1000	20	235.0 max.	1600	1200
FNR252010-4R7MH	4.70	1000	20	290.0 max.	1300	1000
FNR252010-R47N	0.47	100	30	47.0	2500	2350
FNR252010-R68N	0.68	100	30	62.0	2200	2000
FNR252010-1R0N	1.00	100	30	90.0	1850	1650
FNR252010-1R5N	1.50	100	30	152.0	1800	1300
FNR252010-2R2N	2.20	100	30	174.0	1200	1200
FNR252010-3R3M	3.30	100	20	273.0	1050	900
FNR252010-4R7M	4.70	100	20	469.0	950	700
FNR252010-6R8M	6.80	100	20	747.0	780	590
FNR252010-100M	10.0	100	20	910.0	650	500
FNR252010-R22ML	0.22	1000	20	26.0	3600	3000
FNR252010-R24ML	0.24	1000	20	26.0	3600	3000
FNR252010-R33ML	0.33	1000	20	33.0	3600	2700
FNR252010-R47ML	0.47	1000	20	33.0	2800	2600
FNR252010-R68ML	0.68	1000	20	51.0	2750	2350

* Irms: DC current that will cause an approximate ΔT of 40°C. * Isat : DC current that will cause L to drop approximately 30%.

FNR Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Test Freq. (KHz/1.0V)	Tolerance (± %)	DCR (mΩ) ±30%	Isat (mA) max.	Irms (mA) typ.
FNR252010-1R0ML	1.00	1000	20	66.0	2050	2050
FNR252010-1R5ML	1.50	1000	20	85.0	1700	1700
FNR252010-2R2ML	2.20	1000	20	130.0	1500	1500
FNR252010-3R3ML	3.30	1000	20	170.0	1100	1200
FNR252010-4R7ML	4.70	1000	20	280.0	1000	1000
FNR252010-5R6ML	5.60	1000	20	370.0	900	900
FNR252010-6R8ML	6.80	1000	20	400.0	800	800
FNR252010-8R2ML	8.20	1000	20	463.0	730	780
FNR252010-100ML	10.00	1000	20	500.0	650	740
FNR252010-120ML	12.00	1000	20	700.0	580	620
FNR252010-150ML	15.00	1000	20	820.0	500	500
FNR252012-R24MH	0.24	1000	20	23.0 max.	6500	4050
FNR252012-R33MH	0.33	1000	20	28.0 max.	5350	3700
FNR252012-R47MH	0.47	1000	20	35.0 max.	4900	3450
FNR252012-R68MH	0.68	1000	20	45.0 max.	3800	3150
FNR252012-1R0MH	1.00	1000	20	54.0 max.	3600	3000
FNR252012-1R5MH	1.50	1000	20	72.0 max.	2900	2400
FNR252012-2R2MH	2.20	1000	20	120.0 max.	2600	1900
FNR252012-3R3MH	3.30	1000	20	163.0 max.	1700	1800
FNR252012-4R7MH	4.70	1000	20	260.0 max.	1600	1250
FNR252012-6R8MH	6.80	1000	20	366.0 max.	1200	950
FNR252012-100MH	10.00	1000	20	480.0 max.	1100	850
FNR252012-R47N	0.47	100	30	42.0	3820	2150
FNR252012-R68N	0.68	100	30	73.0	2700	1730
FNR252012-1R0N	1.00	100	30	85.0	2680	1580
FNR252012-1R2N	1.20	100	30	99.0	2380	1460
FNR252012-1R5M	1.50	100	20	113.0	2240	1400
FNR252012-2R2M	2.20	100	20	165.0	1850	1150
FNR252012-3R3M	3.30	100	20	200.0	1610	1040
FNR252012-4R7M	4.70	100	20	315.0	1180	840
FNR252012-5R6M	5.60	100	20	414.0	1110	730
FNR252012-6R8M	6.80	100	20	447.0	980	690
FNR252012-8R2M	8.20	100	20	506.0	980	650
FNR252012-100M	10.00	100	20	575.0	880	620
FNR252012-120M	12.00	100	20	827.0	780	510
FNR252012-150M	15.00	100	20	900.0	620	400
FNR252012-220M	22.00	100	20	1520.0	530	380
FNR252012-R24ML	0.24	1000	20	19.0	4100	4500
FNR252012-R33ML	0.33	1000	20	26.0	4000	3700
FNR252012-R47ML	0.47	1000	20	31.0	3800	3300
FNR252012-R56ML	0.56	1000	20	38.0	3600	2500
FNR252012-R68ML	0.68	1000	20	38.0	3000	2500

* Irms: DC current that will cause an approximate ΔT of 40°C.

* Isat : DC current that will cause L to drop approximately 30%.

FNR Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Test Freq. (KHz/1.0V)	Tolerance (± %)	DCR (mΩ) ±30%	Isat (mA) max.	Irms (mA) typ.
FNR252012-1R0ML	1.00	1000	20	50.0	2250	2300
FNR252012-1R2ML	1.20	1000	20	65.0	2200	2200
FNR252012-1R5ML	1.50	1000	20	75.0	2000	2000
FNR252012-1R8ML	1.80	1000	20	93.0	1950	1900
FNR252012-2R2ML	2.20	1000	20	93.0	1750	1900
FNR252012-2R7ML	2.70	1000	20	130.0	1300	1500
FNR252012-3R3ML	3.30	1000	20	130.0	1200	1500
FNR252012-4R7ML	4.70	1000	20	190.0	1100	1200
FNR252012-5R6ML	5.60	1000	20	255.0	1000	1150
FNR252012-6R8ML	6.80	1000	20	300.0	900	1050
FNR252012-100ML	10.00	1000	20	435.0	700	860
FNR252012-120ML	12.00	1000	20	600.0	650	780
FNR252012-150ML	15.00	1000	20	700.0	600	600
FNR252012-220ML	22.00	1000	20	1000.0	450	550
FNR3010-1R0N	1.00	100	30	65.0	1400	1450
FNR3010-1R5N	1.50	100	30	80.0	1270	1300
FNR3010-2R2M	2.20	100	20	110.0	1150	1090
FNR3010-3R3M	3.30	100	20	145.0	970	960
FNR3010-4R7M	4.70	100	20	225.0	750	770
FNR3010-6R8M	6.80	100	20	305.0	550	660
FNR3010-100M	10.00	100	20	400.0	550	580
FNR3010-150M	15.00	100	20	610.0	420	470
FNR3010-220M	22.00	100	20	930.0	350	380
FNR3012-R33N	0.33	100	30	21.0	3000	2900
FNR3012-R47N	0.47	100	30	33.0	2200	2200
FNR3012-R82N	0.82	100	30	40.0	2050	2100
FNR3012-1R0N	1.00	100	30	48.0	1900	2000
FNR3012-1R5N	1.50	100	30	55.0	1620	1850
FNR3012-1R8N	1.80	100	30	68.0	1500	1700
FNR3012-2R2M	2.20	100	20	75.0	1200	1550
FNR3012-3R3M	3.30	100	20	100.0	1050	1350
FNR3012-4R7M	4.70	100	20	120.0	900	1250
FNR3012-5R6M	5.60	100	20	160.0	800	1100
FNR3012-6R8M	6.80	100	20	190.0	750	1000
FNR3012-100M	10.00	100	20	265.0	600	890
FNR3012-150M	15.00	100	20	430.0	450	720
FNR3012-220M	22.00	100	20	630.0	420	550
FNR3012-270M	27.00	100	20	800.0	350	450
FNR3012-330M	33.00	100	20	875.0	360	460
FNR3012-470M	47.00	100	20	1450.0	270	350

* Irms: DC current that will cause an approximate ΔT of 40°C. * Isat : DC current that will cause L to drop approximately 30%.

FNR Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Test Freq. (KHz/1.0V)	Tolerance (± %)	DCR (mΩ) ±30%	Isat (mA) max.	Irms (mA) typ.
FNR3015-1R0N	1.00	100	30	37.0	2320	2100
FNR3015-1R5N	1.50	100	30	50.0	2000	1700
FNR3015-2R2N	2.20	100	30	60.0	1600	1600
FNR3015-3R3M	3.30	100	20	80.0	1320	1360
FNR3015-4R7M	4.70	100	20	125.0	1100	1090
FNR3015-6R8M	6.80	100	20	200.0	850	850
FNR3015-100M	10.00	100	20	250.0	720	770
FNR3015-150M	15.00	100	20	350.0	660	650
FNR3015-220M	22.00	100	20	460.0	520	570
FNR3015-330M	33.00	100	20	820.0	440	430
FNR3015-470M	47.00	100	20	1250.0	350	350
FNR3015-R47NM	0.47	100	30	36.0	4230	3600
FNR3015-1R0NM	1.00	100	30	54.0	3060	2700
FNR3015-1R5NM	1.50	100	30	63.0	2700	2340
FNR3015-2R2NM	2.20	100	30	90.0	2070	1800
FNR3015-3R3MM	3.30	100	20	125.0	1710	1620
FNR3015-4R7MM	4.70	100	20	170.0	1420	1360
FNR3015-6R8MM	6.80	100	20	235.0	1200	1170
FNR3015-100MM	10.00	100	20	360.0	950	900
FNR3015-150MM	15.00	100	20	550.0	810	720
FNR3015-220MM	22.00	100	20	770.0	680	580
FNR3015-330MM	33.00	100	20	930.0	580	540
FNR3015-470MM	47.00	100	20	1500.0	460	370
FNR3015-101MM	100.00	100	20	2700.0	320	270
FNR3015-R22MH	0.22	1000	20	19 max.	8800	5900
FNR3015-R24MH	0.24	1000	20	19 max.	8600	5900
FNR3015-R33MH	0.33	1000	20	21 max.	8000	5800
FNR3015-R47MH	0.47	1000	20	26 max.	7600	5000
FNR3015-R68MH	0.68	1000	20	37 max.	7000	4500
FNR3015-1R0MH	1.00	1000	20	48 max.	5800	3800
FNR3015-1R5MH	1.50	1000	20	72 max.	4600	2700
FNR3015-2R2MH	2.20	1000	20	95 max.	3700	2500
FNR3015-3R3MH	3.30	1000	20	150 max.	3400	2300
FNR3015-4R7MH	4.70	1000	20	185 max.	2500	1900
FNR3015-6R8MH	6.80	1000	20	320 max.	2000	1350
FNR3015-100MH	10.00	1000	20	450 max.	1600	1200
FNR3015-150MH	15.00	1000	20	610 max.	1450	1200
FNR3015-220MH	22.00	1000	20	910 max.	1000	660
FNR3015-470MH	47.00	1000	20	1900 max.	800	480

* Irms: DC current that will cause an approximate ΔT of 40°C. * Isat : DC current that will cause L to drop approximately 30%.

FNR Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Test Freq. (KHz/1.0V)	Tolerance (± %)	DCR (mΩ) ±30%	Isat (mA) max.	Irms (mA) typ.
FNR4012-R56MH	0.56	1000	20	40.0	6000	3200
FNR4012-R68MH	0.68	1000	20	42.0	5200	3200
FNR4012-1R0MH	1.00	1000	20	49.0	3800	3000
FNR4012-2R2MH	2.20	1000	20	75.0	2800	2500
FNR4012-3R3MH	3.30	1000	20	106.0	2800	2000
FNR4012-4R7MH	4.70	1000	20	145.0	2300	1800
FNR4012-6R8MH	6.80	1000	20	190.0	1600	1500
FNR4012-100MH	10.00	1000	20	300.0	1550	850
FNR4012-1R0N	1.00	100	30	60.0	2500	1500
FNR4012-2R2M	2.20	100	20	90.0	1650	1200
FNR4012-3R3M	3.30	100	20	130.0	1200	980
FNR4012-4R7M	4.70	100	20	120.0	1200	960
FNR4012-6R8M	6.80	100	20	180.0	900	840
FNR4012-100M	10.00	100	20	240.0	740	770
FNR4012-150M	15.00	100	20	400.0	650	600
FNR4012-220M	22.00	100	20	480.0	510	540
FNR4012-330M	33.00	100	20	810.0	400	420
FNR4012-470M	47.00	100	20	1000.0	350	370
FNR4018-1R0N	1.00	100	30	23.0	4500	2500
FNR4018-1R5N	1.50	100	30	33.0	3350	2340
FNR4018-2R2M	2.20	100	20	44.0	2700	2000
FNR4018-3R3M	3.30	100	20	70.0	2450	1900
FNR4018-4R7M	4.70	100	20	90.0	1700	1700
FNR4018-5R6M	5.60	100	20	103.0	1600	1500
FNR4018-6R8M	6.80	100	20	124.0	1450	1300
FNR4018-100M	10.00	100	20	200.0	1300	1100
FNR4018-150M	15.00	100	20	268.0	940	920
FNR4018-220M	22.00	100	20	390.0	800	800
FNR4018-330M	33.00	100	20	560.0	650	600
FNR4018-470M	47.00	100	20	850.0	570	500
FNR4018-680M	68.00	100	20	1000.0	470	320
FNR4018-101M	100.00	100	20	1750.0	400	250
FNR4018-151M	150.00	100	20	2500.0	310	220
FNR4018-221M	220.00	100	20	4000.0	270	170

* Irms: DC current that will cause an approximate ΔT of 40°C. * Isat : DC current that will cause L to drop approximately 30%.

FNR Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Test Freq. (KHz/1.0V)	Tolerance (± %)	DCR (mΩ) ±30%	Isat (mA) max.	Irms (mA) typ.
FNR4020-R24MH	0.24	1000	20	13.0	14000	7000
FNR4020-R33MH	0.33	1000	20	15.0	13000	6800
FNR4020-R47MH	0.47	1000	20	16.0	11000	6800
FNR4020-R68MH	0.68	1000	20	19.2	9000	6700
FNR4020-1R0MH	1.00	1000	20	23.0	8700	6000
FNR4020-1R5MH	1.50	1000	20	32.0	7700	4800
FNR4020-2R2MH	2.20	1000	20	46.0	6000	4000
FNR4020-3R3MH	3.30	1000	20	73.0	4700	3400
FNR4020-4R7MH	4.70	1000	20	95.0	4000	2850
FNR4020-6R8MH	6.80	1000	20	130.0	3000	2400
FNR4020-8R2MH	8.20	1000	20	175.0	2900	2100
FNR4020-100MH	10.00	1000	20	190.0	2800	2000
FNR4020-150MH	15.00	1000	20	305.0	2100	750
FNR4020-1R0N	1.00	100	30	28.0	5100	2150
FNR4020-1R2N	1.20	100	30	29.0	4700	2100
FNR4020-1R5N	1.50	100	30	35.0	4450	1980
FNR4020-2R2M	2.20	100	20	40.0	3400	1850
FNR4020-3R3M	3.30	100	20	70.0	3200	1400
FNR4020-4R7M	4.70	100	20	80.0	2350	1340
FNR4020-5R6M	5.60	100	20	95.0	2200	1220
FNR4020-6R8M	6.80	100	20	125.0	2000	1040
FNR4020-8R2M	8.20	100	20	150.0	1750	1000
FNR4020-100M	10.00	100	20	165.0	1600	900
FNR4020-120M	12.00	100	20	175.0	1500	880
FNR4020-150M	15.00	100	20	230.0	1350	770
FNR4020-220M	22.00	100	20	350.0	1050	620
FNR4020-270M	27.00	100	20	545.0	1020	500
FNR4020-330M	33.00	100	20	550.0	850	490
FNR4020-470M	47.00	100	20	710.0	740	440
FNR4020-680M	68.00	100	20	1250.0	600	350

* Irms: DC current that will cause an approximate ΔT of 40°C. *Isat: DC current that will cause L to drop approximately 30%.

FNR Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Test Freq. (KHz/1.0V)	Tolerance (± %)	DCR (mΩ) ±30%	Isat (mA) max.	Irms (mA) typ.
FNR4030-R47N	0.47	100	30	11.0	7500	3500
FNR4030-1R0N	1.00	100	30	15.0	5900	3400
FNR4030-1R5N	1.50	100	30	25.0	4850	3300
FNR4030-2R2M	2.20	100	20	35.0	4100	2950
FNR4030-3R3M	3.30	100	20	40.0	3300	2400
FNR4030-4R7M	4.70	100	20	60.0	2900	2000
FNR4030-5R6M	5.60	100	20	70.0	2750	1950
FNR4030-6R8M	6.80	100	20	75.0	2600	1700
FNR4030-7R5M	7.50	100	20	90.0	2200	1650
FNR4030-8R2M	8.20	100	20	100.0	2100	1600
FNR4030-100M	10.00	100	20	115.0	1950	1500
FNR4030-120M	12.00	100	20	140.0	1700	1350
FNR4030-150M	15.00	100	20	190.0	1650	1150
FNR4030-180M	18.00	100	20	215.0	1400	1100
FNR4030-220M	22.00	100	20	225.0	1300	1000
FNR4030-330M	33.00	100	20	330.0	1100	840
FNR4030-470M	47.00	100	20	500.0	850	650
FNR4030-560M	56.00	100	20	560.0	850	650
FNR4030-680M	68.00	100	20	750.0	750	550
FNR4030-820M	82.00	100	20	950.0	680	500
FNR4030-101M	100.00	100	20	1150.0	600	450
FNR5020-1R0N	1.00	100	30	20.0	4330	3700
FNR5020-1R5N	1.50	100	30	26.0	4100	3200
FNR5020-2R2N	2.20	100	30	38.0	3850	2900
FNR5020-3R3M	3.30	100	20	46.0	3250	2400
FNR5020-4R7M	4.70	100	20	65.0	2400	2050
FNR5020-6R8M	6.80	100	20	92.0	2100	1700
FNR5020-100M	10.00	100	20	125.0	1800	1500
FNR5020-120M	12.00	100	20	140.0	1500	1400
FNR5020-150M	15.00	100	20	180.0	1440	1250
FNR5020-180M	18.00	100	20	200.0	1250	1150
FNR5020-220M	22.00	100	20	250.0	1180	1050
FNR5020-330M	33.00	100	20	370.0	970	830
FNR5020-470M	47.00	100	20	560.0	810	700
FNR5020-560M	56.00	100	20	630.0	770	660
FNR5020-101M	100.00	100	20	1100.0	530	530

* Irms: DC current that will cause an approximate ΔT of 40°C. * Isat : DC current that will cause L to drop approximately 30%.

FNR Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Test Freq. (KHz/1.0V)	Tolerance (± %)	DCR (mΩ) ±30%	Isat (mA) max.	Irms (mA) typ.
FNR5030-R47N	0.47	100	30	10.0	9000	5000
FNR5030-1R0N	1.0	100	30	15.0	6650	4000
FNR5030-1R5N	1.5	100	30	16.0	4800	3900
FNR5030-2R2M	2.2	100	20	23.0	4200	3500
FNR5030-3R3M	3.3	100	20	30.0	3600	3000
FNR5030-4R7M	4.7	100	20	35.0	3100	2600
FNR5030-6R8M	6.8	100	20	52.0	2500	2300
FNR5030-100M	10.0	100	20	70.0	1900	1700
FNR5030-150M	15.0	100	20	125.0	1600	1400
FNR5030-220M	22.0	100	20	180.0	1400	1050
FNR5030-270M	27.0	100	20	190.0	1300	900
FNR5030-330M	33.0	100	20	225.0	1150	800
FNR5030-470M	47.0	100	20	325.0	950	700
FNR5030-560M	56.0	100	20	420.0	890	650
FNR5030-680M	68.0	100	20	475.0	850	600
FNR5030-101M	100.0	100	20	720.0	580	590
FNR5030-151M	150.0	100	20	1050.0	560	550
FNR5030-221M	220.0	100	20	1300.0	500	450

* Irms: DC current that will cause an approximate ΔT of 40°C. * Isat : DC current that will cause L to drop approximately 30%.

FNR Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Test Freq. (KHz/1.0V)	Tolerance (± %)	DCR (mΩ) ±30%	Isat (mA) max.	Irms (mA) typ.
FNR5040-1R0N	1.00	100	30	13.0	7350	4900
FNR5040-1R5N	1.50	100	30	15.0	6300	4300
FNR5040-2R2N	2.20	100	30	19.0	4900	3800
FNR5040-3R3N	3.30	100	30	24.0	3950	3400
FNR5040-3R9N	3.90	100	30	27.0	3550	3200
FNR5040-4R7N	4.70	100	30	30.0	3500	3000
FNR5040-5R6M	5.60	100	20	33.0	3200	2800
FNR5040-6R8M	6.80	100	20	43.0	2900	2500
FNR5040-100M	10.00	100	20	64.0	2350	2100
FNR5040-150M	15.00	100	20	86.0	2000	2000
FNR5040-220M	22.00	100	20	129.0	1600	1500
FNR5040-270M	27.00	100	20	165.0	1500	1300
FNR5040-330M	33.00	100	20	188.0	1300	1200
FNR5040-470M	47.00	100	20	270.0	1100	1000
FNR5040-680M	68.00	100	20	400.0	900	800
FNR5040-101M	100.00	100	20	560.0	750	700
FNR5040-221M	220.00	100	20	1330.0	450	400
FNR5040-331M	330.00	100	20	2100.0	420	360
FNR5040-471M	470.00	100	20	3000.0	370	350
FNR6015-1R2N	1.20	100	30	35.0	4200	2800
FNR6015-2R2N	2.20	100	30	50.0	3100	2300
FNR6015-3R3N	3.30	100	30	60.0	2600	2100
FNR6015-4R7M	4.70	100	20	90.0	2100	1900
FNR6015-5R6M	5.60	100	20	92.0	2000	1800
FNR6015-6R8M	6.80	100	20	115.0	1800	1650
FNR6015-100M	10.00	100	20	155.0	1450	1350
FNR6015-150M	15.00	100	20	220.0	1200	1200
FNR6015-220M	22.00	100	20	320.0	1000	1000
FNR6020-1R0N	1.00	100	30	20.0	4150	3500
FNR6020-1R5N	1.50	100	30	22.0	4250	3200
FNR6020-2R2N	2.20	100	30	28.0	3750	2750
FNR6020-3R3N	3.30	100	30	35.0	3150	2600
FNR6020-4R7N	4.70	100	30	58.0	3000	2000
FNR6020-6R8N	6.80	100	30	79.0	2200	1800
FNR6020-100M	10.00	100	20	105.0	1750	1400
FNR6020-120M	12.00	100	20	120.0	1450	1300
FNR6020-150M	15.00	100	20	145.0	1200	1200
FNR6020-180M	18.00	100	20	180.0	1200	1080
FNR6020-220M	22.00	100	20	204.0	1050	1000
FNR6020-330M	33.00	100	20	339.0	900	800
FNR6020-470M	47.00	100	20	500.0	750	700
FNR6020-680M	68.00	100	20	739.0	680	550
FNR6020-101M	100.00	100	20	1116.0	500	350
FNR6020-221M	220.00	100	20	2400.0	350	300
FNR6020-331M	330.00	100	20	3577.0	280	200
FNR6020-102M	1000.00	100	20	11039.0	180	100

* Irms: DC current that will cause an approximate ΔT of 40°C. * Isat : DC current that will cause L to drop approximately 30%.

FNR Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Test Freq. (KHz/1.0V)	Tolerance (± %)	DCR (mΩ) ±30%	Isat (mA) max.	Irms (mA) typ.
FNR6028-1R0N	1.00	100	30	12.0	6700	4600
FNR6028-1R5N	1.50	100	30	16.0	6000	4300
FNR6028-2R2N	2.20	100	30	20.0	5100	3750
FNR6028-3R3N	3.30	100	30	25.0	3630	3400
FNR6028-4R7N	4.70	100	30	33.0	3000	3000
FNR6028-5R6M	5.60	100	20	45.0	2800	2450
FNR6028-6R8M	6.80	100	20	56.0	2600	2400
FNR6028-8R2M	8.20	100	20	68.0	2400	2250
FNR6028-100M	10.00	100	20	78.0	2050	1900
FNR6028-120M	12.00	100	20	88.0	1800	1700
FNR6028-150M	15.00	100	20	125.0	1750	1500
FNR6028-180M	18.00	100	20	130.0	1550	1450
FNR6028-220M	22.00	100	20	140.0	1450	1400
FNR6028-270M	27.00	100	20	180.0	1400	1300
FNR6028-330M	33.00	100	20	220.0	1350	1100
FNR6028-470M	47.00	100	20	280.0	1150	1050
FNR6028-680M	68.00	100	20	450.0	950	850
FNR6028-820M	82.00	100	20	550.0	800	700
FNR6028-101M	100.00	100	20	670.0	650	600
FNR6045-R47N	0.47	100	30	7.7	10000	5200
FNR6045-1R0N	1.00	100	30	10.0	9000	5100
FNR6045-1R5N	1.50	100	30	12.0	8800	4950
FNR6045-2R2N	2.20	100	30	13.0	6750	4600
FNR6045-3R3N	3.30	100	30	20.0	5300	3200
FNR6045-4R7M	4.70	100	20	24.0	4500	3000
FNR6045-5R6M	5.60	100	20	31.0	3700	2800
FNR6045-6R8M	6.80	100	20	33.0	3300	2700
FNR6045-100M	10.0	100	20	52.0	3000	2500
FNR6045-120M	12.0	100	20	60.0	2800	2200
FNR6045-150M	15.0	100	20	77.0	2500	1900
FNR6045-180M	18.0	100	20	81.0	2200	1850
FNR6045-220M	22.0	100	20	115.0	2000	1500
FNR6045-270M	27.0	100	20	130.0	1800	1450
FNR6045-330M	33.0	100	20	150.0	1650	1450
FNR6045-470M	47.0	100	20	220.0	1400	1200
FNR6045-560M	56.0	100	20	260.0	1300	1100
FNR6045-680M	68.0	100	20	290.0	1200	900
FNR6045-820M	82.0	100	20	341.0	1050	850
FNR6045-101M	100.0	100	20	430.0	1000	800
FNR6045-121M	120.0	100	20	484.0	860	770
FNR6045-151M	150.0	100	20	580.0	800	700
FNR6045-221M	220.0	100	20	834.0	700	590
FNR6045-331M	330.0	100	20	1270.0	570	570
FNR6045-102M	1000.0	100	20	5300.0	250	200

* Irms: DC current that will cause an approximate ΔT of 40°C. * Isat : DC current that will cause L to drop approximately 30%.

FNR Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Test Freq. (KHz/1.0V)	Tolerance (± %)	DCR (mΩ) ±30%	Isat (mA) max.	Irms (mA) typ.
FNR8040-1R0N	1.00	100	30	8.0	9850	6300
FNR8040-1R5N	1.50	100	30	10.0	8150	5650
FNR8040-2R2N	2.20	100	30	12.0	7100	5150
FNR8040-3R3N	3.30	100	30	17.0	6500	4400
FNR8040-4R7N	4.70	100	30	20.0	5900	4000
FNR8040-5R6M	5.60	100	20	24.0	5500	3800
FNR8040-6R8M	6.80	100	20	28.0	4550	3600
FNR8040-8R2M	8.20	100	20	35.0	4200	3400
FNR8040-100M	10.00	100	20	37.0	3600	3100
FNR8040-120M	12.00	100	20	42.0	3500	2800
FNR8040-150M	15.00	100	20	56.0	2950	2500
FNR8040-180M	18.00	100	20	60.0	2700	2400
FNR8040-220M	22.00	100	20	74.0	2400	2000
FNR8040-270M	27.00	100	20	78.0	2150	1900
FNR8040-330M	33.00	100	20	100.0	2050	1700
FNR8040-470M	47.00	100	20	158.0	1750	1500
FNR8040-680M	68.00	100	20	196.0	1450	1200
FNR8040-820M	82.00	100	20	225.0	1300	1150
FNR8040-101M	100.00	100	20	295.0	1150	1000
FNR8040-121M	120.00	100	20	334.0	1120	950
FNR8040-151M	150.00	100	20	470.0	1100	800
FNR8040-181M	180.00	100	20	610.0	900	750
FNR8040-221M	220.00	100	20	660.0	850	700
FNR8040-331M	330.00	100	20	970.0	680	550
FNR8065-150M	15.00	100	20	45.0	5200	3500
FNR8065-220M	22.00	100	20	54.0	4300	2850
FNR8065-330M	33.00	100	20	83.0	3600	2000
FNR8065-470M	47.00	100	20	135.0	2850	1800
FNR8065-680M	68.00	10	20	181.0	2500	1500
FNR8065-101M	100.00	10	20	250.0	2000	1300
FNR8065-151M	150.00	10	20	360.0	1600	1000
FNR8065-221M	220.00	10	20	528.0	1300	900
FNR1050-220M	22.00	100	20	65.0	4300	3500
FNR1050-330M	33.00	100	20	90.0	4000	3000
FNR1050-470M	47.00	100	20	125.0	3300	2500
FNR1050-680M	68.00	100	20	181.0	3000	2000
FNR1050-101M	100.00	100	20	260.0	2500	1600
FNR1050-221M	220.00	100	20	520.0	1800	1100

* Irms: DC current that will cause an approximate ΔT of 40°C. * Isat : DC current that will cause L to drop approximately 30%.

FCDL Series (Rev. 5.0)

Applications

* DC/DC converters, etc
* Power supply for VTRs
* OA equipment
* LCD televisions
* Notebook PCs
* Portable communication devices

Features

* RoHS compliant
* Available in magnetic shielding
* Low DC resistance
* Suitable for large currents
* Ideal for DC-DC converter inductor applications

Operating & Storage Condition

* Operating Temp.: -40 to +85°C
* Storage Temp.: -40 to +85°C
* Storage Life Time :12 Months @25°C,RH 65%

Product Identification

FCDL	7030	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%, N=±30%

Test Equipment

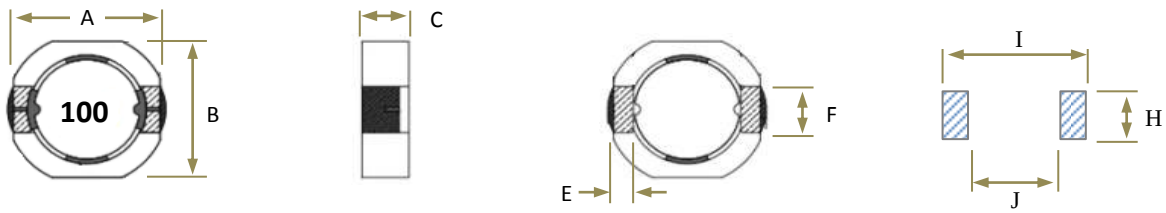
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Top View	Side View	Bottom View	PAD Layout



Size Code	A(±0.5)	B(±0.5)	C(max.)	E(typ.)	F(typ.)	H(ref.)	I(ref.)	J(ref.)
6045	6.2±0.3	6.0±0.2	4.8	0.8	2	2.2	7.0	4.0
7030	7.5	7.5	3.0	1.0	2.5	2.8	8.4	5.4
7040	7.5	7.5	4.0	1.0	2.5	2.8	8.4	5.4
7045	7.5	7.5	4.5	1.0	2.5	2.8	8.4	5.4
7060	7.5	7.5	6.0	1.0	2.5	2.8	8.4	5.4

FCDL Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	Tolerance	DCR (mΩ) ±30%	Isat. (A) max.	Irms. (A) max.
FCDL6045-1R0N	1.0	N	11	6.70	4.80
FCDL6045-1R5N	1.5	N	13	5.50	4.50
FCDL6045-2R2N	2.2	N	15	4.20	4.10
FCDL6045-3R3N	3.3	N	19	3.50	3.70
FCDL6045-4R7N	4.7	N	23	3.10	3.30
FCDL6045-6R8N	6.8	N	27	2.50	3.10
FCDL6045-100M/N	10.0	M/N	35	2.60	2.10
FCDL6045-150M/N	15.0	M/N	60	2.30	1.70
FCDL6045-220M/N	22.0	M/N	75	1.80	1.40
FCDL6045-330M/N	33.0	M/N	100	1.60	1.10
FCDL6045-470M/N	47.0	M/N	130	1.40	0.97
FCDL6045-680M/N	68.0	M/N	200	1.10	0.81
FCDL6045-101M/N	100.0	M/N	320	0.86	0.61
FCDL6045-331M/N	330.0	M/N	1500	0.47	0.45
FCDL6045-471M/N	470.0	M/N	1680	0.27	0.27
FCDL6045-222M/N	2200.0	M/N	1750	0.10	0.08
FCDL7030-1R0N	1.0	N	9.2±20%	9.00	6.50
FCDL7030-2R2N	2.2	N	19.2±20%	5.50	4.60
FCDL7030-2R7N	2.7	N	20.5±20%	5.30	4.40
FCDL7030-3R3N	3.3	N	22.5±20%	4.10	4.20
FCDL7030-4R7M/N	4.7	M/N	30.0±20%	3.30	3.50
FCDL7030-5R0N	5.0	N	30.0±20%	3.30	3.50
FCDL7030-6R8N	6.8	N	40.0±20%	3.10	3.10
FCDL7030-8R0N	8.0	N	52.0±20%	3.00	2.60
FCDL7030-100M/N	10.0	M/N	70.0±20%	2.90	2.00
FCDL7030-220M/N	22.0	M/N	140.0±20%	2.00	1.70
FCDL7030-330M/N	33.0	M/N	175.0±20%	1.70	1.20
FCDL7030-470M/N	47.0	M/N	265.0±20%	1.50	1.00
FCDL7030-101M/N	100.0	M/N	575.0±20%	1.00	0.85

* Test Freq.: @100KHz / 0.1V
* IDC : This indicates the value of current when the inductance is 35% lower than it's initial value at D.C. superimposition or D.C.current when at ΔT=40°C,whichever is lower. (Ta=20°C)
* Tolerance: M= ±20%, N= ±30%

FCDL Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	Tolerance	DCR (mΩ) ±20%	Isat. (A) max.	Irms. (A) max.
FCDL7040-1R0N	1.0	N	5.4	8.30	8.00
FCDL7040-1R5N	1.5	N	7.2	7.20	6.80
FCDL7040-2R0N	2.0	N	8.0	7.00	6.50
FCDL7040-2R2N	2.2	N	8.0	7.00	6.50
FCDL7040-3R3N	3.3	N	11.2	5.50	5.40
FCDL7040-4R7N	4.7	N	14.1	4.90	4.60
FCDL7040-5R6M/N	5.6	M/N	16.0	4.60	4.10
FCDL7040-6R8M/N	6.8	M/N	22.2	3.90	3.50
FCDL7040-8R2M/N	8.2	M/N	30.0	3.50	3.00
FCDL7040-100M/N	10.0	M/N	34.6	3.20	2.80
FCDL7040-150M/N	15.0	M/N	47.0	2.50	2.30
FCDL7040-180M/N	18.0	M/N	57.5	2.30	2.25
FCDL7040-220M/N	22.0	M/N	58.0	2.20	2.10
FCDL7040-330M/N	33.0	M/N	95.0	1.80	2.00
FCDL7040-470M/N	47.0	M/N	165.0	1.35	1.30
FCDL7040-820M/N	82.0	M/N	312.0	1.20	0.85
FCDL7040-101M/N	100.0	M/N	400.0	1.10	0.82
FCDL7040-121M/N	120.0	M/N	469.0	1.00	0.75
FCDL7040-151M/N	150.0	M/N	685.0	0.92	0.65
FCDL7045-1R0N	1.0	N	6.5	9.00	8.00
FCDL7045-2R2N	2.2	N	8.6	7.30	6.50
FCDL7045-3R3N	3.3	N	10.2	5.80	5.50
FCDL7045-4R7M/N	4.7	M/N	14.5	5.40	5.20
FCDL7045-6R8M/N	6.8	M/N	19.2	4.30	4.00
FCDL7045-100M/N	10.0	M/N	28.9	3.50	3.50
FCDL7045-180M/N	18.0	M/N	51.4	2.80	2.70
FCDL7045-220M/N	22.0	M/N	54.3	2.60	2.40
FCDL7045-330M/N	33.0	M/N	82.4	2.10	2.00
FCDL7045-470M/N	47.0	M/N	110.0	1.80	1.60
FCDL7045-680M/N	68.0	M/N	165.0	1.40	1.40
FCDL7045-101M/N	100.0	M/N	330.0	1.20	1.10
FCDL7045-221M/N	220.0	M/N	800.0	0.80	0.70
FCDL7045-331M/N	330.0	M/N	1130.0	0.70	0.55

* Test Freq.: @100KHz / 0.1V
* IDC : This indicates the value of current when the inductance is 35% lower than it's initial value at D.C. superimposition or D.C.current when at ΔT=40°C,whichever is lower. (Ta=20°C)
* Tolerance: M= ±20%, N= ±30%

FCDL Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	Tolerance	DCR (mΩ) ±20%	Isat. (A) max.	Irms. (A) max.
FCDL7060-2R0N	2.0	N	8.6	10.50	6.60
FCDL7060-2R2N	2.2	N	8.6	10.50	6.60
FCDL7060-3R3N	3.3	N	12.2	7.50	5.35
FCDL7060-4R7M/N	4.7	M/N	16.8	7.00	4.70
FCDL7060-5R2N	5.2	N	18.3	6.30	4.55
FCDL7060-6R2N	6.2	N	21.0	5.80	4.30
FCDL7060-6R8M/N	6.8	M/N	22.0	5.30	4.10
FCDL7060-100M/N	10.0	M/N	26.9	4.50	3.70
FCDL7060-150M/N	15.0	M/N	32.6	3.60	3.30
FCDL7060-220M/N	22.0	M/N	50.8	3.00	2.60
FCDL7060-330M/N	33.0	M/N	92.5	2.50	2.00
FCDL7060-470M/N	47.0	M/N	150.0	2.00	1.45
FCDL7060-680M/N	68.0	M/N	290.0	1.80	1.00
FCDL7060-820M/N	82.0	M/N	410.0	1.60	0.85
FCDL7060-101M/N	100.0	M/N	510.0	1.40	0.80
FCDL7060-121M/N	120.0	M/N	560.0	1.30	0.75
FCDL7060-151M/N	150.0	M/N	650.0	1.20	0.72
FCDL7060-181M/N	180.0	M/N	710.0	1.10	0.68
FCDL7060-221M/N	220.0	M/N	770.0	0.90	0.55

* Test Freq.: @100KHz / 0.1V
* IDC : This indicates the value of current when the inductance is 35% lower than it's initial value at D.C. superimposition or D.C.current when at ΔT=40°C,whichever is lower. (Ta=20°C)
* Tolerance: M= ±20%, N= ±30%

FCDM Series (Rev. 5.0)

Applications

* DC/DC converters, etc
* Power supply for VTRs
* OA equipment
* LCD televisions
* Notebook PCs
* Portable communication devices

Features

* RoHS compliant
* Available in magnetic shielding
* Low DC resistance
* Suitable for large currents
* Ideal for DC-DC converter inductor applications

Operating & Storage Condition

* Operating Temp.: -40 to +85°C
* Storage Temp.: -40 to +85°C
* Storage Life Time :12 Months @25°C,RH 65%

Product Identification

FCDM	104	-	101	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 100uH
4. Tolerance: M=±20%, N=±30%

Test Equipment

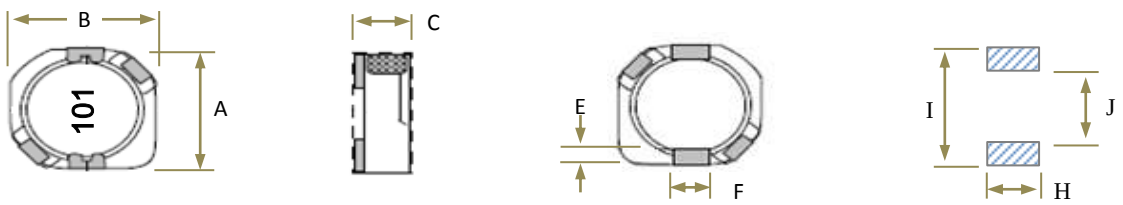
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Top View	Side View	Bottom View	PAD Layout



Size Code	A(±0.5)	B(±0.5)	C(max.)	E(typ.)	F(typ.)	H(ref.)	I(ref.)	J(ref.)
104	10.2	10.2	4.5	1.2	3.0	3.2	10.5	7.3
105	10.2	10.2	5.1	1.2	3.0	3.2	10.5	7.3

FCDM Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	Tolerance (M/N)	DCR (mΩ) max.	IDC (A) max.
FCDM104-R33N	0.33	N	4.2	8.50
FCDM104-R68N	0.68	N	6.0	7.50
FCDM104-1R0N	1.00	N	15.0	6.50
FCDM104-1R3N	1.30	N	15.5	5.40
FCDM104-1R8N	1.80	N	16.0	5.20
FCDM104-2R2N	2.20	N	17.0	4.95
FCDM104-2R5N	2.50	N	20.0	4.50
FCDM104-3R0N	3.00	N	20.0	4.50
FCDM104-3R3N	3.30	N	22.0	4.35
FCDM104-3R8N	3.80	N	26.0	4.05
FCDM104-4R7N	4.70	N	30.0	3.90
FCDM104-5R2N	5.20	N	33.0	3.90
FCDM104-5R6N	5.60	N	33.0	3.80
FCDM104-6R8N	6.80	N	43.0	3.50
FCDM104-7R0N	7.00	N	43.0	3.50
FCDM104-8R2N	8.20	N	50.0	3.20
FCDM104-100M	10.00	M	60.0	3.15
FCDM104-150M	15.00	M	78.0	2.90
FCDM104-180M	18.00	M	90.0	2.70
FCDM104-220M	22.00	M	107.0	2.50
FCDM104-270M	27.00	M	114.0	2.30
FCDM104-330M	33.00	M	133.0	2.00
FCDM104-470M	47.00	M	241.0	1.80
FCDM104-680M	68.00	M	338.0	1.35
FCDM104-820M	82.00	M	384.0	1.26
FCDM104-101M	100.00	M	429.0	1.17
FCDM104-151M	150.00	M	611.0	1.05
FCDM104-221M	220.00	M	939.0	0.90
FCDM104-331M	330.00	M	1300.0	0.53
FCDM104-471M	470.00	M	1760.0	0.40

* Test Freq.: @100KHz / 0.1V
* IDC : This indicates the value of current when the inductance is 35% lower than it's initial value at D.C. superimposition or D.C.current when at ΔT=40°C,whichever is lower. (Ta=20°C)
* Tolerance: M= ±20%, N= ±30%

FCDM Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	Tolerance (M/N)	DCR (mΩ) max.	IDC (A) max.
FCDM105-1R2N	1.2	N	12.0	8.30
FCDM105-1R5N	1.5	N	14.0	8.30
FCDM105-1R8N	1.8	N	15.0	7.85
FCDM105-2R2N	2.2	N	16.0	7.50
FCDM105-2R7N	2.7	N	18.2	7.10
FCDM105-3R3N	3.3	N	19.5	6.50
FCDM105-3R9N	3.9	N	22.5	6.00
FCDM105-4R7N	4.7	N	28.0	5.50
FCDM105-5R6N	5.6	N	30.0	4.50
FCDM105-6R8N	6.8	N	36.0	4.90
FCDM105-8R2N	8.2	N	45.0	4.55
FCDM105-100M	10.0	M	51.0	4.00
FCDM105-150M	15.0	M	57.0	3.30
FCDM105-180M	18.0	M	59.0	3.10
FCDM105-220M	22.0	M	82.0	2.90
FCDM105-330M	33.0	M	95.0	2.60
FCDM105-470M	47.0	M	183.0	2.00
FCDM105-560M	56.0	M	205.0	1.80
FCDM105-680M	68.0	M	234.0	1.60
FCDM105-820M	82.0	M	247.0	1.40
FCDM105-101M	100.0	M	325.0	1.35
FCDM105-151M	150.0	M	403.0	1.10
FCDM105-181M	180.0	M	527.0	1.00
FCDM105-221M	220.0	M	668.0	0.94
FCDM105-331M	330.0	M	775.0	0.60
FCDM105-471M	470.0	M	1300.0	0.54
FCDM105-561M	560.0	M	1400.0	0.48
FCDM105-681M	680.0	M	1560.0	0.45

* Test Freq.: @100KHz / 0.1V
* IDC : This indicates the value of current when the inductance is 35% lower than it's initial value at D.C. superimposition or D.C.current when at ΔT=40°C,whichever is lower. (Ta=20°C)
* Tolerance: M= ±20%, N= ±30%

FCDZ Series (Rev. 5.0)

Applications

* DC/DC converters, etc
* Power supply for VTRs
* OA equipment
* LCD televisions
* Notebook PCs
* Portable communication devices

Features

* RoHS compliant
* Available in magnetic shielding
* Low DC resistance
* Suitable for large currents
* Ideal for DC-DC converter inductor applications

Operating & Storage Condition

* Operating Temp.: -40 to +85°C
* Storage Temp.: -40 to +85°C
* Storage Life Time :12 Months @25°C,RH 65%

Product Identification

FCDZ	104	-	101	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 100uH
4. Tolerance: K=±10%, M=±20%, N=±30%

Test Equipment

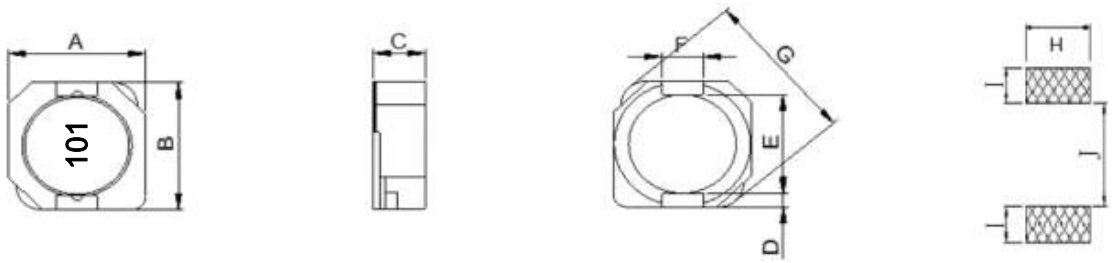
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Top View	Side View	Bottom View	PAD Layout



Size Code	A(±0.5)	B(±0.5)	C(max.)	D(typ.)	E(typ.)	F(typ.)	G(typ.)	H(typ.)	I(typ.)	J(typ.)
104	10.2	10.2	4.5	1.2	7.7	3.0	13.5	3.2	1.6	7.3
105	10.2	10.2	5.1	1.2	7.7	3.0	13.5	3.2	1.6	7.3

FCDZ Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	Tolerance (M/N)	DCR (mΩ) max.	IDC (A) max.
FCDZ104-1R5N	1.5	N	6.5	12.0
FCDZ104-1R8N	1.8	N	7.6	9.5
FCDZ104-2R2N	2.2	N	8.2	8.2
FCDZ104-3R3N	3.3	N	10.3	7.2
FCDZ104-4R7M/N	4.7	M/N	12.0	6.5
FCDZ104-5R6M/N	5.6	M/N	24.0	5.3
FCDZ104-6R8M/N	6.8	M/N	27.0	5.1
FCDZ104-100M/N	10.0	M/N	35.0	3.8
FCDZ104-150M/N	15.0	M/N	45.0	3.5
FCDZ104-220M/N	22.0	M/N	66.0	2.8
FCDZ104-330M/N	33.0	M/N	101.0	2.3
FCDZ104-470M/N	47.0	M/N	170.0	2.0
FCDZ104-560M/N	56.0	M/N	200.0	1.9
FCDZ104-101K/M	100.0	K/M	280.0	1.7
FCDZ104-151K/M	150.0	K/M	400.0	1.4
FCDZ105-1R3N	1.3	N	9.8	15.0
FCDZ105-1R5N	1.5	N	9.8	10.0
FCDZ105-3R5N	3.5	N	15.5	6.5
FCDZ105-4R7M/N	4.7	M/N	16.0	6.0
FCDZ105-5R6M/N	5.6	M/N	17.8	5.6
FCDZ105-6R8M/N	6.8	M/N	18.0	5.4
FCDZ105-8R2M/N	8.2	M/N	20.0	5.0
FCDZ105-100M/N	10.0	M/N	26.0	4.5
FCDZ105-120M/N	12.0	M/N	33.0	4.0
FCDZ105-150M/N	15.0	M/N	41.0	3.3
FCDZ105-330M/N	33.0	M/N	84.0	3.0
FCDZ105-470M/N	47.0	M/N	130.0	2.5
FCDZ105-221K/M	220.0	K/M	500.0	1.0

* Test Freq.: @100KHz / 0.1V
* IDC : This indicates the value of current when the inductance is 35% lower than it's initial value at D.C. superimposition or D.C.current when at ΔT=40°C,whichever is lower. (Ta=20°C)
* Tolerance: K=±10%, M= ±20%, N= ±30%

FCDN Series (Rev. 5.0)

S-type

R-type

Applications

* DC/DC converters, etc
* Power supply for VTRs
* OA equipment
* LCD televisions/ Notebook PCs
* Portable communication devices

Features

* RoHS compliant
* Available in magnetic shielding
* Low DC resistance
* Suitable for large currents
* Ideal for DC-DC converter inductor applications
* Available on tape and reel for automatic surface mounting

Operating & Storage Condition

* Operating Temp.: -40 to +85°C
* Storage Temp.: -40 to +85°C
* Storage Life Time :12 Months @25°C,RH 65%

Product Identification

FCDN	53	-	4R7	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 4.7uH
4. Tolerance: M=±20%, N=±30%

Test Equipment

* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

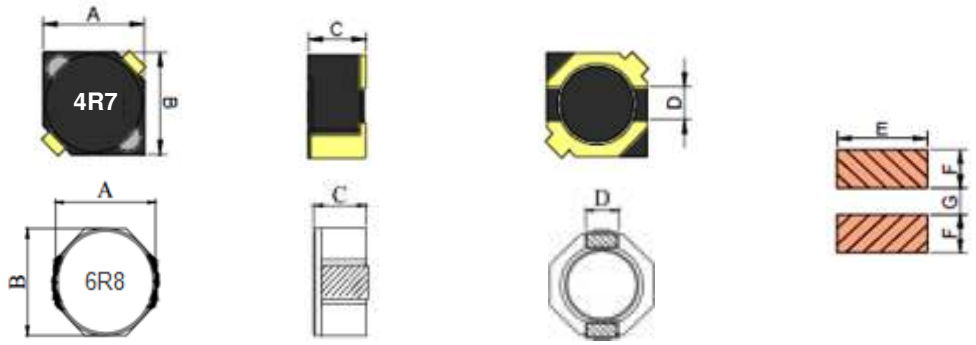
* Ambient Temp : 20+/-15℃
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

	Top View	Side View	Bottom View	Pad Layout

S-type

R-type



Size Code	A(±0.3)	B(±0.3)	C(max.)	D(ref)	E(ref.)	F(ref.)	G(ref.)
32	3.8	3.8	1.9	1.2	4.2	1.6	1.2
42	4.7	4.7	2.0	1.5	5.3	1.9	1.5
43	4.7	4.7	3.0	1.5	5.3	1.9	1.5
52	5.7	5.7	2.0	2.0	6.3	2.1	2.0
53	5.7	5.7	3.0	2.0	6.3	2.1	2.0
62	6.7	6.7	2.0	2.0	7.3	2.6	2.0
63	6.7	6.7	3.0	2.0	7.3	2.6	2.0
64	6.7	6.7	4.0	2.0	7.3	2.6	2.0
83	8.0	8.0	3.0	2.5	2.8	2.0	6.1
84	8.0	8.0	4.0	2.5	2.8	2.0	6.1
85	8.0	8.0	4.5	2.5	2.8	2.0	6.1
86	8.0	8.0	6.0	2.5	2.8	2.0	6.1

FCDN Series (Rev. 5.0)

Electrical Characteristics

L Code	L (uH)	DCR (Ω) max. / IDC (A) max.															
		32		42		43		52		53		62		63		64	
1R0	1.0	0.045	1.60	0.045	1.72									0.016	4.10		
1R2	1.2					0.024	2.56									0.014	4.20
1R5	1.5	0.050	1.55											0.018	3.50		
1R8	1.8					0.028	2.20										
2R2	2.2	0.070	1.20	0.075	1.32	0.031	2.04	0.034	2.60	0.018	2.60	0.043	2.60	0.021	3.00	0.018	4.00
2R5	2.5									0.018	2.60						
2R7	2.7			0.105	1.28	0.043	1.60										
3R0	3.0									0.024	2.40			0.024	3.00		
3R3	3.3	0.080	1.10	0.110	1.04	0.049	1.57	0.047	2.07	0.030	2.20	0.056	2.40	0.026	2.70	0.020	3.50
3R8	3.8																
3R9	3.9			0.155	0.88	0.065	1.44							0.027	2.60	0.023	3.10
4R1	4.1							0.057	1.95								
4R2	4.2																
4R7	4.7	0.110	0.90	0.162	0.84	0.072	1.32	0.060	1.90	0.036	2.10	0.073	2.10	0.032	2.50	0.024	3.00
5R0	5.0													0.033	2.40	0.025	2.90
5R2	5.2																
5R3	5.3																
5R4	5.4							0.076	1.60								
5R6	5.6			0.170	0.80	0.101	1.17			0.040	1.90						
6R0	6.0													0.035	2.25		
6R2	6.2							0.096	1.40	0.045	1.80					0.027	2.50
6R8	6.8	0.170	0.73	0.180	0.76	0.109	1.12	0.096	1.30			0.099	1.80	0.040	2.10		
7R0	7.0																
7R3	7.3													0.054	2.10		
7R4	7.4															0.031	2.30
8R2	8.2			0.190	0.68	0.118	1.04			0.053	1.60						
8R6	8.6													0.058	1.85		
8R7	8.7															0.034	2.20
8R9	8.9							0.116	1.25								
100	10.0	0.210	0.55	0.200	0.61	0.128	1.00	0.124	1.20	0.065	1.30	0.156	1.50	0.065	1.70	0.038	2.00
120	12.0			0.210	0.56	0.132	0.84	0.153	1.10	0.076	1.20			0.070	1.55	0.053	1.70
150	15.0	0.290	0.45	0.240	0.50	0.149	0.76	0.196	0.97	0.103	1.10	0.244	1.20	0.084	1.40	0.057	1.60
180	18.0			0.338	0.48	0.166	0.72	0.210	0.85	0.110	1.00			0.095	1.32	0.092	1.50
220	22.0	0.430	0.40	0.397	0.41	0.235	0.70	0.290	0.80	0.122	0.90	0.388	0.95	0.128	1.20	0.096	1.30
270	27.0			0.441	0.35	0.261	0.58	0.330	0.75	0.175	0.85			0.142	1.05	0.109	1.20
330	33.0	0.680	0.32	0.694	0.32	0.378	0.56	0.386	0.65	0.189	0.75	0.531	0.82	0.165	0.97	0.124	1.10
390	39.0			0.709	0.30	0.384	0.50	0.520	0.57	0.212	0.70			0.210	0.86	0.138	1.00
470	47.0	1.000	0.26	0.922	0.28	0.587	0.48	0.595	0.54	0.250	0.62	0.775	0.65	0.238	0.80	0.155	0.95
560	56.0			1.080	0.26	0.624	0.41	0.665	0.50	0.305	0.58			0.277	0.73	0.202	0.85
680	68.0	1.100	0.22	1.300	0.24	0.699	0.35	0.840	0.43	0.355	0.52			0.304	0.65	0.234	0.75
820	82.0			1.550	0.22	0.915	0.32	0.978	0.41	0.463	0.46			0.390	0.60	0.324	0.70
101	100.0	1.750	0.15	1.730	0.20	1.020	0.29	1.200	0.36	0.520	0.42			0.535	0.54	0.358	0.65
121	120.0			2.390	0.18	1.270	0.27	1.500	0.33	0.560	0.40			0.750	0.51	0.470	0.59
151	150.0			2.670	0.15	1.350	0.24	1.710	0.31	0.680	0.35			0.950	0.47	0.580	0.54
181	180.0			4.000	0.14	1.540	0.22	2.240	0.28	0.930	0.32			1.200	0.41	0.690	0.49
221	220.0					1.720	0.20	2.440	0.23	1.150	0.30			1.500	0.37	0.890	0.43
271	270.0					1.950	0.16	3.380	0.21	1.560	0.27			1.700	0.33	1.290	0.40
331	330.0					2.660	0.14	4.340	0.18	1.980	0.25			2.150	0.28	1.700	0.37
391	390.0					2.830	0.13			2.500	0.22			2.250	0.27	1.750	0.34
471	470.0									2.700	0.20			3.150	0.21	2.200	0.32

* Test Freq.: L≤8.2uH @100KHz / 0.25V (N=±30%); L>8.2uH @1KHz / 0.25V (M=±20%)
* IDC : This indicates the value of current when the inductance is 35% lower than it's initial value at D.C. superimposition or D.C.current when at ΔT=40°C,whichever is lower. (Ta=20°C)

FCDN Series (Rev. 5.0)

Electrical Characteristics

L Code	L (uH)	DCR (Ω) max. / IDC (A) max.															
		83		84		85		86									
1R8	1.8	0.017	3.88	0.017	5.80	0.016	5.15	0.012	6.00								
2R2	2.2	0.020	4.26	0.020	5.40	0.018	5.10	0.013	5.50								
2R5	2.5	0.026	4.13	0.022	5.15	0.020	5.00	0.014	5.10								
2R8	2.8	0.029	3.96	0.026	4.85	0.021	4.80	0.015	4.70								
3R3	3.3	0.033	3.70	0.028	4.60	0.022	4.50	0.016	4.40								
3R9	3.9	0.059	3.00	0.029	4.30	0.030	4.00	0.016	4.10								
4R7	4.7	0.062	2.60	0.032	4.05	0.033	3.87	0.017	4.00								
5R0	5.0	0.068	2.10	0.035	3.60	0.038	3.45	0.018	3.80								
6R8	6.8	0.085	2.50	0.036	3.00	0.044	3.10	0.022	3.10								
100	10.0	0.091	2.50	0.049	2.70	0.069	2.50	0.026	2.60								
150	15.0	0.137	1.61	0.075	2.30	0.075	2.35	0.036	2.30								
220	22.0	0.195	1.40	0.109	1.88	0.082	1.90	0.045	1.70								
330	33.0	0.319	1.16	0.163	1.52	0.125	1.62	0.065	1.50								
470	47.0	0.423	0.90	0.211	1.28	0.176	1.35	0.091	1.20								
680	68.0	0.559	0.75	0.304	1.10	0.247	1.20	0.130	1.00								
101	100.0	0.793	0.58	0.416	0.88	0.377	1.02	0.175	0.80								
121	120.0	0.935	0.51	0.494	0.83	0.429	0.90	0.220	0.70								

* Test Freq.: L≤8.2uH @100KHz / 0.25V (N=±30%); L>8.2uH @1KHz / 0.25V (M=±20%)
* IDC : This indicates the value of current when the inductance is 35% lower than it's initial value at D.C. superimposition or D.C.current when at ΔT=40°C,whichever is lower. (Ta=20°C)

FCDS Series (Rev. 5.0)

Applications

* DC/DC converters, etc
* Power supply for VTRs
* OA equipment
* LCD televisions/ Notebook PCs
* Portable communication devices

Features

* RoHS compliant
* Available in magnetic shielding
* Low DC resistance
* Suitable for large currents
* Ideal for DC-DC converter inductor applications
* Available on tape and reel for automatic surface mounting

Operating & Storage Condition

* Operating Temp.: -40 to +85°C
* Storage Temp.: -40 to +85°C
* Storage Life Time :12 Months @25°C,RH 65%

Product Identification

FCDS	418	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%, N=±30%

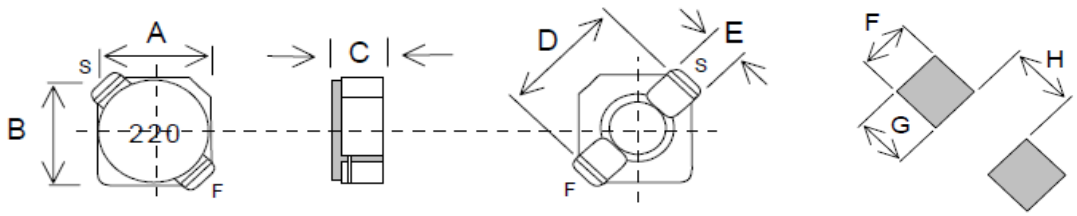
Test Equipment

* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]



Size Code	A(max.)	B(max.)	C(max.)	D(ref.)	E(ref.)	F(ref.)	G(ref.)	H(ref.)
310	3.3	3.3	1.1	4.4	1.3	1.4	1.3	1.7
312	3.3	3.3	1.3	4.4	1.3	1.4	1.3	1.7
315	3.3	3.3	1.6	4.4	1.3	1.4	1.3	1.7
320	3.2	3.2	2.0	4.4	1.3	1.4	1.3	1.7
418	4.2	4.2	1.8	5.5	1.5	1.4	1.4	2.4

FCDS Series (Rev. 5.0)

Electrical Characteristics

L Code	L (uH)	DCR (mΩ) max. / IDC (A) max.											
		310		312		315		320		320LD		418	
R20	0.20							22	5.35				
R36	0.36							29	4.62				
R56	0.56							33	3.75				
R82	0.82							39	2.91				
1R0	1.00					58	1.95					43	1.68
1R1	1.10							43	2.50				
1R5	1.50			68	0.90	63	1.80					52	1.55
1R7	1.70							44	1.85				
1R8	1.80					75	1.65						
2R2	2.20	144	0.73	98	0.78	94	1.50	60	1.60	41	0.85	72	1.20
2R7	2.70					106	1.35						
3R3	3.30	195	63.00	123	0.60	125	1.20	86	1.45	54	0.75	85	1.10
3R9	3.90					138	1.10						
4R7	4.70	288	0.54	170	0.50	169	1.00	140	1.20	78	0.63	105	0.90
5R6	5.60					188	0.95						
6R3	6.30							160	1.05				
6R8	6.80	425	0.45	260	0.44	213	0.85			106	0.52	170	0.73
8R2	8.20	475	0.41			281	0.80	245	0.85				
100	10.00	538	0.36	400	0.35	294	0.70			180	0.43	210	0.55
120	12.00					394	0.62						
150	15.00	750	0.31					345	0.70	220	0.35	295	0.45
220	22.00	1560	0.26	748	0.22	781	0.40			320	0.30	430	0.40
330	33.00	1680	0.21							460	0.24	660	0.32
470	47.00									660	0.20	1000	0.26
680	68.00					2760	0.25						

* Test Freq.(L): @100KHz/1.0v.
* IDC：ΔT=40℃Typ
* Tolerance: M=±20%, N=±30%; FCDS-320 (0.2~1.1uH N=±35%; 1.7~15uH N=±30%).

FDOS Series (Rev. 5.0)

Help designers significantly longer battery life in handheld communication devices & other portable products. They are designed with a flat top & constructed of heat resistant materials to ensure trouble-free assy. and reflow operations.

Features

* RoHS compliant
* High energy storage and very low resistance
* Smallest size and high performance

Applications

* Notebook, step-up and step-down converters
* Flash, memory programmers. Etc

Product Identification

FDOS	0804	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance : 10uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp. : -55 to +125℃
* Storage Temp. : -25 to +35℃
* Storage Life Time : 12 Months @25°C, RH 65%

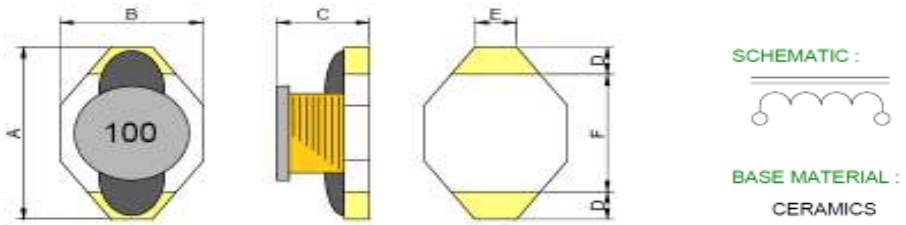
Test Equipment

* HP4284A，HP42841A-L,IDC,Q.RDC
* HP8573D Netwok Analyzer-SRF

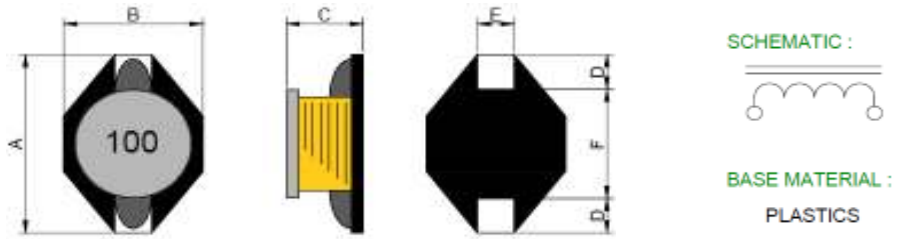
Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]



Size Code	A(max.)	B(max.)	C(max.)	D(ref.)	E(ref.)	F(ref.)
0402	6.60	4.45	2.92	1.27	1.02	4.32



Size Code	A(max.)	B(max.)	C(max.)	D(ref.)	E(ref.)	F(ref.)
0804	12.95	9.40	5.10	2.54	2.54	7.62
1306	18.54	15.24	7.62	2.54	2.54	12.70

FDOS Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	DCR (Ω) max.	SRF (MHz) typ.	Q min. @200KHz	IDC (A) max.
FDOS0402-1R0M	1.0	0.040	250.0	30.0	0.20
FDOS0402-1R5M	1.5	0.045	125.0	30.0	0.15
FDOS0402-2R2M	2.2	0.050	120.0	40.0	0.15
FDOS0402-3R3M	3.3	0.055	120.0	40.0	0.15
FDOS0402-4R7M	4.7	0.060	105.0	40.0	0.15
FDOS0402-6R8M	6.8	0.065	50.0	40.0	0.15
FDOS0402-100M	10.0	0.075	38.0	40.0	0.15
FDOS0402-150M	15.0	0.090	33.0	40.0	0.15
FDOS0402-220M	22.0	0.110	25.0	40.0	0.15
FDOS0402-270M	27.0	0.170	23.0	40.0	0.15
FDOS0402-330M	33.0	0.190	20.0	40.0	0.14
FDOS0402-470M	47.0	0.230	20.0	40.0	0.11
FDOS0402-680M	68.0	0.290	15.0	40.0	0.08
FDOS0402-101M	100.0	0.480	10.0	40.0	0.07
FDOS0402-151M	150.0	0.590	9.0	40.0	0.55
FDOS0402-221M	220.0	0.770	6.0	40.0	0.49
FDOS0402-331M	330.0	1.400	5.0	40.0	0.02
FDOS0402-471M	470.0	1.800	4.0	40.0	0.01
FDOS0402-681M	680.0	2.200	3.0	40.0	0.01
FDOS0402-102M	1000.0	3.400	2.0	40.0	0.07

* Test Condition: @100KHz/ 1.0V
* IDC: ΔT = 30°C rise typ at Irms.

FDOS Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	DCR (Ω) max.	SRF (MHz) typ.	Isat (A) typ.	Irms (A) typ.
FDOS0804-1R0M	1.0	0.021	140.0	5.60	5.00
FDOS0804-1R5M	1.5	0.022	120.0	5.20	4.50
FDOS0804-2R2M	2.2	0.032	80.0	5.00	3.80
FDOS0804-3R3M	3.3	0.039	70.0	3.90	3.30
FDOS0804-4R7M	4.7	0.054	40.0	3.20	2.70
FDOS0804-6R8M	6.8	0.075	38.0	2.80	2.20
FDOS0804-100M	10.0	0.101	35.0	2.40	2.00
FDOS0804-150M	15.0	0.150	25.0	2.00	1.50
FDOS0804-220M	22.0	0.207	19.0	1.60	1.30
FDOS0804-330M	33.0	0.334	15.0	1.40	1.10
FDO0S804-470M	47.0	0.472	13.0	1.00	0.80
FDOS0804-680M	68.0	0.660	10.0	0.90	0.70
FDOS0804-101M	100.0	1.110	7.0	0.80	0.60
FDOS0804-151M	150.0	1.550	6.0	0.60	0.50
FDOS0804-221M	220.0	2.000	5.0	0.50	0.37
FDOS0804-102M	1000.0	8.300	2.0	0.32	0.17
FDOS1306-100M	10.0	0.040	30.0	8.00	3.90
FDOS1306-150M	15.0	0.048	20.0	7.00	3.40
FDOS1306-220M	22.0	0.059	18.0	6.00	3.10
FDOS1306-330M	33.0	0.075	14.0	5.00	2.80
FDOS1306-470M	47.0	0.097	10.0	4.00	2.40
FDOS1306-680M	68.0	0.138	9.0	3.00	2.00
FDOS1306-101M	100.0	0.207	7.0	2.40	1.70
FDOS1306-151M	150.0	0.293	6.0	2.10	1.30
FDOS1306-221M	220.0	0.470	5.0	1.90	1.10
FDOS1306-331M	330.0	0.780	4.0	1.10	0.86
FDOS1306-471M	470.0	1.080	3.0	1.10	0.73
FDOS1306-681M	680.0	1.400	2.5	0.96	0.64
FDOS1306-102M	1000.0	2.010	2.0	0.80	0.53

* Test Condition: @100KHz/ 1.0V
* Isat.: Inductance drop = 10% typ.; Irms: ΔT = 40°C rise typ at Irms.

FDRH Series (Rev. 5.0)

Applications

* DC/DC converters, etc
* Power supply for VTRs
* OA equipment
* LCD televisions
* Notebook PCs
* Portable communication devices

Features

* RoHS compliant
* Available in magnetic shielding
* Low DC resistance
* Suitable for large currents
* Ideal for DC-DC converter inductor applications
* Available on tape and reel for automatic surface mounting

Operating & Storage Condition

* Operating Temp.: -40 to +85°C
* Storage Temp.: -40 to +85°C
* Storage Life Time : 12 months @25°C, RH 65%

Product Identification

FDRH	74	-	6R8
1	2		3

1. Product Code
2. Size Code
3. Inductance: 6.8uH

Test Equipment

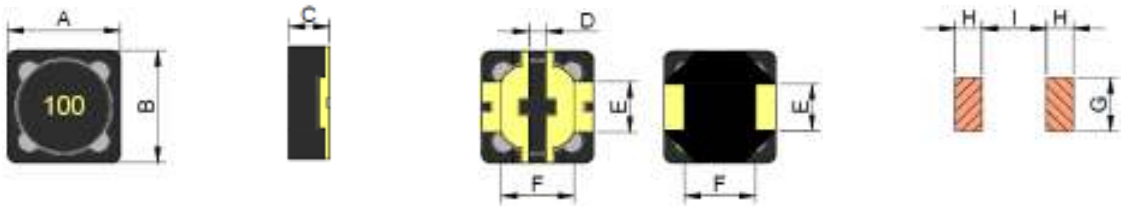
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended Pad Layout: [mm]

Top View	Side View	Bottom View	Pad Layout



Size Code	A(±0.5)	B(±0.5)	C(max.)	D(ref.)	E(±0.5)	F(±0.2)	G(ref.)	H(ref.)	I(ref.)
62	6.3	6.3	3.0	1.0	1.5	4.6	1.9	1.3	4.2
64	6.3	6.3	5.0	1.0	1.5	4.6	1.9	1.3	4.2
73	7.3	7.3	3.5	1.3	2.0	4.8	2.4	1.7	4.4
74	7.3	7.3	4.5	1.2	2.0	4.8	2.4	1.7	4.4
105	10.0	10.0	5.8	1.2	4.0	6.0	4.5	2.8	5.5
124	12.0	12.0	5.0	1.5	5.0	7.6	5.6	2.8	7.0
125	12.0	12.0	6.0	1.5	5.0	7.6	5.6	2.8	7.0
127	12.0	12.0	8.0	1.5	5.0	7.6	5.6	2.8	7.0
129	12.0	12.0	10.0	1.5	5.0	7.6	5.6	2.8	7.0

FDRH Series (Rev. 5.0)

Electrical Characteristics

L Code	Inductance (uH)	DCR (Ω) max. / Rated Current (A) max.							
		62		64		73		74	
1R2	1.2								
1R5	1.5					18m	3.40		
1R8	1.8							18m	5.50
2R2	2.2					25m	3.00	24m	4.00
3R3	3.3	68m	1.94	30m	2.20	34m	3.50	30m	3.60
3R5	3.5								
3R9	3.9								
4R7	4.7	80m	1.63	40m	1.80			44m	2.70
5R6	5.6								
6R1	6.1								
6R8	6.8			0.09m	1.80			46m	2.40
7R6	7.6								
8R2	8.2							48m	2.00
100	10.0	0.15	1.10	0.12	1.35	72m	1.68	49m	1.84
120	12.0	0.20	1.00	0.13	1.20	98m	1.52	58m	1.71
150	15.0	0.23	0.90	0.18	1.10	0.13	1.33	81m	1.47
180	18.0	0.27	0.80	0.24	1.00	0.14	1.20	91m	1.31
220	22.0	0.34	0.74	0.27	0.91	0.19	1.07	0.11	1.23
270	27.0	0.38	0.66	0.30	0.82	0.21	0.96	0.15	1.12
330	33.0	0.45	0.59	0.33	0.75	0.24	0.91	0.17	0.96
390	39.0	0.49	0.54	0.37	0.69	0.32	0.77	0.23	0.91
470	47.0	0.69	0.50	0.52	0.62	0.36	0.76	0.26	0.88
560	56.0	0.78	0.46	0.56	0.58	0.47	0.68	0.35	0.75
680	68.0	1.07	0.42	0.63	0.52	0.52	0.61	0.38	0.69
820	82.0	1.21	0.38	0.71	0.47	0.69	0.57	0.43	0.61
101	100.0	1.39	0.34	1.03	0.43	0.79	0.50	0.61	0.60
121	120.0	1.90	0.31	1.15	0.39	0.89	0.49	0.66	0.52
151	150.0	2.18	0.28	1.68	0.35	1.27	0.43	0.88	0.46
181	180.0	2.77	0.26	1.87	0.32	1.45	0.39	0.98	0.42
221	220.0	3.12	0.23	2.08	0.29	1.65	0.35	1.17	0.36
271	270.0	4.38	0.22	2.37	0.26	2.31	0.32	1.64	0.34
331	330.0	4.94	0.19	2.67	0.23	2.62	0.28	1.86	0.32
391	390.0			2.94	0.22	2.94	0.26	2.85	0.29
471	470.0			3.39	0.20	4.18	0.24	3.01	0.26
561	560.0			5.43	0.18	4.67	0.22	3.62	0.23
681	680.0			7.32	0.17	5.73	0.19	4.63	0.22
821	820.0			8.24	0.15	6.54	0.18	5.20	0.20
102	1000.0			9.26	0.14	9.44	0.16	6.00	0.18

* Test Condition: 1.0~8.2 uH (±30%) @100KHz / 0.3V; 10uH and above (±20%) @1KHz / 0.3V
* Rated Current: the current at which the inductance decreases by 25% from the initial value; or the current at which temperature rise is △T≤40°C（Ta=20°C), whichever is smaller.

FDRH Series (Rev. 5.0)

Electrical Characteristics

L Code	Inductance (uH)	DCR (Ω) max./ Rated Current (A) max.									
		105		124		125		127		129	
1R0	1.0			8.0m	7.80	11.0m	8.50	6.5m	10.40	5.0m	16.00
1R5	1.5			11.0m	7.20	13.0m	7.50	7.0m	9.80	5.0m	15.10
2R2	2.2	10.0m	6.00	13.0m	6.00	15.5m	6.50	11.5m	8.00	6.0m	13.20
2R4	2.4							11.5m	8.00		
3R3	3.3			21.0m	6.00	18.0m	5.70	13.5m	7.50	7.0m	11.90
3R5	3.5							13.5m	7.50		
3R9	3.9			21.0m	5.10						
4R7	4.7	30.0m	5.00	22.0m	4.80	20.5m	4.70	15.8m	6.80	8.0m	10.80
5R6	5.6									10.0m	9.60
6R1	6.1							17.6m	6.60		
6R8	6.8	45.0m	4.20	26.0m	4.20	25.0m	4.50	19.0m	6.60	12.0m	8.70
7R6	7.6							20.0m	5.90		
8R2	8.2			31.0m	4.00			20.0m	5.60		
100	10.0	60.0m	4.00	39.0m	3.90	25.0m	4.00	21.6m	5.40	17.0m	8.00
120	12.0			44.0m	3.40	27.0m	3.50	24.3m	4.90		
150	15.0	70.0m	3.50	55.0m	3.20	30.0m	3.30	27.0m	4.50	28.0m	7.00
180	18.0			65.0m	2.90	34.0m	3.00	39.2m	3.90		
220	22.0	0.120	2.50	75.0m	2.50	36.0m	2.80	43.2m	3.60	32.0m	5.60
270	27.0			86.0m	2.25	51.0m	2.30	45.9m	3.40		
330	33.0	0.155	2.00	0.112	2.00	57.0m	2.10	64.8m	3.00	51.0m	4.80
390	39.0			0.121	1.90	68.0m	2.00	72.9m	2.75		
470	47.0	0.220	1.30	0.160	1.80	75.0m	1.80	0.100	2.50	78.0m	3.90
560	56.0			0.190	1.70	0.110	1.70	0.110	2.35		
680	68.0	0.300	1.20	0.220	1.50	0.120	1.50	0.140	2.10	0.105	2.70
820	82.0			0.260	1.30	0.140	1.40	0.160	1.95		
101	100	0.450	1.00	0.308	1.20	0.160	1.30	0.220	1.70	0.150	2.10
121	120			0.380	1.10	0.170	1.10	0.250	1.60		
151	150			0.530	0.95	0.230	1.00	0.280	1.42		
181	180			0.620	0.85	0.290	0.90	0.350	1.30		
221	220	0.680	0.85	0.700	0.80	0.400	0.80	0.420	1.16		
271	270			0.870	0.60	0.460	0.75	0.560	1.06		
331	330			0.990	0.50	0.510	0.68	0.640	0.95		
391	390					0.690	0.65	0.700	0.88		
471	470					0.770	0.58	0.980	0.79		
561	560					0.860	0.54	1.070	0.73		
681	680					1.200	0.48	1.460	0.67		
821	820					1.340	0.43	1.640	0.60		
102	1000	4.300	0.10			1.530	0.40	1.820	0.55	1.220	0.79
122	1200									1.330	0.78
152	1500									1.990	0.58
182	1800									2.180	0.54
222	2200									2.580	0.52

* Test Condition: 1.0~8.2 uH (±30%) @100KHz / 0.3V; 10uH and above (±20%) @1KHz / 0.3V
* Rated Current: the current at which the inductance decreases by 25% from the initial value; or the current at which temperature rise is △T≤40°C（Ta=20°C), whichever is smaller.

FDRC Series (Rev. 5.0)

Applications

* For use in a variety of circuits including flyback, multi-output buck and SEPIC.
* Power supply for LED,etc.

Features

* RoHS compliant
* High inductance, high efficiency and excellent current handling in a rugged, low cost part.
* 2 in 1 package coil for up-down converter (SEPIC and ZETA) and step up converter (Auto transformer).
* Can also be used as 2 single inductors connected in series or parallel, as a common mode choke or as a 1:1 transformer.

Operating & Storage Condition

* Operating Temp.: -40 to +105°C
* Storage Temp.: -40 to +85°C
* Storage Life Time: 12 months @25°C, RH 65%

Product Identification

FDRC	74	-	150	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 15uH
4. Tolerance: M = ±20%

Test Equipment

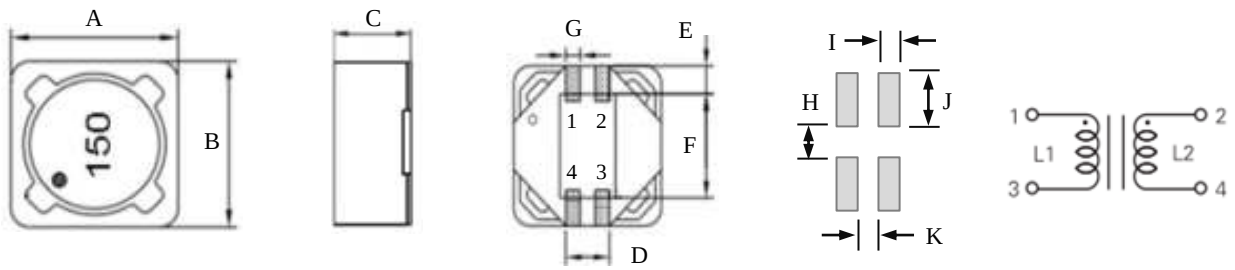
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended Pad Layout: [mm]

Top View | Side View | Bottom View | Pad Layout | Schematic



Size Code	A(±0.3)	B(±0.3)	C(max.)	D(ref.)	E(ref.)	F(ref.)	G(ref.)	H(ref.)	I(ref.)	J(ref.)	K(ref.)
74	7.3±0.2	7.3±0.2	4.6	2.7	1.3	4.5	0.7	4.3	0.9	1.5	1.1
104	10.0	10.0	5.0	3.0	2.0	5.8	1.0	5.4	1.3	2.4	0.8
125	12.0	12.0	6.5	5.0	2.5	7.0	1.7	5.0	2.0	4.0	1.5
127	12.0	12.0	8.5	5.0	2.5	7.0	1.7	5.0	2.0	4.0	1.5

FDRC Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance L1=L2 (uH)	DCR (mΩ) max.	Isat. (A) max.	Irms. (A) max.
FDRC74-2R5M	2.5	33	6.20	3.06
FDRC74-3R3M	3.3	37	5.30	2.89
FDRC74-4R7M	4.7	51	4.30	2.46
FDRC74-5R6M	5.6	63	4.10	2.22
FDRC74-6R8M	6.8	70	3.80	2.10
FDRC74-8R2M	8.2	75	3.40	2.00
FDRC74-100M	10.0	100	2.90	1.76
FDRC74-120M	12.0	120	2.60	1.61
FDRC74-150M	15.0	130	2.30	1.54
FDRC74-180M	18.0	170	2.20	1.35
FDRC74-220M	22.0	220	2.00	1.19
FDRC74-270M	27.0	250	1.80	1.10
FDRC74-330M	33.0	270	1.60	1.07
FDRC74-390M	39.0	380	1.40	0.90
FDRC74-470M	47.0	420	1.30	0.85
FDRC74-560M	56.0	460	1.20	0.82
FDRC74-680M	68.0	600	1.10	0.72
FDRC74-820M	82.0	680	1.00	0.67
FDRC74-101M	100.0	770	0.92	0.63
FDRC74-121M	120.0	1030	0.80	0.55
FDRC74-151M	150.0	1350	0.75	0.48
FDRC74-181M	180.0	1520	0.65	0.45
FDRC74-221M	220.0	1720	0.62	0.42
FDRC74-271M	270.0	2410	0.57	0.36
FDRC74-331M	330.0	2700	0.52	0.34
FDRC74-391M	390.0	3050	0.47	0.32
FDRC74-471M	470.0	4000	0.43	0.28
FDRC74-561M	560.0	4430	0.40	0.26
FDRC74-681M	680.0	5000	0.37	0.25
FDRC74-821M	820.0	6800	0.32	0.21
FDRC74-102M	1000.0	7800	0.29	0.20
FDRC104-2R2M	2.2	20	8.9	3.1
FDRC104-100M	10.0	55	4.1	1.9
FDRC104-220M	22.0	100	2.7	1.7
FDRC104-470M	47.0	220	1.8	1.4
FDRC104-680M	68.0	310	1.5	1.2
FDRC104-101M	100.0	400	1.1	1.0
FDRC104-221M	220.0	850	0.8	0.7

* Test Condition: @100KHz/0.1V (Ambient temperature: 25°C)
* Isat.: Based on L drop 30%
* Irms.: The actual value of D.C. current when the temperature rise is △t＝40℃(Ta＝20℃).
* Tolerance: M=±20%
* Turns Ratio: L1 : L2 = 1 : 1

FDRC Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance L1=L2 (uH)	DCR (mΩ) typ.	Isat. (A) max.	Irms. (A) max.
FDRC125-4R7M	4.7	28	7.5	2.8
FDRC125-6R8M	6.8	40	6.0	2.5
FDRC125-100M	10.0	50	5.5	1.9
FDRC125-220M	22.0	90	2.5	1.7
FDRC125-330M	33.0	170	2.3	1.2
FDRC125-470M	47.0	180	2.0	1.1
FDRC125-101M	100.0	360	1.5	0.9
FDRC127-1R5M	1.5	16	15.5	8.1
FDRC127-2R5M	2.5	18	14.0	7.3
FDRC127-3R3M	3.3	21	11.0	6.5
FDRC127-4R7M	4.7	30	9.0	3.2
FDRC127-6R8M	6.8	35	7.0	2.8
FDRC127-100M	10.0	44	6.0	2.4
FDRC127-220M	22.0	80	4.7	2.1
FDRC127-330M	33.0	130	3.5	1.5
FDRC127-470M	47.0	150	2.8	1.2
FDRC127-680M	68.0	215	2.3	1.0
FDRC127-101M	100.0	300	1.7	0.9
FDRC127-151M	150.0	400	1.3	0.8
FDRC127-221M	220.0	650	1.0	0.7
FDRC127-471M	470.0	1200	0.8	0.6

* Test Condition: @100KHz/0.1V (Ambient temperature: 25°C)
* Isat.: Based on L drop 30%
* Irms.: The actual value of D.C. current when the temperature rise is △t＝40℃(Ta＝20℃).
* Tolerance: M=±20%
* Turns Ratio: L1 : L2 = 1 : 1

FDRM Series (Rev. 5.0)

Applications

* DC/DC converters, etc
* Power supply for VTRs
* OA equipment
* LCD televisions/ Notebook PCs
* Portable communication devices

Features

* RoHS compliant
* Available in magnetic shielding
* Low DC resistance
* Suitable for large currents
* Ideal for DC-DC converter inductor applications

Operating & Storage Condition

* Operating Temp.: -40 to +85°C
* Storage Temp.: -40 to +85°C
* Storage Life Time : 6 Months @20°C,RH 65%

Product Identification

FDRM	127	-	150	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 15uH
4. Tolerance: K=±10%, M=±20%, N=±30%

Test Equipment

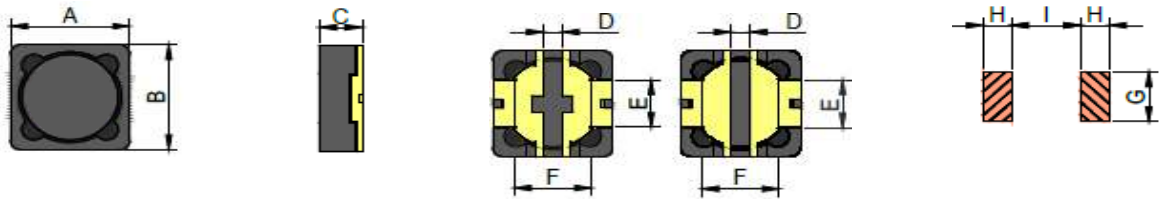
* L-WK3260 LCR Meter
* RDC-Twintex TM8089A
* IDC-WK3260+3265B DC-Bias
* Dimension-Mitutoyo
* Temperrature-Tecpel 305A

Standard Atmospheric Conditions

* Ambient Temp : 20+/-5°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Top View	Side View	Bottom View	Pad Layout



(FDRM125/127/129) (FDRM74)

Size Code	A(max.)	B(max.)	C(max.)	D(ref.)	E(±0.3)	F(±0.5)	G(ref.)	H(ref.)	I(ref.)
74	7.8	7.8	4.5	1.3	2.0	4.8	2.4	1.7	4.4
125	12.5	12.5	6.0	1.5	5.0	7.6	5.6	2.8	7.0
127	12.5	12.5	8.0	1.5	5.0	7.6	5.6	2.8	7.0
129	12.5	12.5	10.0	1.5	5.0	7.6	5.6	2.8	7.0

FDRM Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Tolerance	DCR (mΩ) typ.	Isat 1 @L-Drop 10% (A) max.	Isat 2 @L-Drop 35% (A) max.	Irms @△T=40℃ (A) max.
FDRM74-1R0	1.0	M/N	10.9	9.50	10.50	8.40
FDRM74-1R5	1.5	M/N	12.5	7.90	9.50	7.80
FDRM74-1R8	1.8	M/N	14.1	7.70	8.60	7.30
FDRM74-2R2	2.2	M/N	16.1	6.80	7.50	6.60
FDRM74-2R7	2.7	M/N	18.9	6.30	7.00	6.20
FDRM74-3R3	3.3	M/N	22.2	6.00	6.50	5.80
FDRM74-3R9	3.9	M/N	25.2	5.40	6.00	5.40
FDRM74-4R7	4.7	M/N	27.7	5.00	5.50	5.20
FDRM74-5R6	5.6	M/N	34.8	4.10	5.00	4.80
FDRM74-6R8	6.8	M/N	40.0	3.80	4.50	4.50
FDRM74-8R2	8.2	M/N	48.0	3.60	4.10	4.30
FDRM74-100	10.0	M	55.6	2.55	3.50	4.00
FDRM74-120	12.0	M	63.2	2.50	3.40	3.80
FDRM74-150	15.0	M	79.0	2.40	3.30	3.50
FDRM74-180	18.0	M	97.4	2.10	2.90	3.20
FDRM74-220	22.0	M	114.0	2.00	2.60	3.00
FDRM74-270	27.0	M	123.0	1.90	2.40	2.80
FDRM74-330	33.0	M	152.0	1.65	2.10	2.40
FDRM74-390	39.0	M	164.0	1.55	2.00	2.20
FDRM74-470	47.0	M	200.0	1.50	1.82	2.00
FDRM74-560	56.0	M	250.0	1.35	1.60	1.78
FDRM74-680	68.0	M	290.0	1.25	1.50	1.65
FDRM74-820	82.0	M	290.0	1.10	1.30	1.50
FDRM74-101	100.0	M	490.0	1.00	1.18	1.30
FDRM74-121	120.0	M	600.0	0.90	1.10	1.15
FDRM74-151	150.0	M	770.0	0.75	0.90	1.00
FDRM74-181	180.0	M	860.0	0.74	0.86	0.95
FDRM74-221	220.0	M	1050.0	0.70	0.77	0.85
FDRM74-271	270.0	M	1300.0	0.63	0.70	0.78
FDRM74-331	330.0	M	1620.0	0.59	0.65	0.72
FDRM74-391	390.0	M	2100.0	0.50	0.59	0.65
FDRM74-471	470.0	M	2340.0	0.45	0.54	0.60
FDRM74-561	560.0	M	3000.0	0.42	0.50	0.56
FDRM74-681	680.0	M	3350.0	0.40	0.44	0.48
FDRM74-821	820.0	M	3800.0	0.35	0.40	0.44
FDRM74-102	1000.0	M	5044.0	0.28	0.35	0.38

* Test condition: @ 1KHz/0.25V
* Irms DC current (A) that will cause an approximate ΔT of 40°C.
* Isat DC current (A) that will cause L to drop approximately 10% or 35%.
* Tolerance: M= ±20%, N= ±30%

FDRM Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Tolerance	DCR (mΩ) typ.	Isat 1 @L-Drop 10% (A) max.	Isat 2 @L-Drop 35% (A) max.	Irms @△T=40℃ (A) max.
FDRM125-2R7	2.7	N	5.00	13.00	14.00	9.00
FDRM125-3R3	3.3	M/N	9.70	12.20	13.20	8.20
FDRM125-3R9	3.9	M/N	10.70	11.00	12.20	7.80
FDRM125-4R7	4.7	M/N	11.40	10.50	11.30	7.50
FDRM125-5R6	5.6	M/N	14.00	9.40	10.00	6.70
FDRM125-6R8	6.8	M/N	15.30	8.50	9.30	6.40
FDRM125-8R2	8.2	M/N	16.60	7.50	8.40	6.10
FDRM125-100	10.0	M	18.60	7.00	8.00	5.75
FDRM125-120	12.0	M	21.80	6.60	7.50	5.30
FDRM125-150	15.0	M	24.00	6.00	6.60	5.00
FDRM125-180	18.0	M	29.40	5.40	6.00	4.70
FDRM125-220	22.0	M	33.50	4.80	5.50	4.40
FDRM125-270	27.0	M	40.50	4.50	5.00	4.00
FDRM125-330	33.0	M	50.30	4.00	4.50	3.63
FDRM125-390	39.0	M	62.00	3.50	4.00	3.20
FDRM125-470	47.0	M	69.00	3.30	3.60	3.00
FDRM125-560	56.0	M	83.00	3.00	3.30	2.70
FDRM125-680	68.0	M	98.00	2.75	3.00	2.50
FDRM125-820	82.0	M	116.00	2.40	2.70	2.20
FDRM125-101	100.0	M	143.00	2.30	2.55	1.90
FDRM125-121	120.0	M	166.00	2.00	2.30	1.70
FDRM125-151	150.0	M	211.00	1.85	2.05	1.50
FDRM125-181	180.0	M	246.00	1.65	1.85	1.35
FDRM125-221	220.0	M	293.00	1.50	1.75	1.25
FDRM125-271	270.0	M	380.00	1.38	1.58	1.10
FDRM125-331	330.0	M	460.00	1.25	1.40	1.00
FDRM125-391	390.0	M	550.00	1.15	1.30	0.92
FDRM125-471	470.0	M	660.00	1.05	1.20	0.83
FDRM125-561	560.0	M	770.00	0.98	1.08	0.76
FDRM125-681	680.0	M	950.00	0.88	0.98	0.69
FDRM125-821	820.0	M	1120.00	0.78	0.88	0.64
FDRM125-102	1000.0	M	1550.00	0.68	0.78	0.56

* Test condition: @ 1KHz/0.25V
* Irms DC current (A) that will cause an approximate ΔT of 40°C.
* Isat DC current (A) that will cause L to drop approximately 10% or 35%.
* Tolerance: M= ±20%, N= ±30%

FDRM Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Tolerance	DCR (mΩ) typ.	Isat 1 @L-Drop 10% (A) max.	Isat 2 @L-Drop 35% (A) max.	Irms @△T=40℃ (A) max.
FDRM127-1R0	1.0	N	4.50	20.00	21.00	11.00
FDRM127-2R2	2.2	M/N	6.50	19.00	20.00	10.00
FDRM127-3R3	3.3	M/N	7.59	18.00	19.00	9.60
FDRM127-4R7	4.7	M/N	9.75	14.50	16.60	8.20
FDRM127-5R6	5.6	M/N	12.50	13.50	15.00	7.60
FDRM127-6R8	6.8	M/N	13.40	12.70	13.50	7.35
FDRM127-8R2	8.2	M/N	15.40	11.30	12.50	6.50
FDRM127-100	10.0	M	18.70	10.00	11.50	6.10
FDRM127-120	12.0	M	19.60	9.50	10.50	5.50
FDRM127-150	15.0	M	27.50	8.60	9.50	5.00
FDRM127-180	18.0	M	29.70	7.80	8.60	4.80
FDRM127-220	22.0	M	36.60	7.00	7.70	4.60
FDRM127-270	27.0	M	41.90	6.35	7.00	4.20
FDRM127-330	33.0	M	51.60	5.45	6.30	3.80
FDRM127-390	39.0	M	59.70	5.30	6.00	3.50
FDRM127-470	47.0	M	72.00	5.00	5.50	3.10
FDRM127-560	56.0	M	90.00	4.50	5.00	2.90
FDRM127-680	68.0	M	108.00	4.00	4.30	2.70
FDRM127-820	82.0	M	123.00	3.60	4.00	2.50
FDRM127-101	100.0	M	152.00	3.20	3.50	2.20
FDRM127-121	120.0	M	170.00	3.10	3.40	2.00
FDRM127-151	150.0	M	226.00	2.90	3.20	1.80
FDRM127-181	180.0	M	283.00	2.50	2.80	1.60
FDRM127-221	220.0	M	348.00	2.25	2.50	1.45
FDRM127-271	270.0	M	397.00	2.00	2.30	1.30
FDRM127-331	330.0	M	500.00	1.90	2.00	1.20
FDRM127-391	390.0	M	560.00	1.70	1.90	1.10
FDRM127-471	470.0	M	657.00	1.55	1.70	1.00
FDRM127-561	560.0	M	820.00	1.45	1.60	0.90
FDRM127-681	680.0	M	990.00	1.30	1.45	0.80
FDRM127-821	820.0	M	1260.00	1.20	1.30	0.70
FDRM127-102	1000.0	M	1530.00	1.09	1.20	0.60
FDRM127-222	2200.0	K/M	3050.00	0.70	0.80	0.42
FDRM127-332	3300.0	K/M	4250.00	0.45	0.55	0.35

* Test condition: @ 1KHz/0.25V
* Irms DC current (A) that will cause an approximate ΔT of 40°C.
* Isat DC current (A) that will cause L to drop approximately 10% or 35%.
* Tolerance: K= ±10%, M= ±20%, N= ±30%

FDRM Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Tolerance	DCR (mΩ) max.	Isat. @L-Drop 25% (A) max.	Irms. @△T=40℃ (A) max.
FDRM129-4R7	4.7	M/N	10.0	16.00	10.00
FDRM129-6R8	6.8	M/N	14.0	12.80	8.40
FDRM129-100	10.0	M/N	18.3	11.50	7.50
FDRM129-150	15.0	M/N	28.0	8.60	6.00
FDRM129-330	33.0	M	45.0	5.50	4.20
FDRM129-470	47.0	M	60.0	4.50	3.80
FDRM129-560	56.0	M	70.0	4.00	3.40
FDRM129-680	68.0	M	88.5	3.60	3.20
FDRM129-101	100.0	M	110.0	3.10	2.50
FDRM129-221	220.0	M	270.0	2.50	1.80
FDRM129-271	270.0	M	330.0	2.10	1.60
FDRM129-301	300.0	M	340.0	1.80	1.45
FDRM129-331	330.0	M	340.0	1.80	1.45
FDRM129-681	680.0	M/N	675.0	1.60	1.25
FDRM129-821	820.0	M	1000.0	1.10	0.85

* Test condition: @ 1KHz/0.25V
* Irms DC current (A) that will cause an approximate ΔT of 40°C.
* Isat DC current (A) that will cause L to drop approximately 25%.
* Tolerance: K= ±10%, M= ±20%, N= ±30%

FDRM157&1510 Series (Rev. 5.0)

Applications

* DC/DC converters, etc
* Power supply for VTRs
* OA equipment
* LCD televisions/ Notebook PCs
* Portable communication devices

Features

* RoHS compliant
* Available in magnetic shielding
* Low DC resistance
* Suitable for large currents
* Ideal for DC-DC converter inductor applications

Operating & Storage Condition

* Operating Temp.: -40 to +85°C
* Storage Temp.: -40 to +85°C
* Storage Life Time : 6 Months @20°C,RH 65%

Product Identification

FDRM	157	-	330	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 33uH
4. Tolerance: M=±20%, N=±30%

Test Equipment

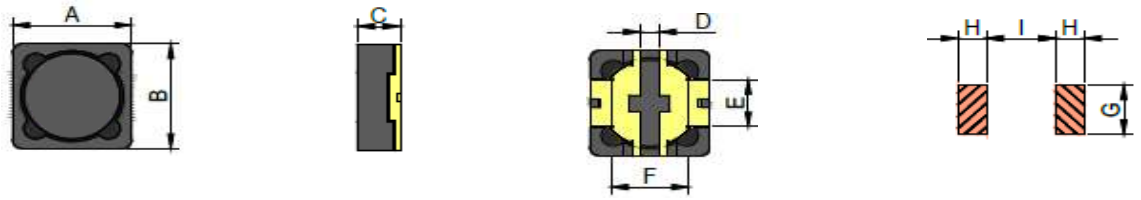
* L-WK3260 LCR Meter
* RDC-Twintex TM8089A
* IDC-WK3260+3265B DC-Bias
* Dimension-Mitutoyo
* Temperrature-Tecpel 305A

Standard Atmospheric Conditions

* Ambient Temp : 20+/-5°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Top View	Side View	Bottom View	Pad Layout



Size Code	A(max.)	B(max.)	C(max.)	D(ref.)	E(±0.3)	F(±0.5)	G(ref.)	H(ref.)	I(ref.)
157	15.8	15.8	7.6	2.0	5.0	10.0	6.0	3.5	8.5
1510	15.8	15.8	10.8	2.0	5.0	10.0	6.0	3.5	8.5

Electrical Characteristics

P/N	L (uH)	Tolerance (±%)	DCR (mΩ) max.	Isat (A) max.
FDRM157-330M	33	20	60	4.2
FDRM157-470M	47	20	78	3.9
FDRM157-680M	68	20	90	3.7
FDRM157-101M	100	20	180	3.0
FDRM1510-470M	47	20	58	4.0
FDRM1510-680M	68	20	64	3.8
FDRM1510-101M	100	20	160	3.2

* Test condition: @ 1KHz/0.25V
* Isat : DC current that will cause L to drop approximately 30%.

FLPS Series (Rev. 5.0)

Applications

* DC/DC converters, etc
* Power supply for VTRs
* OA equipment/ LCD televisions
* Notebook PCs & portable communication devices

Features

* RoHS compliant
* Available in magnetic shielding
* Low DC resistance
* Suitable for large currents
* Ideal for DC-DC converter inductor applications

Operating & Storage Condition

* Operating Temp.: -40 to +125°C
* Storage Temp.: -40 to +125°C
* Storage Life Time : 12 Months @25°C,RH 65%

Product Identification

FLPS	5030	-	102	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 1000uH
4. Tolerance: M=±20%, N=±30%

Test Equipment

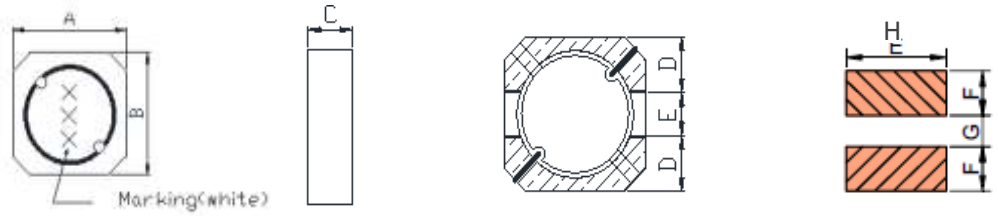
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15℃
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Top View	Side View	Bottom View	Pad Layout



Size Code	A(±0.2)	B(±0.2)	C(max.)	D(ref)	E(ref.)	F(ref.)	G(ref.)	H(ref.)
5015	5.0	5.0	1.5	1.75	1.5	2.0	1.5	5.4
5020	5.0	5.0	2.0	1.75	1.5	2.0	1.5	5.4
5030	5.0	5.0	3.0	1.75	1.5	2.0	1.5	5.4

FLPS Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (± %)	DCR (mΩ) max.	Isat (A) max.	Irms (A) max.
FLPS5015-1R0N	1.0	30	50	3.50	2.65
FLPS5015-1R5N	1.5	30	65	2.60	2.35
FLPS5015-2R2N	2.2	30	90	2.30	2.00
FLPS5015-3R3N	3.3	30	125	2.00	1.80
FLPS5015-4R7N	4.7	30	150	1.70	1.62
FLPS5015-5R6N	5.6	30	175	1.60	1.45
FLPS5015-6R8N	6.8	30	225	1.40	1.25
FLPS5015-8R2N	8.2	30	280	1.30	1.05
FLPS5015-100M	10.0	20	300	1.10	0.95
FLPS5015-120M	12.0	20	350	1.00	0.84
FLPS5015-150M	15.0	20	360	0.70	0.82
FLPS5015-180M	18.0	20	550	0.65	0.82
FLPS5015-220M	22.0	20	675	0.60	0.80
FLPS5015-330M	33.0	20	750	0.50	0.70
FLPS5015-470M	47.0	20	1000	0.45	0.55
FLPS5015-560M	56.0	20	1130	0.40	0.50
FLPS5015-680M	68.0	20	1450	0.35	0.40
FLPS5015-101M	100.0	20	1950	0.28	0.35
FLPS5015-121M	120.0	20	2500	0.26	0.30
FLPS5015-151M	150.0	20	3400	0.24	0.28
FLPS5015-221M	220.0	20	4500	0.20	0.24
FLPS5015-331M	330.0	20	7400	0.16	0.20
FLPS5015-471M	470.0	20	7500	0.12	0.18
FLPS5020-R33N	0.33	30	11	5.80	6.00
FLPS5020-R68N	0.68	30	15	4.00	5.20
FLPS5020-1R0N	1.00	30	25	3.50	4.00
FLPS5020-1R5N	1.50	30	35	3.20	3.30
FLPS5020-2R2N	2.20	30	55	2.70	2.75
FLPS5020-3R3N	3.30	30	65	2.40	2.50
FLPS5020-4R7N	4.70	30	80	2.10	2.00
FLPS5020-5R6M	5.60	20	90	1.95	1.90
FLPS5020-6R8M	6.80	20	105	1.80	1.70
FLPS5020-100M	10.0	20	150	1.40	1.50
FLPS5020-150M	15.0	20	270	1.10	1.20
FLPS5020-220M	22.0	20	350	0.78	0.90
FLPS5020-330M	33.0	20	480	0.65	0.80
FLPS5020-470M	47.0	20	750	0.60	0.70
FLPS5020-101M	100.0	20	1210	0.34	0.55
FLPS5020-121M	120.0	20	1600	0.30	0.48
FLPS5020-151M	150.0	20	2250	0.28	0.40
FLPS5020-221M	220.0	20	3300	0.26	0.37

* Test Condition: @100KHz/ 0.1V
* Isat DC current (A) that will cause L to drop approximately 30%.
* Irms DC current (A) that will cause an approximate ΔT of 40°C, whichever is smaller.

FLPS Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (± %)	DCR (mΩ) max.	Isat (A) max.	Irms (A) max.
FLPS5030-1R2N	1.20	30	40	3.50	2.65
FLPS5030-2R2N	2.20	30	57	3.10	2.15
FLPS5030-3R3N	3.30	30	66	2.50	1.80
FLPS5030-4R7N	4.70	30	83	2.00	1.75
FLPS5030-6R8N	6.80	30	99	1.70	1.60
FLPS5030-8R2N	8.20	30	120	1.60	1.50
FLPS5030-100M	10.0	20	150	1.50	1.40
FLPS5030-120M	12.0	20	160	1.40	1.30
FLPS5030-150M	15.0	20	175	1.30	1.20
FLPS5030-220M	22.0	20	190	1.00	1.10
FLPS5030-270M	27.0	20	270	0.90	1.00
FLPS5030-330M	33.0	20	350	0.80	0.90
FLPS5030-470M	47.0	20	500	0.75	0.75
FLPS5030-560M	56.0	20	650	0.65	0.65
FLPS5030-680M	68.0	20	750	0.55	0.60
FLPS5030-101M	100.0	20	900	0.45	0.55
FLPS5030-221M	220.0	20	1450	0.20	0.40
FLPS5030-331M	330.0	20	1800	0.17	0.35
FLPS5030-821M	820.0	20	5000	0.12	0.25
FLPS5030-102M	1000.0	20	5200	0.10	0.20

* Test Condition: @100KHz/ 0.1V
* Isat DC current (A) that will cause L to drop approximately 30%.
* Irms DC current (A) that will cause an approximate ΔT of 40°C, whichever is smaller.

FMWC Series (Rev. 5.0)

Applications

* Mobile device
* Handheld device
* Low-profile device
* Panel…

Features

* RoHS compliant
* Lead-free materials is used for the plating on theterminals
* Use metal terminals that realize excellent connection.
* Good heat durability that withstands lead-free reflow.
* High resistance to heat, humidity, mechanical shocks and presser. Accurate dimensions for automatically surfacemounted

Operating & Storage Condition

* Operating Temp. : -25 to +85°C
* Storage Temp. : -25 to +85°C
* Storage Life Time : 12 Months @25°C , RH 65%

Product Identification

FMWC	3225	_	100	M	H
1	2		3	4	5

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: J=±5%, K=±10%, M=±20%
5. H: high current

Test Equipment

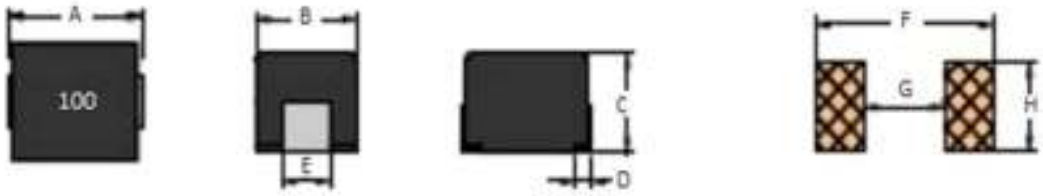
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-5°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Top View	Side View	Front View	Pad Layout



Size Code	A(±0.4)	B(±0.2)	C(±0.2)	D(±0.2)	E(±0.2)	F(ref.)	G(ref.)	H(ref.)
3225	3.20	2.50	2.20	0.60	1.00	3.80	1.00	1.60
4532	4.50	3.20	3.20	1.00	1.20	5.20	1.20	1.80

FMWC Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Q (min.)	Test Freq. (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
FMWC3225-R10M/K	0.10	28	100.0	700	0.44	450
FMWC3225-R12M/K	0.12	30	25.20	500	0.22	450
FMWC3225-R15M/K	0.15	30	25.20	450	0.25	450
FMWC3225-R18M/K	0.18	30	25.20	400	0.28	450
FMWC3225-R22M/K	0.22	30	25.20	350	0.32	450
FMWC3225-R27M/K	0.27	30	25.20	320	0.36	450
FMWC3225-R33M/K	0.33	30	25.20	300	0.40	450
FMWC3225-R39M/K	0.39	30	25.20	250	0.45	450
FMWC3225-R47M/K	0.47	30	25.20	220	0.50	450
FMWC3225-R56M/K	0.56	30	25.20	180	0.55	450
FMWC3225-R68M/K	0.68	30	25.20	160	0.60	450
FMWC3225-R82M/K	0.82	30	25.20	140	0.65	450
FMWC3225-1R0K/J	1.00	30	7.960	120	0.70	400
FMWC3225-1R2K/J	1.20	30	7.960	100	0.75	390
FMWC3225-1R5K/J	1.50	30	7.960	85	0.85	370
FMWC3225-1R8K/J	1.80	30	7.960	80	0.90	350
FMWC3225-2R2K/J	2.20	30	7.960	75	1.00	320
FMWC3225-2R7K/J	2.70	30	7.960	70	1.10	290
FMWC3225-3R3K/J	3.30	30	7.960	60	1.20	260
FMWC3225-3R9K/J	3.90	30	7.960	55	1.30	250
FMWC3225-4R7K/J	4.70	30	7.960	50	1.50	220
FMWC3225-5R6K/J	5.60	30	7.960	45	1.60	200
FMWC3225-6R8K/J	6.80	30	7.960	40	1.80	180
FMWC3225-8R2K/J	8.20	30	7.960	35	2.00	170
FMWC3225-100K/J	10.0	30	2.520	30	2.10	150
FMWC3225-120K/J	12.0	30	2.520	20	2.50	140
FMWC3225-150K/J	15.0	30	2.520	20	2.80	130
FMWC3225-180K/J	18.0	30	2.520	20	3.30	120
FMWC3225-220K/J	22.0	30	2.520	20	3.70	110
FMWC3225-270K/J	27.0	30	2.520	20	5.00	80
FMWC3225-330K/J	33.0	30	2.520	17	5.60	70
FMWC3225-390K/J	39.0	30	2.520	16	6.40	65
FMWC3225-470K/J	47.0	30	2.520	15	7.0	60
FMWC3225-560K/J	56.0	30	2.520	13	8.0	55
FMWC3225-680K/J	68.0	30	2.520	12	9.0	50
FMWC3225-820K/J	82.0	30	2.520	11	10.0	45
FMWC3225-101K/J	100.0	20	0.796	10	10.0	40
FMWC3225-121K/J	120.0	20	0.796	10	11.0	70
FMWC3225-151K/J	150.0	20	0.796	8	15.0	65
FMWC3225-181K/J	180.0	20	0.796	7	17.0	60
FMWC3225-221K/J	220.0	20	0.796	7	21.0	50

* IDC : This indicates the value of current when the inductance is 10% lower than it's initial value at D.C. superimposition or D.C.current when at ΔT=40°C,whichever is lower. (Ta=20°C)

* Tolerance：J=±5%, K=±10%, M=±20%

FMWC Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Q (min.)	Test Freq. (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
FMWC4532-R10M/K	0.10	35	25.20	300	0.18	800
FMWC4532-R12M/K	0.12	35	25.20	280	0.20	770
FMWC4532-R15M/K	0.15	35	25.20	250	0.22	730
FMWC4532-R18M/K	0.18	35	25.20	220	0.24	700
FMWC4532-R22M/K	0.22	40	25.20	200	0.25	665
FMWC4532-R27M/K	0.27	40	25.20	180	0.26	635
FMWC4532-R33M/K	0.33	40	25.20	165	0.28	605
FMWC4532-R39M/K	0.39	40	25.20	150	0.30	575
FMWC4532-R47M/K	0.47	40	25.20	145	0.32	545
FMWC4532-R56M/K	0.56	40	25.20	140	0.36	520
FMWC4532-R68M/K	0.68	40	25.20	135	0.40	500
FMWC4532-R82M/K	0.82	40	25.20	130	0.45	475
FMWC4532-1R0K/J	1.00	50	7.960	100	0.50	450
FMWC4532-1R2K/J	1.20	50	7.960	80	0.55	430
FMWC4532-1R5K/J	1.50	50	7.960	70	0.60	410
FMWC4532-1R8K/J	1.80	50	7.960	60	0.65	390
FMWC4532-2R2K/J	2.20	50	7.960	55	0.70	380
FMWC4532-2R7K/J	2.70	50	7.960	50	0.75	370
FMWC4532-3R3K/J	3.30	50	7.960	45	0.80	355
FMWC4532-3R9K/J	3.90	50	7.960	40	0.90	330
FMWC4532-4R7K/J	4.70	50	7.960	35	1.00	315
FMWC4532-5R6K/J	5.60	50	7.960	33	1.10	300
FMWC4532-6R8K/J	6.80	50	7.960	27	1.20	285
FMWC4532-8R2K/J	8.20	50	7.960	25	1.40	270
FMWC4532-100K/J	10.0	50	2.520	20	1.60	250
FMWC4532-120K/J	12.0	50	2.520	18	2.00	225
FMWC4532-150K/J	15.0	50	2.520	17	2.50	200
FMWC4532-180K/J	18.0	50	2.520	15	2.80	190
FMWC4532-220K/J	22.0	50	2.520	13	3.20	180
FMWC4532-270K/J	27.0	50	2.520	12	3.60	170
FMWC4532-330K/J	33.0	50	2.520	11	4.00	160
FMWC4532-390K/J	39.0	50	2.520	10	4.50	150
FMWC4532-470K/J	47.0	50	2.520	10	5.0	140
FMWC4532-560K/J	56.0	50	2.520	9.0	5.5	135
FMWC4532-680K/J	68.0	50	2.520	9.0	6.0	130
FMWC4532-820K/J	82.0	50	2.520	8.0	7.0	120
FMWC4532-101K/J	100.0	40	0.796	8.0	8.0	110
FMWC4532-121K/J	120.0	40	0.796	6.0	8.0	110
FMWC4532-151K/J	150.0	40	0.796	5.0	9.0	105
FMWC4532-181K/J	180.0	40	0.796	5.0	9.5	102
FMWC4532-221K/J	220.0	40	0.796	4.0	10.0	100
FMWC4532-271K/J	270.0	40	0.796	4.0	12.0	92
FMWC4532-331K/J	330.0	40	0.796	3.5	14.0	85
FMWC4532-391K/J	390.0	40	0.796	3.0	18.0	80
FMWC4532-471K/J	470.0	40	0.796	3.0	26.0	62
FMWC4532-561K/J	560.0	30	0.796	3.0	30.0	50
FMWC4532-681K/J	680.0	30	0.796	3.0	30.0	50
FMWC4532-821K/J	820.0	30	0.796	2.5	35.0	30
FMWC4532-102K/J	1000.0	20	0.252	2.5	40.0	30

* IDC : This indicates the value of current when the inductance is 10% lower than it's initial value at D.C. superimposition or D.C.current when at ΔT=40°C,whichever is lower. (Ta=20°C)

* Tolerance：J=±5%, K=±10%, M=±20%

FMWC Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Q (min.)	Test Freq. (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
FMWC3225-1R0MH	1.0	10	7.960	100	0.156	770
FMWC3225-1R5MH	1.5	10	7.960	80	0.195	580
FMWC3225-2R2MH	2.2	10	7.960	65	0.260	480
FMWC3225-3R3MH	3.3	10	7.960	55	0.325	400
FMWC3225-4R7MH	4.7	10	7.960	45	0.520	320
FMWC3225-6R8MH	6.8	10	7.960	35	0.650	280
FMWC3225-100KH	10.0	15	2.520	28	1.105	220
FMWC3225-150KH	15.0	15	2.520	25	1.690	180
FMWC3225-220KH	22.0	15	2.520	20	2.600	145
FMWC3225-330KH	33.0	15	2.520	15	3.640	115
FMWC3225-390KH	39.0	15	2.520	14	4.500	110
FMWC3225-470KH	47.0	15	2.520	13	5.460	105
FMWC3225-680KH	68.0	15	2.520	10	8.450	85
FMWC3225-820KH	82.0	15	2.520	9	8.710	80
FMWC3225-101KH	100.0	15	0.796	8	9.140	75
FMWC4532-1R0KH	1.0	10	7.960	180	0.11	1050
FMWC4532-1R2KH	1.2	10	7.960	160	0.12	1000
FMWC4532-1R5KH	1.5	10	7.960	130	0.15	950
FMWC4532-1R8KH	1.8	10	7.960	100	0.16	900
FMWC4532-2R2KH	2.2	10	7.960	80	0.18	850
FMWC4532-2R7KH	2.7	10	7.960	60	0.20	800
FMWC4532-3R3KH	3.3	10	7.960	45	0.22	750
FMWC4532-3R9KH	3.9	10	7.960	40	0.24	700
FMWC4532-4R7KH	4.7	10	7.960	35	0.27	650
FMWC4532-5R6KH	5.6	10	7.960	30	0.30	650
FMWC4532-6R8KH	6.8	10	7.960	28	0.35	600
FMWC4532-8R2KH	8.2	10	7.960	25	0.40	600
FMWC4532-100KH	10.0	10	2.520	22	0.50	550
FMWC4532-120KH	12.0	10	2.520	21	0.60	500
FMWC4532-150KH	15.0	10	2.520	20	0.70	450
FMWC4532-180KH	18.0	10	2.520	19	0.80	400
FMWC4532-220KH	22.0	10	2.520	18	0.90	370
FMWC4532-270KH	27.0	10	2.520	16	1.20	330
FMWC4532-330KH	33.0	10	2.520	14	1.40	300
FMWC4532-390KH	39.0	10	2.520	12	1.60	280
FMWC4532-470KH	47.0	10	2.520	12	1.90	260
FMWC4532-560KH	56.0	10	2.520	11	2.20	240
FMWC4532-680KH	68.0	10	2.520	10	2.60	220
FMWC4532-820KH	82.0	10	2.520	9	3.50	200
FMWC4532-101KH	100.0	20	0.796	8	4.00	180
FMWC4532-121KH	120.0	20	0.796	8	4.50	160
FMWC4532-151KH	150.0	20	0.796	7	6.50	140
FMWC4532-181KH	180.0	20	0.796	7	7.50	120
FMWC4532-221KH	220.0	20	0.796	6	9.00	120
FMWC4532-271KH	270.0	20	0.796	5	11.00	100
FMWC4532-331KH	330.0	20	0.796	4.0	13.00	90

* IDC : This indicates the value of current when the inductance is 10% lower than it's initial value at D.C. superimposition or D.C.current when at ΔT=40°C,whichever is lower. (Ta=20°C)

* Tolerance：J=±5%, K=±10%, M=±20%

FSD Series (Rev. 5.0)

Applications

* DC/DC converters, etc
* Power supply for VTRs
* OA equipment
* LCD televisions/ Notebook PCs
* Portable communication devices

Features

* RoHS compliant
* Available in magnetic shielding
* Low DC resistance
* Suitable for large currents
* Ideal for DC-DC converter inductor applications

Operating & Storage Condition

* Operating Temp.: -40 to +105°C
* Storage Temp.: -40 to +105°C
* Storage Life Time : 12 Months @25°C,RH 65%

Product Identification

FSD	53	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%, N=±30%

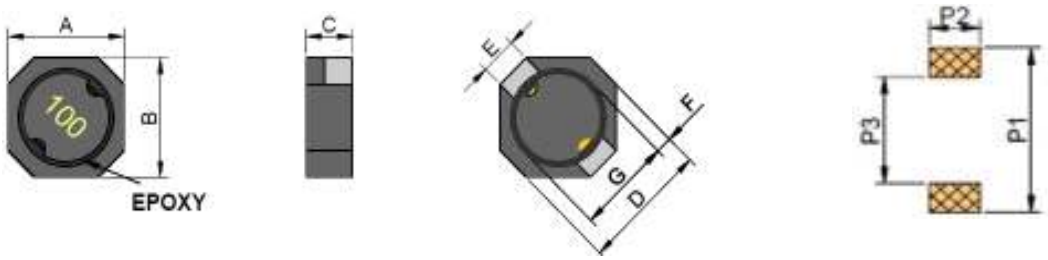
Test Equipment

* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D Network Analyzer-SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-5℃
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]



Size Code	A(ref.)	B(ref.)	C(ref.)	D(±0.3)	E(ref.)	F(ref.)	G(ref.)	P1	P2	P3
31	3.85	3.85	1.3	3.8	1.6	0.5	3.2	4.9	1.7	2.5
32	3.85	3.85	2.0	4.1	1.6	0.5	3.2	4.9	1.7	2.5
33	3.85	3.85	3.0	3.9	1.6	0.5	3.2	4.9	1.7	2.5
52	5.00	5.00	2.0	5.5	1.6	0.5	4.2	6.5	1.8	3.4
53	5.00	5.00	3.0	5.5	1.6	0.5	4.2	6.5	1.8	3.4

FSD Series (Rev. 5.0)

Electrical Characteristics

L Code	L (uH)	Tolerance (±%)	DCR (mΩ) max. / IDC (A) max.											
			31		32		33		33H		52		53	
R47N	0.47	30			17	1.84					15	2.33		
1R0N	1.00	30	60	1.60	30	1.80	9	1.90			24	2.27	15	4.00
1R2N	1.20	30	65	1.40	83	1.70	10	1.75			44	2.15	22	3.80
1R5N	1.50	30	77	1.24	52	1.60	13	1.45	15	1.90			22	3.80
1R8N	1.80	30	93	1.22	56	1.55			18	1.76				
2R0N	2.00	30					16	1.25			46	1.90	27	2.92
2R2N	2.20	30	125	1.20	58	1.50	17	1.15			59	1.63	29	2,41
2R4N	2.40	30	139	0.98			22	1.65						
2R5N	2.50	30			59	1.40	18	1.05						
2R7N	2.70	30			60	1.35	20	1.00	28	1.45				
3R3N	3.30	30	187	0.89	64	1.30	24	0.96	32	1.44	62	1.50	34	2.36
3R5N	3.50	30	210	0.85	127	1.30	25	0.95			73	1.34		
3R6N	3.60	30							35	1.43				
3R9N	3.90	30	220	0.78			33	0.87	37	1.32				
4R3N	4.30	30							43	1.00				
4R7N	4.70	30	240	0.71	146	1.10	39	0.78	45	0.97	87	1.14	45	1.87
5R1N	5.10	30							46	0.94				
5R6N	5.60	30	320	0.62	176	0.95	44	0.74					52	1.60
6R2N	6.20	30			220	0.91							62	1.55
6R8N	6.80	30	350	0.57	238	0.90	51	0.68	65	0.87	105	0.95	68	1.51
8R2N	8.20	30	470	0.52	272	0.80	65	0.57	91	0.77	139	0.90	75	1.40
100M	10.00	20	570	0.47	299	0.70	92	0.43	105	0.70	150	0.76	90	1.33
120M	12.00	20	750	0.43	355	0.65	100	0.38	119	0.67			100	1.15
150M	15.00	20	810	0.38	472	0.61	113	0.33	140	0.54	210	0.63	142	1.05
180M	18.00	20	1060	0.35	500	0.58	125	0.30	175	0.50			162	0.95
220M	22.00	20	1150	0.32	592	0.52	146	0.28	201	0.48	275	0.56	208	0.86
270M	27.00	20	1670	0.29	630	0.44	176	0.26	227	0.40			238	0.80
330M	33.00	20	1840	0.28	1075	0.43	214	0.23	287	0.35	455	0.44	257	0.72
390M	39.00	20	2310	0.25			225	0.21	341	0.33			320	0.65
470M	47.00	20	2630	0.22	1309	0.34	304	0.19	430	0.32	730	0.35	352	0.62
560M	56.00	20	2860	0.20	1800	0.30	324	0.17	471	0.30			500	0.62
680M	68.00	20	3940	0.18	2316	0.25	472	0.16	532	0.27	935	0.30	525	0.51
820M	82.00	20	4900	0.16	2950	0.20	539	0.14	675	0.23			770	0.48
101M	100.00	20	5740	0.14	3255	0.19	608	0.13	850	0.21	1500	0.23	801	0.43
121M	120.00	20	7310	0.13	3350	0.15	757	0.12	1100	0.20	1910	0.22	850	0.34
151M	150.00	20	9080	0.12	3500	0.12	882	0.11	1230	0.17	2680	0.21	1100	0.26
181M	180.00	20	9500	0.11	4000	0.11	1130	0.09	1560	0.15	3040	0.20	1190	0.24
221M	220.00	20			4800	0.10	1269	0.09	1800	0.14	3520	0.20	1530	0.20
271M	270.00	20			5100	0.09	1570	0.08	2200	0.13	4380	0.19	1960	0.19
331M	330.00	20			7280	0.08	1930	0.08	2640	0.12	5560	0.19	2030	0.19

* Test Condition: 0.47-8.2uH @100KHz/ 0.25V; 10uH and above @1KHz/ 0.25V.
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 25%
* Tolerance: M= ±20%, N= ±30%

FSL Series (Rev. 5.0)

Designed for low profile type with low Rdc and large current. Its magnetic shielded type is suitable for high -density mounting and flat bottom surface allows for reliable mounting onto the board. Soldering conditions can be easily confirmed as mounting onto the board.

Features

* RoHS compliant
* Low resistance and high rated currents

Applications

* Portable telephones
* Computers
* Hard disk drives and other electronic devices

Product Identification

FSL	127	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp. : -40 to +85°C
* Storage Temp. : -40 to +85°C
* Storage Life Time : 12 Months @25°C , RH 65%

Test Equipment

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer- SRF

Standard Atmospheric Conditions

* Ambient Temp : 25+/-5°C
* Relative Humidity : 65+/-10%

Dimension & Recommended PAD Layout: [mm]

Top View	Side View	Bottom View	Recommended Pad Layout

Size Code	A(max.)	B(max.)	C(max.)	D(±0.2)	E(ref.)	P1	P2	P3
63	6.2	6.2	3	1.8	3	6.6	2.4	2.6
73	7.4	7.4	3.5	2	5.4	7.8	2.6	5.0
74	7.4	7.4	4.5	2	5.4	7.8	2.6	5.0
104	10.4	10.4	4.8	3	6.5	10.8	3.6	6.1
126	12.8	12.8	5.8	3	8.6	13.2	3.6	8.2
127	12.8	12.8	6.8	3	8.6	13.2	3.6	8.2
128	12.8	12.8	7.8	3	8.6	13.2	3.6	8.2

FSL Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	Tolerance (±%)	Test Freq. (KHz) @0.25V	DCR (Ω) max.	IDC (A) max.
FSL63-2R2M	2.2	20	100	0.027	2.50
FSL63-4R7M	4.7	20	100	0.050	1.90
FSL63-100M	10.0	20	1	0.150	1.10
FSL63-120M	12.0	20	1	0.200	1.00
FSL63-150M	15.0	20	1	0.230	0.90
FSL63-180M	18.0	20	1	0.270	0.80
FSL63-220M	22.0	20	1	0.340	0.74
FSL63-270M	27.0	20	1	0.380	0.66
FSL63-330M	33.0	20	1	0.450	0.59
FSL63-390M	39.0	20	1	0.490	0.54
FSL63-470M	47.0	20	1	0.690	0.50
FSL63-560M	56.0	20	1	0.780	0.46
FSL63-680M	68.0	20	1	1.070	0.42
FSL63-820M	82.0	20	1	1.210	0.38
FSL63-101M	100.0	20	1	1.390	0.34
FSL63-121M	120.0	20	1	1.900	0.31
FSL63-151M	150.0	20	1	2.180	0.28
FSL63-181M	180.0	20	1	2.770	0.26
FSL63-221M	220.0	20	1	3.120	0.23
FSL63-271M	270.0	20	1	4.380	0.22
FSL63-331M	330.0	20	1	4.940	0.19
FSL73-1R0M	1.0	20	100	0.019	3.12
FSL73-1R5M	1.5	20	100	0.023	2.85
FSL73-2R2M	2.2	20	100	0.028	2.66
FSL73-3R3M	3.3	20	100	0.035	2.26
FSL73-4R7M	4.7	20	100	0.430	1.96
FSL73-6R8M	6.8	20	100	0.055	1.76
FSL73-100M	10.0	20	1	0.080	1.34
FSL73-120M	12.0	20	1	0.090	1.23
FSL73-150M	15.0	20	1	0.120	1.09
FSL73-180M	18.0	20	1	0.130	0.99
FSL73-220M	22.0	20	1	0.150	0.90
FSL73-270M	27.0	20	1	0.210	0.81
FSL73-330M	33.0	20	1	0.250	0.72
FSL73-390M	39.0	20	1	0.310	0.67
FSL73-470M	47.0	20	1	0.350	0.60
FSL73-560M	56.0	20	1	0.430	0.55
FSL73-680M	68.0	20	1	0.520	0.50
FSL73-820M	82.0	20	1	0.600	0.46
FSL73-101M	100.0	20	1	0.790	0.41

* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 25%

FSL Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	Tolerance (±%)	Test Freq. (KHz) @0.25V	DCR (Ω) max.	IDC (A) max.
FSL74-1R0M	1.0	20	100	0.023	2.88
FSL74-1R5M	1.5	20	100	0.027	2.61
FSL74-2R2M	2.2	20	100	0.030	2.46
FSL74-3R3M	3.3	20	100	0.035	2.2.8
FSL74-4R7M	4.7	20	100	0.041	2.08
FSL74-6R8M	6.8	20	100	0.047	1.94
FSL74-100M	10.0	20	1	0.050	1.68
FSL74-120M	12.0	20	1	0.070	1.54
FSL74-150M	15.0	20	1	0.080	1.39
FSL74-180M	18.0	20	1	0.090	1.26
FSL74-220M	22.0	20	1	0.110	1.1.3
FSL74-270M	27.0	20	1	0.150	1.02
FSL74-330M	33.0	20	1	0.170	0.84
FSL74-390M	39.0	20	1	0.180	0.80
FSL74-470M	47.0	20	1	0.200	0.76
FSL74-560M	56.0	20	1	0.280	0.64
FSL74-680M	68.0	20	1	0.320	0.60
FSL74-820M	82.0	20	1	0.350	0.57
FSL74-101M	100.0	20	1	0.400	0.50
FSL74-221M	220.0	20	1	0.620	0.33
FSL74-331M	330.0	20	1	0.940	0.27

* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 25%

FSL Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	Tolerance (±%)	Test Freq. (KHz) @0.25V	DCR (Ω) ±20%	IDC (A) max.
FSL104-4R7M	4.7	20	100	0.034	3.60
FSL104-6R8M	6.8	20	100	0.035	3.50
FSL104-100M	10.0	20	1	0.036	3.00
FSL104-150M	15.0	20	1	0.047	2.40
FSL104-220M	22.0	20	1	0.059	2.10
FSL104-330M	33.0	20	1	0.082	1.60
FSL104-470M	47.0	20	1	0.100	1.40
FSL104-680M	68.0	20	1	0.140	1.20
FSL104-101M	100.0	20	1	0.200	1.00
FSL104-151M	150.0	20	1	0.350	0.79
FSL104-221M	220.0	20	1	0.470	0.65
FSL104-331M	330.0	20	1	0.680	0.54
FSL104-471M	470.0	20	1	1.030	0.47
FSL104-681M	680.0	20	1	1.600	0.38
FSL104-102M	1000.0	20	1	2.800	0.32
FSL104-152M	1500.0	20	1	3.400	0.22
FSL126-6R0N	6.0	30	100	0.016	3.60
FSL126-100M	10.0	20	1	0.022	3.40
FSL126-150M	15.0	20	1	0.026	2.80
FSL126-220M	22.0	20	1	0.034	2.30
FSL126-330M	33.0	20	1	0.042	1.90
FSL126-470M	47.0	20	1	0.062	1.60
FSL126-680M	68.0	20	1	0.083	1.30
FSL126-101M	100.0	20	1	0.117	1.10
FSL126-151M	150.0	20	1	0.190	0.88
FSL126-221M	220.0	20	1	0.270	0.72
FSL126-331M	330.0	20	1	0.410	0.59
FSL126-471M	470.0	20	1	0.520	0.49
FSL126-681M	680.0	20	1	0.760	0.43
FSL126-102M	1000.0	20	1	1.120	0.34
FSL126-152M	1500.0	20	1	1.800	0.29

* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 25%

FSL Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	Tolerance (±%)	Test Freq. (KHz) @0.25V	DCR (Ω) ±20%	IDC (A) max.
FSL127-2R0N	2.0	30	100	0.012	10.0
FSL127-4R2N	4.2	30	100	0.015	7.3
FSL127-7R0N	7.0	30	100	0.018	5.7
FSL127-100M	10.0	20	1	0.020	5.0
FSL127-150M	15.0	20	1	0.024	4.2
FSL127-220M	22.0	20	1	0.032	3.5
FSL127-330M	33.0	20	1	0.041	2.8
FSL127-470M	47.0	20	1	0.058	2.4
FSL127-680M	68.0	20	1	0.079	2.0
FSL127-101M	100.0	20	1	0.123	1.6
FSL127-221M	220.0	20	1	0.273	1.0
FSL128-1R2N	1.2	30	100	6.80	13.0
FSL128-2R7N	2.7	30	100	9.40	10.0
FSL128-3R3N	3.3	30	100	10.00	9.5
FSL128-3R9N	3.9	30	100	10.40	9.0
FSL128-4R7N	4.7	30	100	11.25	8.5
FSL128-5R6N	5.6	30	100	11.60	7.8
FSL128-6R8N	6.8	30	100	13.10	7.2
FSL128-100M	10.0	20	1	15.90	5.5
FSL128-150M	15.0	20	1	18.40	4.7
FSL128-220M	22.0	20	1	26.30	4.0
FSL128-330M	33.0	20	1	40.20	3.2
FSL128-470M	47.0	20	1	52.80	2.7
FSL128-680M	68.0	20	1	77.80	2.0
FSL128-101M	100.0	20	1	125.00	1.9
FSL128-151M	150.0	20	1	175.00	1.5
FSL128-221M	220.0	20	1	258.00	1.3

* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 25%

FMAT Series (Rev. 5.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting & ultra low buzz noise. Soldering can be easily confirmed when mounting onto board.

Features

* High current and Low DCR
* Low profile for machine placement
* Minimize electromagnetic interference
* Prevent EMI Effect via precise impedance
* Custom design available

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

FMAT	6030	-	1R5	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 1.5uH
4. Tolerance: M=±20%, N=±30%

Operating & Storage Condition

* Operating Temp.: -25 to +125°C
* Storage Temp.: -25 to +125°C
* Storage Life Time : 12 Months @25°C, RH40～65%

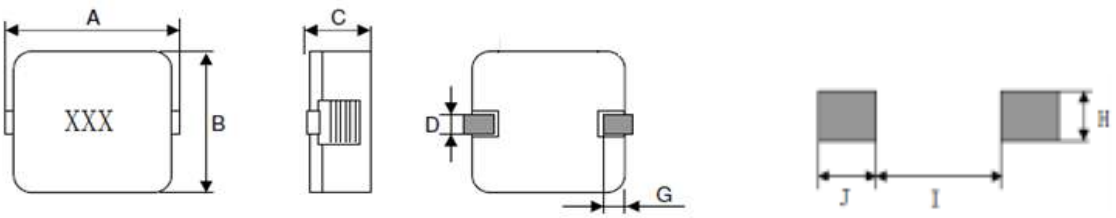
Test Equipment

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-5°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]



Size Code	A(±0.5)	B(±0.5)	C(max.)	D	G(±0.5)	H(ref.)	I(ref.)	J(ref.)
6030	7.0±0.4	6.9±0.4	3.3	1.2±0.3	1.8	2.2	2.4	2.7
6040	7.0±0.4	6.9±0.4	4.0	1.2±0.3	1.8	2.2	2.4	2.7
6050	7.0±0.4	6.9±0.4	5.0	1.2±0.3	1.8	2.2	2.4	2.7
1030	10.5	10.2	3.1	2.0±0.5	2.6	3.5	3.9	3.8
1040	10.5	10.2	4.2	2.5±1.0	2.0	4.0	3.8	3.9
1050	10.5	10.2	5.0	2.0±0.5	2.0	4.0	3.8	3.5
1335	13.0±1.0	12.8	3.5	2.5±0.5	3.0±1.0	5.0	6.3	3.9
1350	13.0±1.0	12.8	5.0	2.5±0.5	3.0±1.0	5.0	6.0	4.5
1365	13.0±1.0	12.8	6.5	3.0±1.0	3.0±1.0	5.0	6.0	4.5
1890	18.3±1.0	18.2	9.2	3.5±1.5	5.0±1.0	6.0	7.3	6.0
2212	22.5±1.0	22.0±1.0	12.4	3.5±1.0	5.5±1.0	6.0	9.0	7.0

FMAT Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Tolerance	DCR (mΩ) typ.	DCR (mΩ) max.	Isat (A) max.	Irms (A) max.
FMAT6030-R13M	0.13	20%	0.91	1.00	48.0	22.0
FMAT6030-R24M	0.24	20%	1.80	1.98	40.0	18.0
FMAT6030-R52M	0.52	20%	3.70	4.07	20.0	14.0
FMAT6030-R95M	0.95	20%	6.20	6.82	13.0	11.0
FMAT6030-1R2M	1.20	20%	8.60	9.46	13.0	8.5
FMAT6030-1R5M	1.50	20%	12.70	13.97	12.0	7.5
FMAT6030-2R0M	2.00	20%	14.20	15.62	9.0	6.5
FMAT6040-R22M	0.22	20%	1.10	1.21	32.0	21.0
FMAT6040-R40M	0.40	20%	1.85	2.04	25.0	19.0
FMAT6040-R68M	0.68	20%	3.10	3.41	20.0	17.0
FMAT6040-1R0M	1.00	20%	4.60	5.06	19.0	15.0
FMAT6040-1R5M	1.50	20%	6.60	7.26	14.0	11.0
FMAT6040-2R2M	2.20	20%	11.40	12.54	13.0	9.0
FMAT6040-3R3M	3.30	20%	17.20	18.92	11.0	6.5
FMAT6040-4R7M	4.70	20%	19.50	21.45	7.0	6.0
FMAT6050-R24M	0.24	20%	1.00	1.10	28.0	20.0
FMAT6050-R47M	0.47	20%	1.35	1.49	20.0	18.0
FMAT6050-R76M	0.76	20%	2.25	2.48	15.0	15.5
FMAT6050-1R1M	1.10	20%	3.15	3.47	13.0	15.0
FMAT6050-1R5M	1.50	20%	4.30	4.73	11.0	13.0
FMAT6050-2R0M	2.00	20%	5.85	6.44	9.0	11.5
FMAT6050-3R3M	3.30	20%	9.00	9.90	8.0	9.0
FMAT6050-4R9M	4.90	20%	14.50	15.95	6.5	6.5
FMAT6050-6R5M	6.50	20%	21.50	23.65	6.0	6.0
FMAT6050-7R6M	7.60	20%	30.20	33.22	4.8	4.2
FMAT6050-8R5M	8.50	20%	32.50	35.75	4.5	4.0
FMAT6050-100M	10.00	20%	33.00	36.30	4.0	3.5
FMAT1030-R20M	0.20	20%	0.82	0.90	50.0	22.0
FMAT1030-R33M	0.33	20%	2.17	2.39	36.0	18.0
FMAT1030-R56M	0.56	20%	2.17	2.39	33.0	18.0
FMAT1030-R68M	0.68	20%	4.79	5.27	21.0	14.0
FMAT1030-1R0M	1.00	20%	4.79	5.27	21.0	14.0
FMAT1030-1R2M	1.20	20%	6.60	7.26	15.0	12.0
FMAT1030-1R5M	1.50	20%	6.60	7.26	18.0	12.0
FMAT1030-2R2M	2.20	20%	11.38	12.52	15.0	9.0
FMAT1040-R15M	0.15	20%	0.58	0.64	60.0	25.0
FMAT1040-R30M	0.30	20%	1.1	1.21	35.0	22.0
FMAT1040-R56M	0.56	20%	1.61	1.77	30.0	20.0
FMAT1040-1R0M	1.00	20%	3.30	3.63	20.0	16.0
FMAT1040-1R5M	1.50	20%	5.30	5.83	17.0	14.0
FMAT1040-2R2M	2.00	20%	7.30	8.03	13.0	11.0
FMAT1040-2R8M	2.80	20%	10.60	11.66	11.0	9.5
FMAT1040-4R3M	4.30	20%	14.10	15.51	8.0	8.0

* Test Condition: @100KHz/ 0.1V
* Irms DC current (A) that will cause an approximate ΔT of 50°C
* Isat DC current (A) that will cause L to drop approximately 30%

FMAT Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Tolerance	DCR (mΩ) typ.	DCR (mΩ) max.	Isat (A) max.	Irms (A) max.
FMAT1050-R16M	0.16	20%	0.51	0.56	58.0	25.0
FMAT1050-R40M	0.40	20%	0.67	0.74	37.0	24.0
FMAT1050-R72M	0.72	20%	1.30	1.43	35.0	22.0
FMAT1050-1R2M	1.20	20%	1.80	1.98	25.0	20.0
FMAT1050-1R8M	1.80	20%	3.50	3.85	18.0	16.0
FMAT1050-2R4M	2.40	20%	4.75	5.23	17.0	14.0
FMAT1050-3R3M	3.30	20%	5.90	6.49	15.0	12.0
FMAT1050-4R2M	4.20	20%	7.10	7.81	14.0	11.0
FMAT1050-5R5M	5.50	20%	10.30	11.33	12.0	10.0
FMAT1050-6R5M	6.5	20%	12.50	13.75	10.0	8.4
FMAT1050-7R8M	7.8	20%	13.60	14.96	9.5	8.0
FMAT1050-100M	10.0	20%	16.30	17.93	8.5	7.2
FMAT1050-160M	16.0	20%	34.50	37.95	6.5	5.0
FMAT1335-R25N	0.25	30%	0.75	0.83	60.0	24.0
FMAT1335-R68M	0.68	20%	1.58	1.74	40.0	22.0
FMAT1335-1R2M	1.20	20%	2.85	3.14	28.0	17.0
FMAT1335-1R8M	1.80	20%	5.60	6.16	22.0	14.0
FMAT1335-2R2M	2.20	20%	5.70	6.27	18.0	14.0
FMAT1335-3R3M	3.30	20%	8.10	8.91	14.0	12.0
FMAT1350-R19M	0.19	20%	0.50	0.55	60.0	29.0
FMAT1350-R47M	0.47	20%	0.90	0.99	50.0	26.0
FMAT1350-R90M	0.90	20%	1.60	1.76	28.0	24.0
FMAT1350-1R4M	1.40	20%	2.40	2.64	26.0	22.0
FMAT1350-2R3M	2.30	20%	3.70	4.07	17.0	17.5
FMAT1350-3R2M	3.20	20%	5.30	5.83	15.0	16.0
FMAT1350-4R8M	4.80	20%	10.50	11.55	13.0	11.0
FMAT1350-6R0M	6.00	20%	13.50	14.85	11.5	9.5
FMAT1350-8R2M	8.20	20%	11.60	12.76	11.0	10.0
FMAT1350-100M	10.00	20%	14.10	15.51	10.0	8.5
FMAT1365-R22M	0.20	20%	0.35	0.39	65.0	32.0
FMAT1365-R47M	0.47	20%	0.67	0.74	50.0	30.0
FMAT1365-R82M	0.82	20%	0.90	0.99	35.0	27.0
FMAT1365-1R3M	1.30	20%	1.80	1.98	25.0	25.0
FMAT1365-2R0M	2.00	20%	2.60	2.86	22.0	23.0
FMAT1365-2R8M	2.80	20%	3.30	3.63	17.5	20.0
FMAT1365-3R7M	3.70	20%	4.90	5.39	16.0	17.0
FMAT1365-4R7M	4.70	20%	7.00	7.70	15.0	13.0
FMAT1365-6R0M	6.00	20%	8.40	9.24	14.0	12.0
FMAT1365-7R3M	7.30	20%	5.90	6.49	12.0	13.0
FMAT1365-9R2M	9.20	20%	7.80	8.58	10.5	12.0
FMAT1365-110M	11.00	20%	9.10	10.00	9.5	11.0
FMAT1365-130M	13.00	20%	11.20	12.32	9.0	10.0
FMAT1365-150M	15.00	20%	14.80	16.28	8.0	9.0
FMAT1365-220M	22.00	20%	24.70	27.17	6.5	6.0

* Test Condition: @100KHz/ 0.1V
* Irms DC current (A) that will cause an approximate ΔT of 50°C
* Isat DC current (A) that will cause L to drop approximately 30%

FMAT Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Tolerance	DCR (mΩ) typ.	DCR (mΩ) max.	Isat (A) max.	Irms (A) max.
FMAT1890-R82M	0.82	20%	0.54	0.58	65.0	41.5
FMAT1890-1R3M	1.30	20%	0.94	1.02	62.0	34.5
FMAT1890-1R9M	1.90	20%	1.20	1.30	52.0	32.5
FMAT1890-2R6M	2.60	20%	1.58	1.71	50.0	31.5
FMAT1890-3R6M	3.60	20%	3.10	3.35	37.0	22.5
FMAT1890-4R5M	4.50	20%	3.40	3.67	37.0	20.5
FMAT1890-5R6M	5.60	20%	3.70	4.00	33.0	19.0
FMAT1890-6R8M	6.80	20%	4.10	4.43	27.0	18.5
FMAT1890-100M	10.00	20%	6.90	7.45	21.5	15.0
FMAT1890-100MT	10.00	20%	7.10	7.67	18.5	16.5
FMAT1890-150M	15.00	20%	9.30	10.05	14.0	14.0
FMAT1890-220M	22.00	20%	14.60	15.77	11.0	11.0
FMAT1890-330M	33.00	20%	22.60	24.41	9.0	8.5
FMAT1890-470M	47.00	20%	34.00	36.72	7.0	6.8
FMAT2212-3R3M	3.30	20%	1.70	1.87	45.0	29.0
FMAT2212-6R8M	6.80	20%	2.10	2.31	31.0	28.5
FMAT2212-8R2M	8.20	20%	2.70	2.97	30.0	25.5
FMAT2212-100M	10.00	20%	3.40	3.74	26.0	21.0
FMAT2212-120M	12.00	20%	4.30	4.73	25.0	19.0
FMAT2212-220M	22.00	20%	7.00	7.70	18.0	15.0
FMAT2212-330M	33.00	20%	13.20	14.52	15.0	11.5
FMAT2212-470M	47.00	20%	19.20	21.12	12.0	9.0
FMAT2212-680M	68.00	20%	27.30	30.03	9.5	7.5
FMAT2212-820M	82.00	20%	20.40	33.44	8.5	7.0

* Test Condition: @100KHz/ 0.1V
* Irms DC current (A) that will cause an approximate ΔT of 50°C
* Isat DC current (A) that will cause L to drop approximately 30%

FMDV Series (Rev. 5.0)

Applications

* Voltage regulator modules (VRMs) for servers, microprocessors
* High frequency, high current switching power supplies

Features

* Designed for high speed, high current switch mode
* Gapped ferrite cores for maximum efficiency
* Inductance values from 0.01 uH to 0.200 uH
* Current up to 64 Amps
* Ferrite core material

Operating & Storage Condition

* Operating Temp. : -55 to +125°C
* Storage Temp. : -40 to +85°C
* Storage Life Time : 12 Months @25°C , RH 65%

Product Identification

FMDV	1070	-	R15	K
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 0.15uH
4. Tolerance: K=±10%, M=±20%

Test Equipment

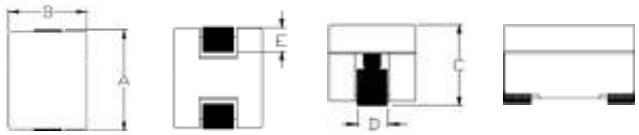
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions

* Ambient Temp : 25+/-5°C
* Relative Humidity : 75+/-10%

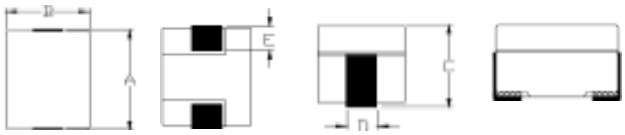
Dimension & Recommended PAD Layout: [mm]

Top View Bottom View Side View

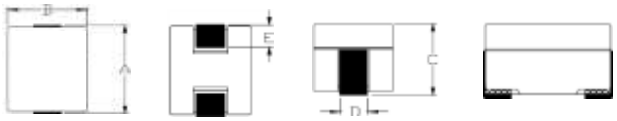


FMDV9080

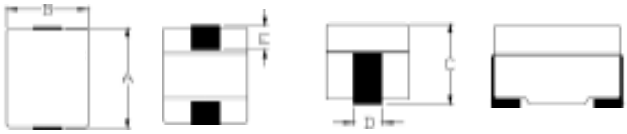
Top View Bottom View Side View



FMDV7050/8050/1050



FMDV1070/1080/1175



FMDV7032/4040

Pad Layout

Size Code	A(max.)	B(max.)	C(max.)	D(±0.2)	E(±0.2)	F(ref.)	G(ref.)	H(ref.)
4040	4.0	4.0	4.0	1.4	1.2	1.9	1.7	0.9
7032	7.4	6.6	3.2	2.8	1.7	3.3	2.2	3.4
7050	7.0	7.0	5.0	2.5	1.5	3.1	2.0	3.4
8050	7.6	7.5	5.0	3.1	2.2	3.4	2.8	2.4
9080	9.6	6.4	8.0	2.1	2.3	2.5	3.2	4.0
1050	10.2	7.0	5.0	2.5	1.5	3.1	2.0	6.4
1070	10.5	8.0	7.0	2.1	2.2	2.6	3.0	5.0
1080	10.2	8.0	8.0	2.1	2.5	2.5	3.6	4.1
1175	11.2	7.2	7.5	1.9	2.5	2.1	3.1	5.0

FMDV Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance (nH)	Tolerance (±%)	DCR (mΩ) ±25%	Isat. (A) max.	Irms. (A) max.
FMDV4040-22NM	22	20	0.32	40.0	19.0
FMDV4040-50NM	50	20	0.32	29.0	19.0
FMDV4040-65NM	65	20	0.32	24.0	19.0
FMDV4040-80NM	80	20	0.32	22.0	19.0
FMDV4040-R10M	100	20	0.32	17.0	19.0

* Test Condition: @100KHz/ 0.1V
* DCR @ 20°C, test at point a&b which was shown on dimension page.
* Isat DC current (A) that will cause L to drop approximately 20%
* Irms DC current (A) that will cause an approximate ΔT of 40°C

FMDV Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance (nH)	Tolerance (±%)	DCR (mΩ)	Isat 1 @ 25°C (A) max.	Isat 2 @ 125°C (A) max.	Irms @△T=40°C (A) max.
FMDV7032-R08K	80	10	1.35 ± 10%	32.0	27.0	28.0
FMDV7032-R10K	100	10	1.35 ± 10%	27.0	23.0	28.0
FMDV7032-R12K	120	10	1.35 ± 10%	22.0	19.0	28.0
FMDV7032-R15K	150	10	1.35 ± 10%	16.0	13.0	28.0
FMDV7050-R07K	72	10	0.25 ± 8%	65.0	50.0	43.0
FMDV7050-R10K	105	10	0.25 ± 8%	44.0	34.0	43.0
FMDV7050-R12K	120	10	0.25 ± 8%	37.0	30.0	43.0
FMDV7050-R15K	150	10	0.25 ± 8%	30.0	24.0	43.0
FMDV7050-R18K	180	10	0.25 ± 8%	25.0	20.0	43.0
FMDV7050-R22K	226	10	0.25 ± 8%	20.0	16.0	43.0
FMDV8050-R03K	32	10	0.17 ± 8%	110.0	95.0	65.0
FMDV8050-R06K	58	10	0.17 ± 8%	83.0	61.0	65.0
FMDV8050-R07K	72	10	0.17 ± 8%	67.0	49.0	65.0
FMDV8050-R10K	100	10	0.17 ± 8%	50.0	35.0	65.0
FMDV8050-R20K	200	10	0.17 ± 8%	20.0	16.0	65.0
FMDV9080-R10K	100	10	0.29 ± 5%	94.0	81.0	51.0
FMDV9080-R12K	120	10	0.29 ± 5%	79.0	68.0	51.0
FMDV9080-R15K	150	10	0.29 ± 5%	65.0	54.5	51.0
FMDV9080-R22K	220	10	0.29 ± 5%	44.0	37.5	51.0
FMDV9080-R28K	280	10	0.29 ± 5%	34.0	29.0	51.0
FMDV9080-R30K	300	10	0.29 ± 5%	32.5	27.5	51.0

* Test Condition: @100KHz/ 0.1V
* DCR @ 20°C, test at point a&b which was shown on dimension page.
* Isat1: Peak current for approximately 20% rolloff at +25°C
* Isat2: Peak current for approximately 20% rolloff at +125°C
* Irms: DC current for an approximate temperature rise of 40°C without core loss.
* Tolerance: K= ±10%

FMDV Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance (nH)	Tolerance (±%)	DCR (mΩ)	Isat 1 @ 25°C (A) max.	Isat 2 @ 125°C (A) max.	Irms @△T=40°C (A) max.
FMDV1050-R08K	80	10	0.39 ± 7.5%	90.0	64.0	53.0
FMDV1050-R10K	100	10	0.39 ± 7.5%	73.0	57.0	53.0
FMDV1050-R12K	120	10	0.39 ± 7.5%	60.0	48.0	53.0
FMDV1050-R15K	150	10	0.39 ± 7.5%	47.0	37.0	53.0
FMDV1050-R22K	220	10	0.39 ± 7.5%	33.0	26.0	53.0
FMDV1070-R12K	115	10	0.29 ± 5%	94.0	86.0	61.0
FMDV1070-R15K	150	10	0.29 ± 5%	75.0	60.0	61.0
FMDV1070-R17K	170	10	0.29 ± 5%	66.0	53.0	61.0
FMDV1070-R18K	180	10	0.29 ± 5%	60.0	50.0	61.0
FMDV1070-R22K	220	10	0.29 ± 5%	50.0	40.0	61.0
FMDV1070-R23K	230	10	0.29 ± 5%	48.0	40.0	61.0
FMDV1070-R27K	270	10	0.29 ± 5%	41.0	33.0	61.0
FMDV1070-R30K	300	10	0.29 ± 5%	35.0	30.0	61.0
FMDV1070-R33K	330	10	0.29 ± 5%	33.0	26.5	61.0
FMDV1070-R39K	390	10	0.29 ± 5%	28.0	22.5	61.0
FMDV1070-R47K	470	10	0.29 ± 5%	23.5	19.0	61.0
FMDV1080-R12K	120	10	0.18 ± 5%	95.0	77.0	68.0
FMDV1080-R15K	150	10	0.18 ± 5%	79.0	66.0	68.0
FMDV1080-R18K	180	10	0.18 ± 5%	62.0	52.0	68.0
FMDV1080-R22K	220	10	0.18 ± 5%	58.0	47.0	68.0
FMDV1175-R12K	120	10	0.29 ± 5%	90.0	72.0	55.0
FMDV1175-R15K	150	10	0.29 ± 5%	70.0	56.0	55.0
FMDV1175-R23K	230	10	0.29 ± 5%	45.0	36.0	55.0
FMDV1175-R30K	300	10	0.29 ± 5%	35.0	28.0	55.0
FMDV1175-R40K	400	10	0.29 ± 5%	25.0	20.0	55.0
FMDV1175-R51K	510	10	0.29 ± 5%	18.0	12.4	55.0

* Test Condition: @100KHz/ 0.1V
* DCR @ 20°C, test at point a&b which was shown on dimension page.
* Isat1: Peak current for approximately 20% rolloff at +25°C
* Isat2: Peak current for approximately 20% rolloff at +125°C
* Irms: DC current for an approximate temperature rise of 40°C without core loss.
* Tolerance: K= ±10%

FAMH-SMD TYPE (Rev. 5.0)

Applications

* DC/DC converters, etc
* Power supply for VTRs
* LCD televisions

Features

* High current,low loss of iron powder core
* Low profile for machine placement
* Minimize electromagnetic interference
* Suppress common mode noise
* Prevent EMI effect via precise impedance

Operating & Storage Condition

* Operating Temp.: -40 to +125°C
* Storage Temp.: -20 to +35°C
* Storage Life Time :12 Months @25°C,RH 65%

Product Identification

FAMH	1360	-	4R7	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 4.7uH
4. Tolerance: M=±20%

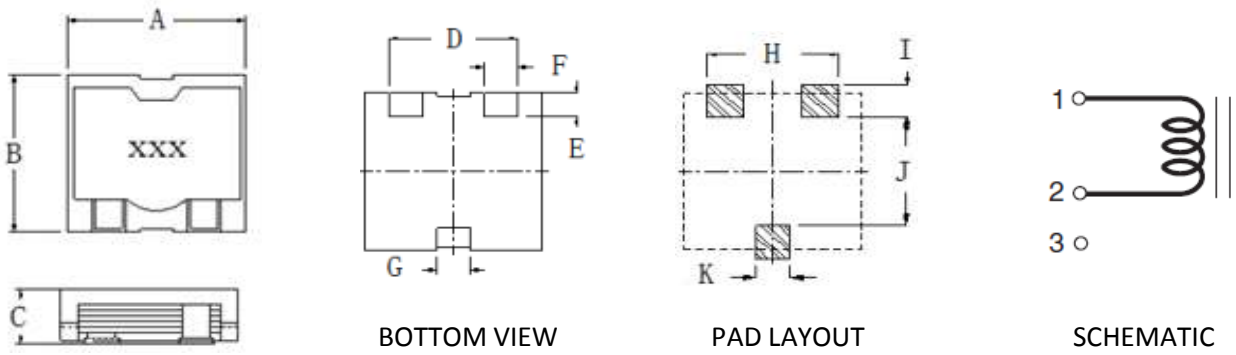
Test Equipment

* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-5°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]



Size Code	A(max.)	B(max.)	C(max.)	D(±0.5)	E(ref.)	F(ref.)	G(ref.)	H(ref.)	I(ref.)	J(ref.)	K(ref.)
1052	10.6	10.6	5.2	8.0	2.0	2.5	1.5	8.2	2.5	5.8	2.4
1360	13.0	13.5	5.8	9.4	2.0	2.5	2.5	9.0	2.5	8.0	3.0
1390	13.0	13.5	9.0	9.4	2.0	2.5	2.5	9.0	2.5	8.0	3.0
1480	14.9	15.1	8.3	11.8	1.8	2.8	2.5	13.0	2.7	10.0	3.5
1412	14.9	15.1	12.2	11.8	1.8	2.8	2.5	13.0	2.7	10.0	3.5

FAMH-SMD TYPE (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Tolerance	DCR (mΩ) typ.	DCR (mΩ) max.	Isat (A) max. @L-Drop 30%	Irms (A) max. @△T=45°C
FAMH1052-R80M	0.80	20%	3.80	4.00	25.6	16.3
FAMH1052-1R0M	1.00	20%	3.80	4.00	17.5	16.3
FAMH1052-1R2M	1.20	20%	5.40	6.00	21.3	15.0
FAMH1052-1R3M	1.30	20%	3.80	4.00	17.2	16.3
FAMH1052-1R5M	1.50	20%	3.80	4.00	14.5	15.0
FAMH1052-1R8M	1.80	20%	5.40	6.00	14.3	15.0
FAMH1052-2R0M	2.00	20%	7.80	9.00	16.2	11.5
FAMH1052-2R2M	2.20	20%	3.80	4.00	10.0	16.3
FAMH1052-2R5M	2.50	20%	5.40	7.50	12.1	12.0
FAMH1052-3R2M	3.20	20%	5.40	6.00	8.5	15.0
FAMH1052-4R0M	4.00	20%	7.80	9.00	8.8	11.5
FAMH1052-4R3M	4.30	20%	5.40	7.50	7.0	12.0
FAMH1052-5R7M	5.70	20%	7.80	9.00	6.0	11.5
FAMH1360-R33M	0.33	20%	0.77	0.86	43.0	16.9
FAMH1360-R65M	0.65	20%	0.77	0.85	28.0	16.9
FAMH1360-1R0M	1.00	20%	2.36	2.60	33.5	13.0
FAMH1360-1R8M	1.80	20%	2.36	2.60	20.0	13.0
FAMH1360-2R7M	2.70	20%	2.36	2.60	14.0	13.0
FAMH1360-4R0M	4.00	20%	5.50	6.05	13.0	9.4
FAMH1360-4R7M	4.70	20%	5.50	6.05	12.0	9.4
FAMH1360-6R0M	6.00	20%	5.50	6.06	9.5	9.4
FAMH1360-8R0M	8.00	20%	9.83	10.81	9.0	7.6
FAMH1360-100M	10.00	20%	9.83	10.81	7.5	7.2
FAMH1390-100M	10.00	20%	13.7	15.0	13.1	9.2
FAMH1390-150M	15.00	20%	13.7	15.0	8.6	9.2
FAMH1390-220M	22.00	20%	21.0	23.1	7.3	7.7
FAMH1390-330M	33.00	20%	21.0	23.1	4.7	7.7
FAMH1390-470M	47.00	20%	21.0	23.1	3.2	7.7
FAMH1480-R40M	0.4	20%	1.0	1.2	66.0	23.0
FAMH1480-R90M	0.9	20%	1.2	1.5	45.0	21.5
FAMH1480-1R5M	1.5	20%	1.7	2.0	34.0	20.0
FAMH1480-2R4M	2.4	20%	2.7	3.2	28.0	17.5
FAMH1480-3R4M	3.4	20%	4.1	5.0	23.0	16.0
FAMH1480-4R7M	4.7	20%	5.0	6.0	19.0	12.5
FAMH1480-6R1M	6.1	20%	6.5	7.8	18.5	11.0
FAMH1480-7R7M	7.7	20%	8.2	9.9	15.5	10.0
FAMH1480-9R5M	9.5	20%	11.1	13.3	14.0	8.5
FAMH1480-100M	10.0	20%	8.2	9.9	11.5	10.0
FAMH1480-120M	12.0	20%	11.1	13.3	10.0	8.5
FAMH1480-470M	47.0	20%	22.3	27.0	3.0	2.5
FAMH1412-7R4M	7.4	20%	3.7	4.5	10.8	13.0
FAMH1412-100M	10.0	20%	4.5	5.4	9.2	12.5
FAMH1412-120M	12.0	20%	6.3	7.5	8.5	10.3
FAMH1412-150M	15.0	20%	7.4	8.4	8.0	9.6
FAMH1412-180M	18.0	20%	8.1	9.8	7.2	9.0
FAMH1412-220M	22.0	20%	9.4	11.3	6.4	8.3

* Test Condition: @100KHz/ 0.1V
* Irms DC current (A) that will cause an approximate ΔT of 45°C
* Isat DC current (A) that will cause L to drop approximately 30%

FAMH-DIP TYPE (Rev. 5.0)

FAMH series provides exceptionally high current carrying capability and very low DC resistance.

Applications

* DC/DC converters, etc
* Power supply for VTRs
* LCD televisions, Lighting

Features

* High current, low loss of ferrite core
* Extremely low DCR; Current handling to >100 Amps
* Custom design available

Operating & Storage Condition

* Operating Temp.: -40 to +125°C
* Storage Temp。: -20 to +35°C
* Storage Life Time: 12 months @25°C, RH 65%

Product Identification

FAMH	1250	-	R68	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 0.68uH
4. Tolerance: M = ±20%

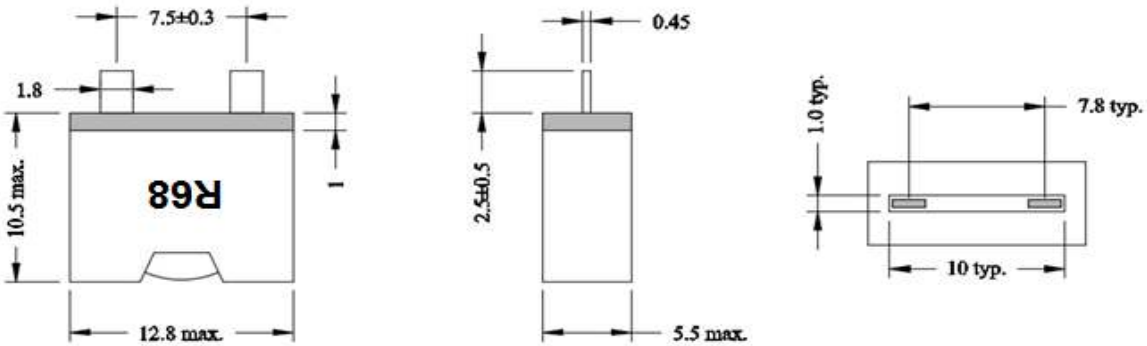
Test Equipment

* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

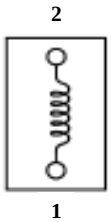
Standard Atmospheric Conditions

* Ambient Temp : 20+/-5°C
* Relative Humidity : 65+/-20%

Dimension: [mm]



Schematic:



Electrical Characteristics

P/N	L (uH)	Tolerance (±%)	DCR (mΩ) max.	Isat (A) max.	Irms (A) max.	Wire Diameter (mm)
FAMH1250-R68M	0.68	20	1.85	45.0	23.0	0.45*1.8*2.75TS
FAMH1250-1R0M	1.00	20	1.92	37.0	23.0	0.45*1.8*2.75TS

* Test Condition : 100KHz , 1Vrms , 25°C Ambient
* Isat: DC current that will cause L to drop approximately 35%.
* Irms: DC current that will cause an approximate ΔT of 40°C.

FAME- SMD Type (Rev. 5.0)

FAME series provides exceptionally high current carrying capability and very low DC resistance.

Features

* High current, low loss of iron powder core
* Extremely low DCR; Current handling to >100 Amps
* Third mounting pad for greater stability and board adhesion
* Custom design available

Applications

* DC/DC converters, etc
* Power supply for VTRs
* LCD televisions, Lighting

Product Identification

FAME	2012	-	330	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 33uH
4. Tolerance: M= ±20%

Operating & Storage Condition

* Operating Temp.: -55 to +125°C
* Storage Temp.: -40 to +85°C
* Storage Life Time: 12 months @25°C, RH 65%

Test Equipment

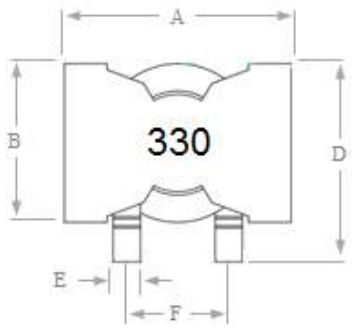
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

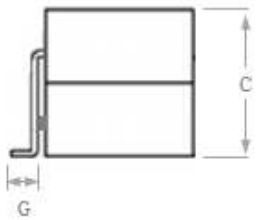
Standard Atmospheric Conditions

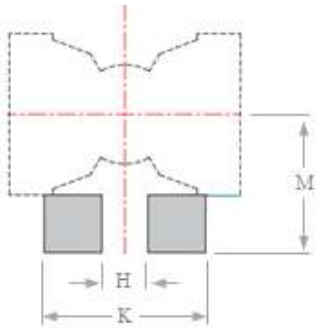
* Ambient Temp : 20+/-5°C
* Relative Humidity : 65+/-20%

Dimension & Recommended Pad Layout: [mm]

Top View	Side View	Pad Layout







Size Code	A(max)	B(max)	C(±0.3)	D(max)	E(±0.2)	F(±0.5)	G(±1.0)	H(ref.)	K(ref.)	M(ref.)
2012	20.9	14.5	12.0	20.5	3.5	8.0	3.5	4.0	14.0	12.0
2014	20.9	14.5	14.0	20.5	3.5	8.0	3.5	4.0	14.0	12.0
2016	20.9	14.5	16.0	20.5	3.5	8.0	3.5	4.0	14.0	12.0

FAME Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance (uH)	DCR (mΩ) typ.	DCR (mΩ) max.	Irms. (A) typ.	Isat. (A) typ.
FAME2012-R47M	0.47	0.45	0.55	45.0	75.0
FAME2012-R82M	0.82	0.45	0.55	45.0	55.0
FAME2012-1R0M	1.00	1.38	1.60	35.0	85.0
FAME2012-1R5M	1.50	1.38	1.60	35.0	60.0
FAME2012-2R2M	2.20	2.11	2.40	28.0	50.0
FAME2012-3R3M	3.30	2.11	2.40	28.0	35.0
FAME2012-4R7M	4.70	2.11	2.40	28.0	24.0
FAME2012-6R8M	6.80	2.11	2.40	28.0	16.0
FAME2012-8R2M	8.20	2.11	2.40	28.0	13.0
FAME2012-100M	10.0	5.87	7.00	16.0	13.0
FAME2012-150M	15.0	5.87	7.00	16.0	10.0
FAME2012-220M	22.0	8.17	9.80	14.0	10.0
FAME2012-330M	33.0	8.17	9.80	14.0	7.0
FAME2014-2R2M	2.20	1.70	2.20	28.0	55.0
FAME2014-2R7M	2.70	1.70	2.20	28.0	48.0
FAME2014-3R3M	3.30	3.28	3.80	24.0	48.0
FAME2014-4R7M	4.70	3.28	3.80	24.0	35.0
FAME2014-5R6M	5.60	3.28	3.80	24.0	30.0
FAME2014-6R8M	6.80	6.60	7.30	18.0	34.0
FAME2014-8R2M	8.20	6.60	7.30	18.0	29.0
FAME2014-100M	10.00	6.60	7.30	18.0	23.0
FAME2014-150M	15.00	8.60	9.50	16.0	18.0
FAME2014-220M	22.00	8.60	9.50	16.0	13.0
FAME2014-330M	33.00	8.60	9.50	16.0	9.0
FAME2016-4R7M	4.70	3.30	4.00	21.0	42.0
FAME2016-6R8M	6.80	3.57	4.30	20.0	25.0
FAME2016-8R2M	8.20	3.57	4.30	20.0	25.0
FAME2016-100M	10.0	5.28	6.30	16.0	24.0
FAME2016-220M	22.0	5.28	6.30	16.0	10.0
FAME2016-330M	33.0	13.0	15.0	12.0	9.0
FAME2016-470M	47.0	13.0	15.0	12.0	6.5

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Isat: DC current that will cause L to drop approximately 20%.
* Irms: DC current that will cause an approximate ΔT of 40°C.
* The part temperature (ambient + temp rise) should not exceed -30～105℃ under worst case operating conditions.
* Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all effect the part temperature. Part temperature should be verified in the end application.

FAME- Dip Type (Rev. 5.0)

Applications

* DC/DC converters, etc
* Power supply for VTRs
* LCD televisions, Lighting

Features

* High current, low loss of iron powder core
* Extremely low DCR; Current handling to >100 Amps
* Custom design available

Operating & Storage Condition

* Operating Temp.: -55 to +125°C
* Storage Temp.: -40 to +85°C
* Storage Life Time: 12 months @25°C, RH 65%

Product Identification

FAME	2612	-	100	K
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: K= ±10%

Test Equipment

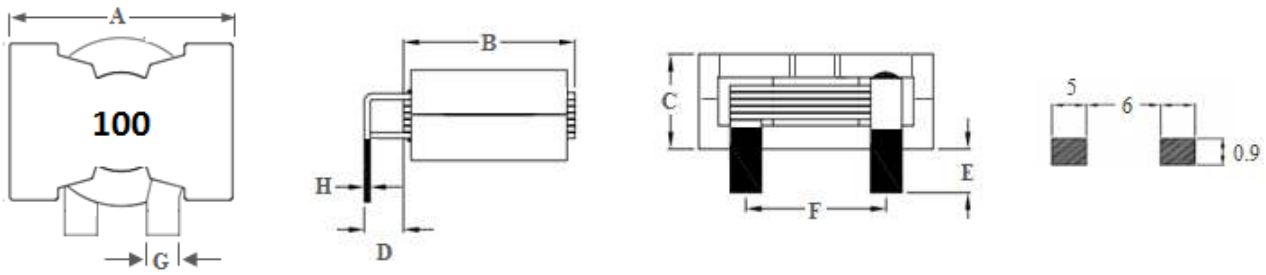
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-5°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Top View	Side View	Front View	Pad Layout



Size Code	A(±1.0)	B(±0.3)	C(±0.4)	D(±0.5)	E(±1.0)	F(±1.0)	G(±0.2)	H(±0.1)
2612	26.5	21.2	12.5	2.3	4.0	11.0	4.0	0.5

Electrical Characteristics

P/N	L (uH)	Tolerance (±%)	DCR (mΩ) max.	Isat. (A) typ.	Irms. (A) typ.
FAME2612-100K	10.0	10	3.2	29.5	25.0

* Test Condition : 100KHz/ 0.1V, 25°C Ambient
* Isat: DC current that will cause L to drop approximately 30%.
* Irms: DC current that will cause an approximate ΔT of 40°C.

FIDA-DIP TYPE (Rev. 5.0)

Round Wire

FIDA, a full series of inductor module for LPF used in the digital amplifier featuring with higher efficiency and lower heat generation.

Features

* Space reduction is realized by 2 in 1 construction
* The optimal design realizes high quality sound and low distortion
* Low radiation noise by magnetically shielded construction
* High current, low resistance

Applications

* Car audios, home theater sets and large LCDs

Operating & Storage Condition

* Operating Temp : -40 to +125°C
* Storage Temp : -40 to +85°C
* Storage Life Time : 12 months @25°C , RH 65%

Product Identification

FIDA	1516	-	220	M	□
1	2		3	4	5

1. Product Code
2. Size Code
3. Inductance: 22uH
4. Tolerance: K=±10%, M=±20%, N=±30%
5. Various type: S-square; P-prism

Test Equipment

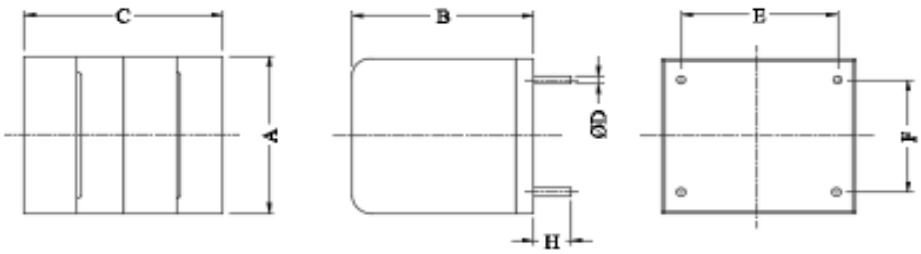
* HP4291A-Z, HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer- SRF

Standard Atmospheric Conditions

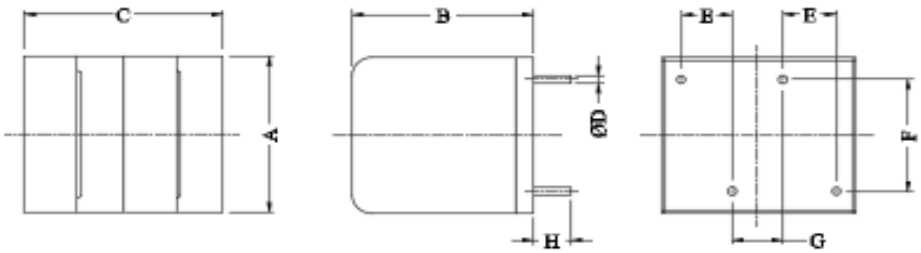
* Ambient Temp : 20+/-5°C
* Relative Humidity : 65+/-20%

Dimension: [mm]

(S Type)



(P Type)



Size Code	Type	A(±0.5)	B(max.)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(±0.5)	H(±0.5)
1516	S	14.5	16.0	16.5	*	11.8	8.5	-	5.0
1516	P	14.5	16.0	16.5	*	4.0	8.5	3.8	5.0
1616	S	15.5max.	16.0	21.5	0.8	16.0	8.0	-	4.5

* Vary with different inductance. Please refer to **Electrical Characteristics**.

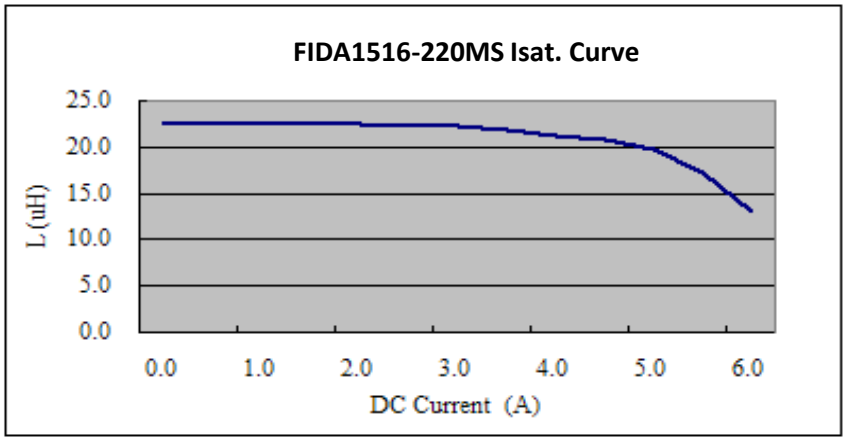
FIDA-DIP TYPE (Rev. 5.0)

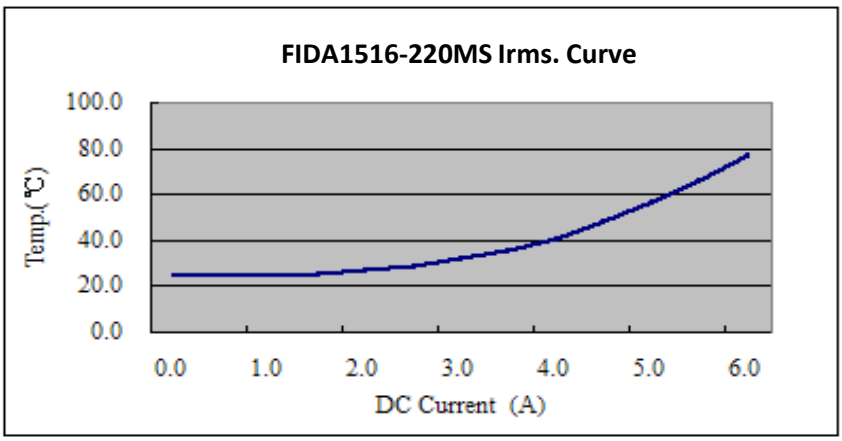
Electrical Characteristics

P/N	Inductance (uH)	DCR (mΩ) max.	Isat (A) max.	Irms (A) max.	Dimension D (mm)
FIDA1516-100MS	10.0	11.0	11.0	7.0	0.8
FIDA1516-150MS	15.0	16.5	8.4	5.4	0.7
FIDA1516-220MS	22.0	18.0	6.2	5.1	0.7
FIDA1516-330MS	33.0	22.0	5.5	4.5	0.6
FIDA1516-100MP	10.0	11.0	11.0	7.0	0.8
FIDA1616-220MS	22.0	26.0	9.8	5.6	-

* Test Condition: @1KHz/ 1.0V, 25°C Ambient
* Isat.: This indicates the value of DC current when the inductance becomes 25% lower than its nominal value.
* Irms.: The DC current at which the temperature rise is △T≤40°C（Ta=20°C).
* Tolerance: K=±10%, M=±20%, N=±30%

Characteristics of DC Superposition:





FIDA-DIP TYPE (Rev. 5.0)

Flat Wire

FIDA, a full series of inductor module for LPF used in the digital amplifier featuring with higher efficiency and lower heat generation.

Features

* The optimal design realizes high quality sound and low distortion
* Low radiation noise by magnetically shielded construction
* High current, low resistance

Applications

* Car audios, home theater sets and large LCDs

Operating & Storage Condition

* Operating Temp : -40 to +125°C
* Storage Temp : -40 to +85°C
* Storage Life Time : 12 months @25°C , RH 65%

Product Identification

FIDA	1315	-	220	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 22uH
4. Tolerance: K=±10%, M=±20%, N=±30%

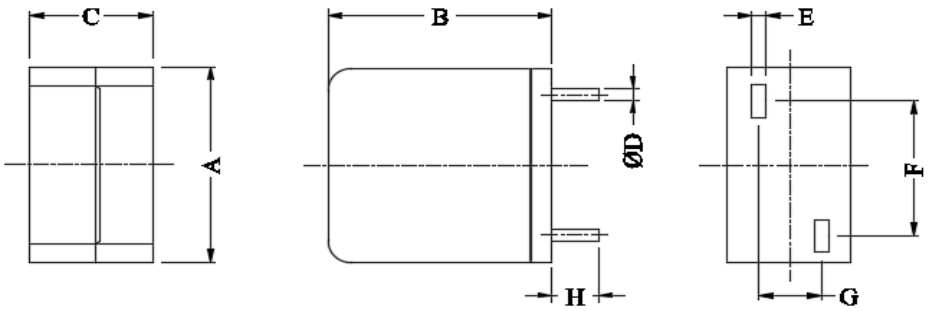
Test Equipment

* HP4291A-Z, HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer- SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-5°C
* Relative Humidity : 65+/-20%

Dimension: [mm]



Size Code	A(±0.5)	B(max.)	C(±0.5)	D(±0.1)	E(±0.1)	F(±0.5)	G(±0.5)	H(±1.0)
1010	10.5	10.5	6.4	1.2	0.2	6.4	3.6	4.0
1315	13.0	15.0	8.4	1.8	*	8.4	3.3	5.0
1416	14.0	16.0	9.6	1.8	*	9.2	5.2	5.0

* Vary with different inductance. Please refer to **Electrical Characteristics**.

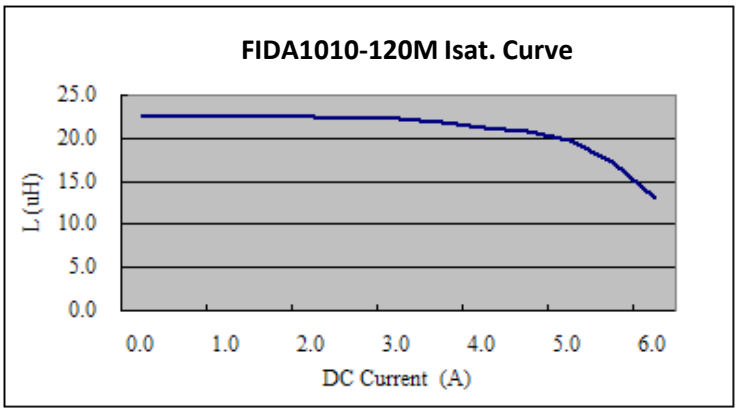
FIDA Series (Rev. 5.0)

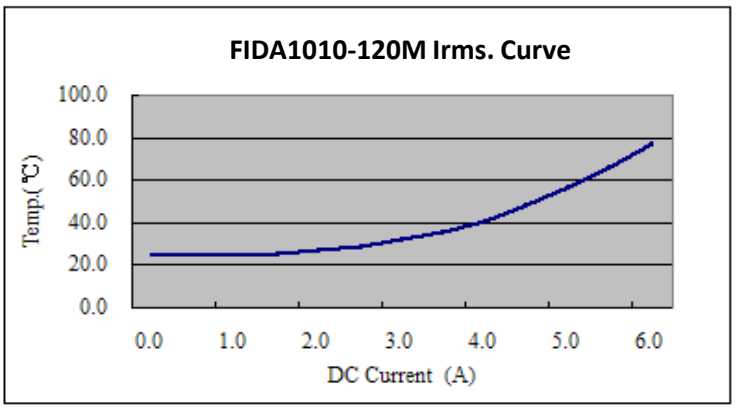
Electrical Characteristics

P/N	Inductance (uH)	DCR (mΩ) max.	Isat (A) max.	Irms (A) max.	Dimension (mm)	
					D	E
FIDA1010-100M	10.0	18.0	7.5	5.5	1.2	0.2
FIDA1010-120M	12.0	20.0	6.0	5.0	1.2	0.2
FIDA1010-150M	15.0	23.0	5.3	4.8	1.2	0.2
FIDA1315-100M	10.0	5.6	7.0	8.5	1.8	0.50
FIDA1315-120M	12.0	6.5	6.6	8.0	1.8	0.50
FIDA1315-150M	15.0	7.2	5.5	7.5	1.8	0.50
FIDA1315-220M	22.0	9.0	5.2	7.0	1.8	0.40
FIDA1315-270M	27.0	15.0	4.0	6.0	1.8	0.33
FIDA1315-330M	33.0	16.0	3.8	5.5	1.8	0.33
FIDA1416-100M	10.0	6.5	9.0	8.0	1.8	0.50
FIDA1416-120M	12.0	6.5	8.5	8.0	1.8	0.50
FIDA1416-150M	15.0	7.0	7.5	7.5	1.8	0.50
FIDA1416-220M	22.0	12.0	6.5	7.0	1.8	0.43
FIDA1416-330M	33.0	15.0	6.0	6.0	1.8	0.35
FIDA1416-470M	47.0	20.0	5.0	5.0	1.8	0.30

* Test Condition: @1KHz/ 1.0V, 25°C Ambient
* Isat.: This indicates the value of DC current when the inductance becomes 25% lower than its nominal value.
* Irms.: The DC current at which the temperature rise is △T≤40°C（Ta=20°C).
* Tolerance: K=±10%, M=±20%, N=±30%

Characteristics of DC Superposition:





FIDA-SMD TYPE (Rev. 5.0)

FIDA, a full series of inductor module for LPF used in the digital amplifier featuring with higher efficiency and lower heat generation.

Features

* Space reduction is realized by cohered structure
* The optimal design realizes high quality sound and low distortion
* Small size and SMD type, magnetic shielded
* High current, low resistance

Applications

* Car audios, home theater sets and large LCDs

Operating & Storage Condition

* Operating Temp : -40 to +125°C
* Storage Temp : -40 to +85°C
* Storage Life Time : 12 months @25°C , RH 65%

Test Equipment

* HP4291A-Z, HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer- SRF

Standard Atmospheric Conditions

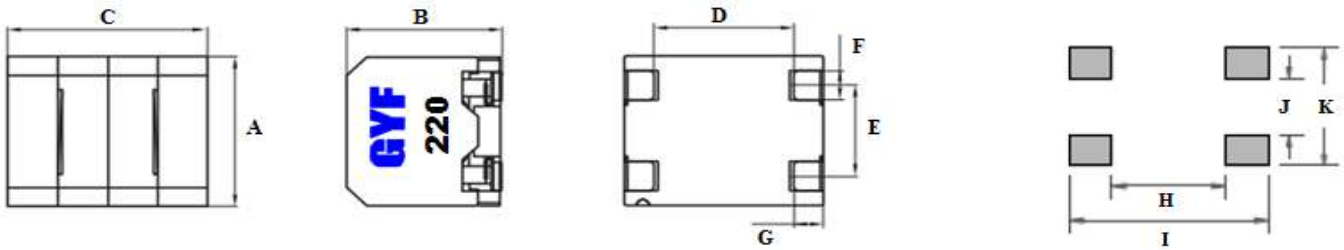
* Ambient Temp : 20+/-5°C
* Relative Humidity : 65+/-20%

Product Identification

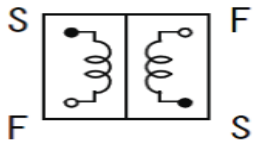
FIDA	1010	-	220	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 22uH
4. Tolerance: M= ±20%

Dimension & Recommended PAD Layout: [mm]



Schematic:



Construction:

Size Code	A(±0.3)	B(max.)	C(±0.3)	D(±0.3)	E(±0.3)	F(ref.)	G(±0.3)	H(ref.)	I(ref.)	J(ref.)	K(ref.)
0910	9.0	10.0	10.0	6.2	5.5	1.2	1.9	5.5	11.0	3.5	7.6
1010	10.5	10.5	12.8	9	6.4	1.2	1.9	8	14	4.2	8.6

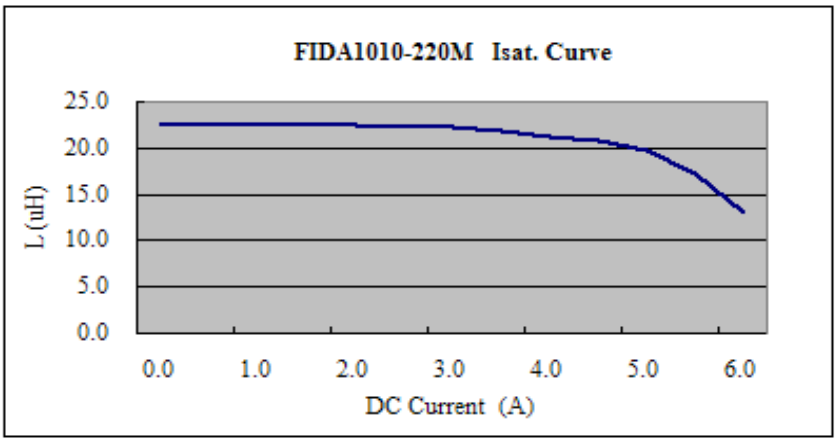
FIDA-SMD TYPE (Rev. 5.0)

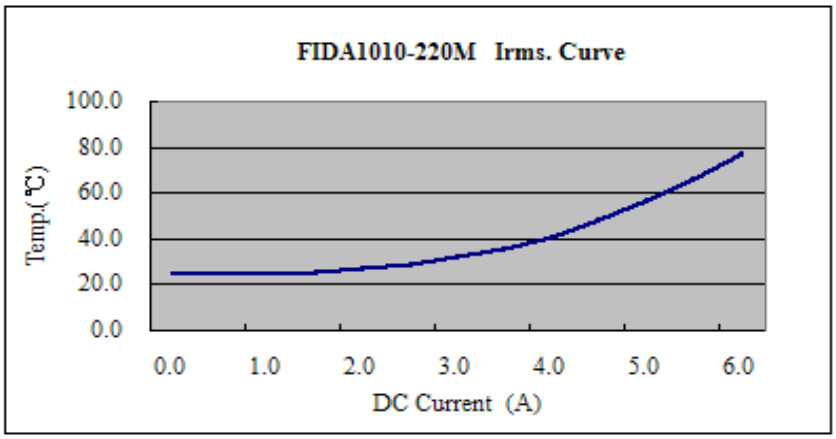
Electrical Characteristics

P/N	Inductance (uH)	DCR (mΩ) max.	Isat (A) max.	Irms (A) max.
FIDA0910-100M	10.0	20.0	6.0	4.5
FIDA0910-120M	12.0	22.0	5.5	4.0
FIDA0910-150M	15.0	30.0	5.0	3.0
FIDA0910-220M	22.0	32.0	4.0	2.5
FIDA1010-100M	10.0	16.0	7.6	7.2
FIDA1010-120M	12.0	18.0	6.2	5.5
FIDA1010-150M	15.0	22.0	5.5	5.0
FIDA1010-180M	18.0	24.0	5.0	4.8
FIDA1010-220M	22.0	28.0	4.3	4.5
FIDA1010-270M	27.0	27.4	3.8	4.1

* Test Condition: @1KHz/ 1.0V, 25°C Ambient
* Isat.: This indicates the value of DC current when the inductance becomes 25% lower than its nominal value.
* Irms.: The DC current at which the temperature rise is △T≤40°C（Ta=20°C).
* Tolerance: K=±10%, M=±20%, N=±30%

Characteristics of DC Superposition:





FMAS Series (Rev. 5.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting & ultra low buzz noise. Soldering can be easily confirmed when mounting onto board.

Features

* High current and Low DCR
* Low profile for machine placement
* Minimize electromagnetic interference
* Prevent EMI Effect via precise impedance
* Custom design available

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

FMAS	0807	-	2R2	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 2.2uH
4. Tolerance: M=20%, N=30%

Operating & Storage Condition

* Operating Temp.: -25 to +125°C
* Storage Temp.: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH 65%

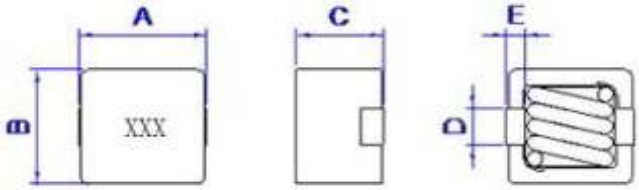
Test Equipment

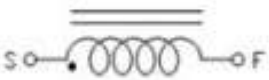
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-5°C
* Relative Humidity : 65+/-20%

Dimension: [mm]





Equivalent Circuit

Size Code	A(±0.4)	B(±0.4)	C(±0.5)	D(±0.2)	E(±0.2)
0807	8.4	7.9	7.0	2.3	1.5
1009	10.9	10.0	9.3±0.4	3.0	1.6
1210	12.1±0.3	11.4±0.3	9.5	3.3	2.0

FMAS Series (Rev. 5.0)

Electrical Characteristics

P/N	L (uH)	Tolerance	DCR (mΩ) typ.	DCR (mΩ) max.	Isat (A) max.	Irms (A) max.
FMAS0807-R30M	0.30	20%	1.40	1.54	36.0	20.5
FMAS0807-R47M	0.47	20%	1.70	1.87	32.0	19.0
FMAS0807-R56M	0.56	20%	1.70	1.87	28.0	19.0
FMAS0807-R68M	0.68	20%	1.70	1.87	23.5	19.0
FMAS0807-R82M	0.82	20%	2.65	3.25	24.0	18.0
FMAS0807-1R0M	1.00	20%	2.95	3.25	24.0	17.0
FMAS0807-1R5M	1.50	20%	4.35	4.79	18.5	16.5
FMAS0807-2R2M	2.20	20%	4.35	4.79	15.0	16.5
FMAS0807-3R3M	3.30	20%	6.35	7.00	11.0	14.0
FMAS1009-R22M	0.22	20%	0.60	0.66	60.0	21.5
FMAS1009-R33M	0.33	20%	0.60	0.66	55.0	21.5
FMAS1009-R47M	0.47	20%	0.80	0.88	47.0	20.5
FMAS1009-R68M	0.68	20%	0.80	0.88	38.0	20.5
FMAS1009-R82M	0.82	20%	1.35	1.49	36.0	20.0
FMAS1009-1R0M	1.00	20%	1.35	1.49	32.0	20.0
FMAS1009-1R5M	1.50	20%	2.50	2.75	27.0	18.5
FMAS1009-2R2M	2.20	20%	3.70	4.07	22.0	16.5
FMAS1009-3R3M	3.30	20%	5.40	5.94	18.0	14.0
FMAS1009-4R7M	4.70	20%	8.20	9.02	17.0	13.0
FMAS1009-6R8M	6.80	20%	13.20	14.52	14.5	11.5
FMAS1009-8R2M	8.20	20%	13.20	14.52	12.0	11.5
FMAS1009-100M	10.00	20%	20.70	22.77	10.0	9.0
FMAS1210-R22M	0.22	20%	0.53	0.58	60.0	27.0
FMAS1210-R33M	0.33	20%	0.53	0.58	55.0	27.0
FMAS1210-R47M	0.47	20%	0.72	0.79	48.0	26.0
FMAS1210-R68M	0.68	20%	0.72	0.79	38.0	26.0
FMAS1210-R82M	0.82	20%	1.17	1.29	36.0	24.0
FMAS1210-1R0M	1.00	20%	1.17	1.29	32.0	24.0
FMAS1210-1R5M	1.50	20%	2.10	2.31	27.0	19.5
FMAS1210-2R2M	2.20	20%	3.05	3.36	23.0	18.0
FMAS1210-3R3M	3.30	20%	4.40	4.84	17.0	17.0
FMAS1210-4R7M	4.70	20%	6.35	6.99	17.0	15.5
FMAS1210-6R8M	6.80	20%	8.98	9.88	13.0	13.0
FMAS1210-8R2M	8.20	20%	9.90	10.89	12.0	13.0
FMAS1210-100M	10.00	20%	14.40	15.84	10.0	9.0

* Test Condition: @100KHz/ 0.1V
* Irms DC current (A) that will cause an approximate ΔT of 45°C
* Isat DC current (A) that will cause L to drop approximately 30%

FMAC Series (Rev. 5.0)

FMAC series is designed for low RDC and ultra large current application. Its assembly model magnetic shielded type is suitable for high-density mounting and ultra low buzz noise. Soldering conditions can be easily confirmed when mounting onto the board.

Features

* Excellent for power line DC-DC
* Shielded construction
* Low DCR/ uH, in this package series
* Handle high transient current spikes without saturation
* Ultra low buzz noise, due to composite construction

Applications

* Power line DC-DC conversion
* Handheld electronic equipment .
* PC

Product Identification

FMAC	100909	-	R33	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 0.33uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp.: -40 to +125°C
* Storage Temp.: -40 to +125°C
* Storage Life Time: 12 Months @25°C,RH 65%

Test Equipment

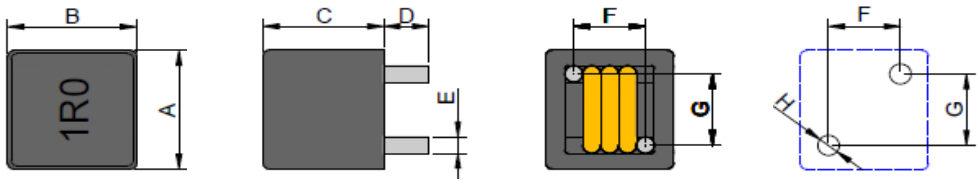
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-5°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Top View	Side View	Bottom View	Pad Layout



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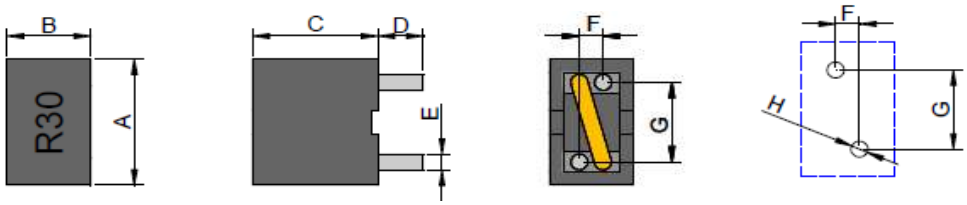


(FMAC100609)

Size Code	A(±0.5)	B(±0.5)	C(±0.5)	D(±0.5)	E	F	G	H
080806	8.0	8.0	6.5	3.5	Vary with different P/N. Refer to page.			
100609	10.3	6.3	9.5	3.5	Vary with different P/N. Refer to page.			
101009	10.2	10.2	9.3	3.5	Vary with different P/N. Refer to page.			
121209	12.2	12.2	9.5	3.5	Vary with different P/N. Refer to page.			
131210	13.0	12.0	10.8	3.5	Vary with different P/N. Refer to page.			

FMAC Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	DCR (mΩ) typ.	DCR (mΩ) max.	Isat (A) typ.	Irms (A) typ.	DIMENSION (mm)			
						E±0.1	F±0.3	G±0.3	H ref.
FMAC080806-R20M	0.20	1.50	1.65	35.0	25.0	0.8	4.7	4.7	1.0
FMAC080806-R30M	0.30	2.10	2.31	30.0	22.0	0.7	4.8	4.8	0.9
FMAC080806-R36M	0.36	2.75	3.02	28.0	22.0	0.7	4.8	4.8	0.9
FMAC080806-R39M	0.39	2.75	3.02	26.0	22.0	0.7	4.8	4.8	0.9
FMAC080806-R47M	0.47	2.75	3.02	24.0	20.0	0.7	4.8	4.8	0.9
FMAC080806-R60M	0.60	2.46	2.71	23.0	20.0	0.8	4.7	4.7	1.0
FMAC080806-R68M	0.68	3.10	3.41	22.0	20.0	0.7	4.8	4.8	0.9
FMAC080806-R80M	0.80	3.30	3.63	20.0	18.0	0.7	4.8	4.8	0.9
FMAC080806-1R0M	1.00	3.30	3.63	19.0	18.0	0.8	4.7	4.7	1.0
FMAC080806-1R2M	1.20	4.20	4.62	17.0	17.0	0.7	4.8	4.8	0.9
FMAC080806-1R5M	1.50	4.60	5.06	16.0	16.0	0.7	4.8	4.8	0.9
FMAC080806-1R8M	1.80	4.80	5.28	15.0	16.0	0.7	4.8	4.8	0.9
FMAC100609-R30M	0.30	0.60	0.65	40.0	35.0	1.6	1.8	6.5	1.8
FMAC100609-R33M	0.33	0.60	0.65	38.0	35.0	1.3	1.8	6.5	1.5
FMAC100609-R36M	0.36	0.60	0.65	36.0	35.0	1.3	1.8	6.5	1.5
FMAC100609-R47M	0.47	0.60	0.65	34.0	35.0	1.3	1.8	6.5	1.5
FMAC100909-R25M	0.25	0.67	0.74	60.0	40.0	1.4	5.8	6.2	1.6
FMAC100909-R30M	0.30	0.67	0.74	60.0	40.0	1.4	5.8	6.2	1.6
FMAC100909-R33M	0.33	0.67	0.74	60.0	40.0	1.4	5.8	6.2	1.6
FMAC100909-R36M	0.36	0.68	0.75	50.0	40.0	1.4	5.8	6.2	1.6
FMAC100909-R39M	0.39	0.89	0.98	50.0	40.0	1.4	5.8	6.2	1.6
FMAC100909-R47M	0.47	0.89	0.98	50.0	35.0	1.4	5.8	6.2	1.6
FMAC100909-R60M	0.60	0.89	0.98	50.0	35.0	1.4	5.8	6.2	1.6
FMAC100909-R80M	0.80	1.56	1.72	40.0	33.0	1.2	6.0	6.4	1.4
FMAC100909-1R0M	1.00	1.56	1.72	40.0	27.0	1.2	6.0	6.4	1.4
FMAC100909-1R2M	1.20	1.60	1.76	40.0	25.0	1.2	6.0	6.4	1.4
FMAC100909-1R5M	1.50	2.60	2.86	30.0	21.0	1.0	6.2	6.6	1.2
FMAC100909-1R8M	1.80	2.60	2.86	30.0	21.0	1.0	6.2	6.6	1.2
FMAC100909-2R2M	2.20	3.70	4.07	30.0	18.0	0.9	6.3	6.7	1.1
FMAC121209-R80M	0.80	1.00	1.10	45.0	25.0	1.4	7.6	7.6	1.6
FMAC121209-1R0M	1.00	1.20	1.32	45.0	25.0	1.4	7.6	7.6	1.6
FMAC121209-1R2M	1.20	1.70	1.87	33.0	23.0	1.2	7.8	7.8	1.4
FMAC121209-1R5M	1.50	2.00	2.20	32.0	21.0	1.2	7.8	7.8	1.4
FMAC121209-1R8M	1.80	2.00	2.20	30.0	18.0	1.2	7.8	7.8	1.4
FMAC121209-2R0M	2.00	3.20	3.52	27.0	15.0	1.0	8.0	8.0	1.2
FMAC121209-2R2M	2.20	3.20	3.52	40.0	15.0	1.0	8.0	8.0	1.2
FMAC121209-2R5M	2.50	3.20	3.52	30.0	15.0	1.0	8.0	8.0	1.2
FMAC131210-1R0M	1.00	1.18	1.30	50.0	30.0	1.5	7.3	8.3	1.7
FMAC131210-1R2M	1.20	1.18	1.30	40.0	30.0	1.5	7.3	8.3	1.7
FMAC131210-1R5M	1.50	1.30	1.43	30.0	25.0	1.4	7.4	8.4	1.6
FMAC131210-1R8M	1.80	2.20	2.42	30.0	20.0	1.2	7.6	8.6	1.4
FMAC131210-2R0M	2.00	2.20	2.42	25.0	17.0	1.2	7.6	8.6	1.4

* Test Condition: @100KHz/ 1.0V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

FMDA Series (Rev. 5.0)

Designed for low profile type with low RDC & ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering could be easily confirmed when mounting onto board.

Features

* RoHS compliant
* Low profile type
* Shielded construction
* Ultra low buzz noise due to molding construction

Applications

* High density DC/DC converters
* POL converters
* High current VRM/VRD for notebook/ Server/ desktop CPUs
* High speed charger/ Ultra thin NB/ TV/ Tablet

Product Identification

FMDA	6030	_	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%, N=±30%

Operating & Storage Condition

* Operating Temp. : -55 to +125°C
* Storage Temp. : -25 to +35°C
* Storage Life Time : 12 Months @25°C , RH 65%

Test Equipment

* Wayne kerr 3260B/G LCR Meter
* Wayne kerr 3265B Bias Current Source

Standard Atmospheric Conditions

* Ambient Temp : 20+/-5°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Top View	Side View	Bottom View	Pad Layout

Size Code	A(±0.2)	B(±0.5)	C(max.)	D(±0.5)	E(±0.3)	F(ref.)	G(ref.)	H(ref.)
4020	4.1	4.4	2.0	1.1±0.3	2.0	5.0	2.2	2.3
5015	5.2	5.6	1.5	1.1±0.3	2.2	7.0	3.0	2.5
5018	5.2	5.6	1.8	1.1±0.3	2.2	7.0	3.0	2.5
5020	5.2	5.6	2.0	1.1±0.3	2.2	7.0	3.0	2.5
5030	5.2	5.6	3.0	1.1±0.3	2.2	7.0	3.0	2.5
5040	5.2	5.6	4.0	1.1±0.3	2.2	7.0	3.0	2.5
6018	6.6	7.1	1.8	1.6	3.0	7.6	3.7	3.4
6020	6.6	7.1	2.0	1.6	3.0	7.6	3.7	3.4
6024	6.6	7.1	2.4	1.6	3.0	7.6	3.7	3.4
6030	6.6	7.1	3.0	1.6	3.0	7.6	3.7	3.4
6040	6.6	7.1	4.0	1.6	3.0	7.6	3.7	3.4
6050	6.6	7.1	5.0	1.6	3.0	7.8	3.7	3.4
8050	8.0	8.5	5.0	1.8	3.0	9.2	4.5	3.5
1030	10.2	11.0	3.0	2.0	3.0	13.6	5.4	4.1
1040	10.2	11.0	4.0	2.0	3.0	13.6	5.4	4.1
1045	10.2	11.0	4.5	2.0	3.0	13.6	5.4	4.1
1050	10.2	11.0	5.0	2.0	3.0	13.6	5.4	4.1
1235	12.8	14.0	3.5	2.5	3.8	14.5	6.0	4.5
1240	12.8	14.0	4.0	2.5	3.8	14.5	6.0	4.5
1250	12.8	14.0	5.0	2.5	3.8	14.5	6.0	4.5
1260	12.8	14.0	6.0	2.5	3.8	14.5	6.0	4.5
1265	12.8	14.0	6.5	2.5	3.8	14.5	6.0	4.5
1770	17.1	17.3	7.0	3.0	11.8	19.5	11.2	13.0

FMDA Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (± %)	DCR (mΩ) max.	Irms (A) typ.	Isat (A) typ.
FMDA4020-R22M	0.22	20	6.4	8.0	14.0
FMDA4020-R33M	0.33	20	12.0	7.0	12.0
FMDA4020-R47M	0.47	20	16.0	6.0	10.0
FMDA4020-R68M	0.68	20	28.0	5.0	9.0
FMDA4020-1R0M	1.00	20	40.0	4.0	8.0
FMDA4020-1R5M	1.50	20	50.0	3.5	7.0
FMDA4020-2R2M	2.20	20	75.0	3.0	6.0
FMDA4020-3R3M	3.30	20	95.0	2.5	4.0
FMDA4020-4R7M	4.70	20	130.0	2.0	3.5
FMDA4020-6R8M	6.80	20	170.0	1.8	3.0
FMDA4020-100M	10.00	20	290.0	1.5	2.5
FMDA4020-150M	15.00	20	330.0	1.4	1.5
FMDA4020-220M	22.00	20	500.0	1.2	1.3
FMDA5015-1R0M	1.0	20	45.0	5.0	9.0
FMDA5015-1R5M	1.5	20	65.0	4.0	8.0
FMDA5015-2R2M	2.2	20	85.0	2.5	5.0
FMDA5015-3R3M	3.3	20	135.0	1.8	3.5
FMDA5018-1R0M	1.0	20	30.0	5.0	9.0
FMDA5018-3R3M	3.3	20	105.0	2.5	5.0
FMDA5018-4R7M	4.7	20	160.0	2.0	4.5
FMDA5018-6R8M	6.8	20	200.0	1.8	3.0
FMDA5020-R47M	0.47	20	15.0	7.0	15.0
FMDA5020-R68M	0.68	20	21.0	6.0	11.0
FMDA5020-1R0M	1.00	20	25.0	5.0	10.0
FMDA5020-1R5M	1.50	20	40.0	4.5	8.0
FMDA5020-2R2M	2.20	20	60.0	4.0	7.0
FMDA5020-3R3M	3.30	20	90.0	3.5	5.5
FMDA5020-4R7M	4.70	20	100.0	2.8	5.0
FMDA5020-6R8M	6.80	20	160.0	2.2	4.0
FMDA5020-100M	10.00	20	225.0	1.8	3.0
FMDA5030-R47M	0.47	20	9.5	8.0	16.0
FMDA5030-R68M	0.68	20	13.0	7.0	14.0
FMDA5030-1R0M	1.00	20	15.0	6.0	12.0
FMDA5030-1R5M	1.50	20	22.5	5.0	10.0
FMDA5030-2R2M	2.20	20	35.0	4.5	9.0
FMDA5030-3R3M	3.30	20	38.0	4.0	8.0
FMDA5030-4R7M	4.70	20	70.0	3.5	7.0
FMDA5030-6R8M	6.80	20	100.0	3.0	5.0
FMDA5030-8R2M	8.20	20	130.0	2.5	4.0
FMDA5030-100M	10.00	20	145.0	2.0	3.5
FMDA5030-150M	15.00	20	215.0	1.8	3.0
FMDA5030-220M	22.00	20	275.0	1.5	2.5
FMDA5030-330M	33.00	20	435.0	0.8	1.5
FMDA5030-470M	47.00	20	445.0	0.7	1.2

* Test Condition @100KHz / 1.0Vrms, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 35%

FMDA Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (± %)	DCR (mΩ) max.	Irms (A) typ.	Isat (A) typ.
FMDA5040-150M	15.00	20	140.0	1.5	3.0
FMDA5040-220M	22.00	20	260.0	1.5	2.5
FMDA6018-R47M	0.47	20	12.0	10.0	22.0
FMDA6018-1R0M	1.00	20	30.0	7.0	12.0
FMDA6018-2R2M	2.20	20	50.0	5.0	9.0
FMDA6018-3R3M	3.30	20	65.0	4.0	7.0
FMDA6018-4R7M	4.70	20	95.0	3.0	5.5
FMDA6020-R47M	0.47	20	10.0	10.0	22.0
FMDA6020-R68M	0.68	20	15.0	9.0	18.0
FMDA6020-1R0M	1.00	20	24.0	7.0	14.0
FMDA6020-1R5M	1.50	20	36.0	6.0	12.0
FMDA6020-2R2M	2.20	20	45.0	5.0	9.0
FMDA6020-3R3M	3.30	20	95.0	4.0	7.0
FMDA6020-4R7M	4.70	20	105.0	3.5	6.0
FMDA6020-6R8M	6.80	20	140.0	2.5	5.0
FMDA6020-100M	10.00	20	200.0	2.0	4.0
FMDA6024-R47M	0.47	20	7.5	12.0	25.0
FMDA6024-R68M	0.68	20	10.0	9.0	18.0
FMDA6024-1R0M	1.00	20	13.0	8.0	16.0
FMDA6024-1R5M	1.50	20	24.0	7.0	14.0
FMDA6024-2R2M	2.20	20	40.0	6.0	11.0
FMDA6024-3R3M	3.30	20	50.0	5.0	9.0
FMDA6024-4R7M	4.70	20	60.0	4.0	7.5
FMDA6024-6R8M	6.80	20	95.0	3.0	6.0
FMDA6024-100M	10.00	20	120.0	2.5	4.5
FMDA6030-R22M	0.22	20	4.0	18.0	35.0
FMDA6030-R33M	0.33	20	5.0	16.0	28.0
FMDA6030-R47M	0.47	20	5.5	15.0	24.0
FMDA6030-R68M	0.68	20	7.0	12.0	20.0
FMDA6030-1R0M	1.00	20	12.5	10.0	18.0
FMDA6030-1R5M	1.50	20	18.0	8.0	14.0
FMDA6030-2R2M	2.20	20	20.0	7.0	12.0
FMDA6030-3R3M	3.30	20	36.0	6.0	10.0
FMDA6030-4R7M	4.70	20	48.0	5.0	9.0
FMDA6030-6R8M	6.80	20	84.0	4.5	8.0
FMDA6030-8R2M	8.20	20	100.0	3.5	6.0
FMDA6030-100M	10.00	20	110.0	3.0	5.5
FMDA6030-150M	15.00	20	130.0	2.5	4.5
FMDA6030-220M	22.00	20	160.0	2.0	3.5
FMDA6030-330M	33.00	20	250.0	1.5	2.5
FMDA6030-470M	47.00	20	412.0	1.0	2.0

* Test Condition @100KHz / 1.0Vrms, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 35%

FMDA Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (± %)	DCR (mΩ) max.	Irms (A) typ.	Isat (A) typ.
FMDA6040-R36M	0.36	20	5.0	15.0	28.0
FMDA6040-1R0M	1.00	20	7.8	10.0	14.0
FMDA6040-1R5M	1.50	20	10.0	9.0	14.0
FMDA6040-2R2M	2.20	20	14.0	8.0	10.0
FMDA6040-3R3M	3.30	20	22.0	7.0	12.0
FMDA6040-4R7M	4.70	20	30.0	6.0	9.0
FMDA6040-6R8M	6.80	20	58.0	5.0	8.0
FMDA6040-100M	10.00	20	67.0	4.0	5.5
FMDA6040-330M	33.00	20	250.0	1.5	2.5
FMDA6040-470M	47.00	20	310.0	1.5	2.2
FMDA6050-1R0M	1.00	20	7.2	12.0	16.0
FMDA6050-1R5M	1.50	20	10.0	10.0	15.0
FMDA6050-2R2M	2.20	20	14.0	8.0	12.0
FMDA6050-3R3M	3.30	20	18.0	6.0	10.0
FMDA6050-4R7M	4.70	20	23.0	5.0	9.0
FMDA6050-6R8M	6.80	20	33.0	4.5	8.0
FMDA6050-8R2M	8.20	20	50.0	4.0	7.5
FMDA6050-100M	10.00	20	60.0	4.0	7.0
FMDA6050-150M	15.00	20	90.0	3.5	6.0
FMDA6050-220M	22.00	20	130.0	2.5	4.0
FMDA6050-330M	33.00	20	195.0	2.0	3.5
FMDA6050-470M	47.00	20	245.0	1.8	3.0
FMDA6050-680M	68.00	20	390.0	1.5	2.5
FMDA6050-101M	100.00	20	698.0	1.2	2.0
FMDA8050-R22M	0.22	20	1.0	33.0	60.0
FMDA8050-R47M	0.47	20	4.5	20.0	35.0
FMDA8050-R56M	0.56	20	4.5	20.0	30.0
FMDA8050-R68M	0.68	20	6.0	16.0	25.0
FMDA8050-1R0M	1.00	20	8.0	14.0	20.0
FMDA8050-1R5M	1.50	20	8.0	12.0	18.0
FMDA8050-2R2M	2.20	20	12.0	8.0	16.0
FMDA8050-3R3M	3.30	20	15.0	8.0	13.0
FMDA8050-4R7M	4.70	20	20.0	8.0	12.0
FMDA8050-5R6M	5.60	20	28.0	7.0	11.0
FMDA8050-6R8M	6.80	20	32.0	6.0	10.0
FMDA8050-100M	10.00	20	45.0	5.5	8.5
FMDA8050-150M	15.00	20	55.0	5.0	7.0
FMDA8050-220M	22.00	20	88.0	4.0	5.5
FMDA8050-330M	33.00	20	140.0	3.0	5.0
FMDA8050-470M	47.00	20	200.0	2.5	4.0
FMDA1030-1R0M	1.00	20	9.6	13.0	20.0
FMDA1030-2R2M	2.20	20	16.0	10.0	16.0
FMDA1030-3R3M	3.30	20	25.0	7.0	13.0
FMDA1030-4R7M	4.70	20	38.0	6.0	11.0
FMDA1030-6R8M	6.80	20	62.0	5.0	10.0
FMDA1030-8R2M	8.20	20	75.0	4.5	9.0
FMDA1030-100M	10.00	20	80.0	4.0	8.0

* Test Condition @100KHz / 1.0Vrms, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 35%

FMDA Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (± %)	DCR (mΩ) max.	Irms (A) typ.	Isat (A) typ.
FMDA1040-R22M	0.22	20	0.8	28.0	50.0
FMDA1040-R33M	0.33	20	1.5	22.0	45.0
FMDA1040-R47M	0.47	20	1.8	20.0	35.0
FMDA1040-R68M	0.68	20	2.8	18.0	32.0
FMDA1040-1R0M	1.00	20	3.5	16.0	28.0
FMDA1040-1R5M	1.50	20	6.0	15.0	23.0
FMDA1040-2R2M	2.20	20	10.0	14.0	20.0
FMDA1040-3R3M	3.30	20	13.0	12.0	17.0
FMDA1040-4R7M	4.70	20	20.0	10.0	15.0
FMDA1040-6R8M	6.80	20	25.0	9.0	12.0
FMDA1040-100M	10.00	20	45.0	6.0	9.0
FMDA1040-150M	15.00	20	75.0	5.0	8.0
FMDA1040-220M	22.00	20	90.0	4.0	7.0
FMDA1040-330M	33.00	20	120.0	3.5	6.0
FMDA1040-470M	47.00	20	170.0	3.0	5.0
FMDA1040-680M	68.00	20	250.0	2.5	4.0
FMDA1040-101M	100.00	20	360.0	1.8	3.0
FMDA1045-220M	22.00	20	70.0	4.0	8.0
FMDA1045-470M	47.00	20	155.0	3.0	5.5
FMDA1045-680M	68.00	20	180.0	2.5	4.0
FMDA1045-101M	100.00	20	350.0	2.0	3.5
FMDA1050-100M	10.00	20	44.0	7.0	12.0
FMDA1050-150M	15.00	20	54.0	6.0	10.0
FMDA1050-220M	22.00	20	85.0	4.5	8.0
FMDA1050-330M	33.00	20	90.0	4.0	6.0
FMDA1050-470M	47.00	20	145.0	3.0	5.5
FMDA1050-680M	68.00	20	195.0	2.5	4.5
FMDA1050-101M	100.00	20	285.0	2.0	3.5
FMDA1235-R47M	0.47	20	1.9	28.0	50.0
FMDA1235-R68M	0.68	20	3.0	22.0	40.0
FMDA1235-1R0M	1.00	20	4.5	17.0	30.0
FMDA1235-1R5M	1.50	20	6.5	13.0	25.0
FMDA1240-2R2M	2.20	20	7.5	12.0	22.0
FMDA1240-3R3M	3.30	20	16.0	10.0	18.0
FMDA1240-4R7M	4.70	20	21.0	8.0	15.0
FMDA1240-6R8M	6.80	20	29.0	7.0	12.0
FMDA1240-100M	10.00	20	52.0	6.0	10.0
FMDA1240-220M	22.00	20	74.0	4.0	7.0
FMDA1250-R33M	0.33	20	1.5	32.0	55.0
FMDA1250-R47M	0.47	20	1.6	30.0	50.0
FMDA1250-R68M	0.68	20	2.1	28.0	45.0
FMDA1250-1R0M	1.00	20	3.2	24.0	40.0
FMDA1250-1R5M	1.50	20	4.0	18.0	30.0
FMDA1250-2R2M	2.20	20	7.3	14.0	26.0
FMDA1250-3R3M	3.30	20	9.5	12.0	22.0

* Test Condition @100KHz / 1.0Vrms, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 35%

FMDA Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (± %)	DCR (mΩ) max.	Irms (A) typ.	Isat (A) typ.
FMDA1250-4R7M	4.70	20	11.5	10.0	18.0
FMDA1250-6R8M	6.80	20	25.0	9.0	16.0
FMDA1250-100M	10.00	20	42.0	7.0	14.0
FMDA1250-150M	15.00	20	54.0	6.0	11.0
FMDA1250-220M	22.00	20	68.0	5.0	9.0
FMDA1250-330M	33.00	20	95.0	4.0	7.0
FMDA1250-470M	47.00	20	110.0	3.0	5.5
FMDA1260-2R2M	2.20	20	4.5	16.0	28.0
FMDA1260-3R3M	3.30	20	7.5	14.0	24.0
FMDA1260-4R7M	4.70	20	11.0	12.0	20.0
FMDA1260-6R8M	6.80	20	15.0	9.0	17.0
FMDA1260-100M	10.00	20	22.0	8.0	15.0
FMDA1260-150M	15.00	20	41.0	7.0	13.0
FMDA1260-220M	22.00	20	48.0	6.0	10.0
FMDA1265-330M	33.00	20	71.0	5.0	8.0
FMDA1265-470M	47.00	20	95.0	4.0	7.0
FMDA1265-680M	68.00	20	130.0	3.0	6.0
FMDA1265-101M	100.00	20	195.0	2.5	4.5
FMDA1770-R47M	0.47	20	1.0	42.0	65.0
FMDA1770-R68M	0.68	20	1.5	40.0	60.0
FMDA1770-1R0M	1.00	20	2.0	32.0	55.0
FMDA1770-1R5M	1.50	20	2.5	32.0	40.0
FMDA1770-2R2M	2.20	20	2.7	28.0	40.0
FMDA1770-3R3M	3.30	20	4.2	25.0	40.0
FMDA1770-4R7M	4.70	20	5.5	25.0	35.0
FMDA1770-5R6M	5.60	20	7.0	25.0	30.0
FMDA1770-6R8M	6.80	20	9.2	19.0	27.0
FMDA1770-8R2M	8.20	20	10.8	16.0	22.0
FMDA1770-100M	10.00	20	13.0	14.0	18.0
FMDA1770-150M	15.00	20	20.5	12.0	13.0
FMDA1770-200M	20.00	20	23.0	9.7	12.0
FMDA1770-220M	22.00	20	26.5	9.5	12.0
FMDA1770-330M	33.00	20	44.0	9.0	10.0
FMDA1770-470M	47.00	20	55.0	6.8	9.0
FMDA1770-680M	68.00	20	80.0	5.2	7.0
FMDA1770-820M	82.00	20	95.0	4.5	7.0
FMDA1770-101M	100.00	20	120.0	4.0	6.5
FMDA1770-151M	150.00	20	172.5	3.0	5.0

* Test Condition @100KHz / 1.0Vrms, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 35%

FMDB Series (Rev. 5.0)

FMDB series provides high current in compact package size with magnetically shielded construction. This power inductor is an excellent power solution for space-limited devices.

Features

* RoHS, Halogen Free and REACH Compliance
* Monolithic, magnetically shielded
* Capable for large current

Applications

* Smartphones, tablets and wearable devices
* HDD, SSD and PC peripheral devices
* DSC, camcoders
* PND
* DC/DC converters

Product Identification

FMDB	201610	_	2R2	M	L
1	2		3	4	5

1. Product Code
2. Size Code
3. Inductance: 2.2uH
4. Tolerance: M= ±20%
5. L: low RDC

Operating & Storage Condition

* Operating Temp. : -40 to +125°C
* Storage Temp. : -25 to +35°C
* Storage Life Time : 12 Months @25°C , RH 65%

Test Equipment

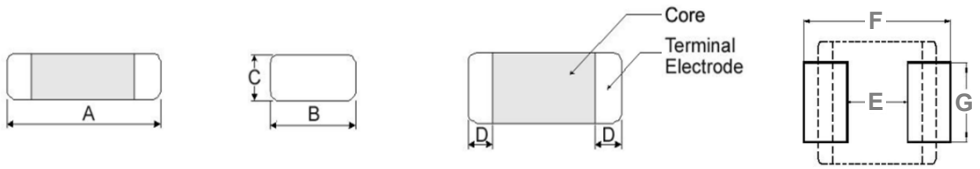
* Wayne kerr 3260B/G LCR Meter
* Wayne kerr 3265B Bias Current Source

Standard Atmospheric Conditions

* Ambient Temp : 20+/-5°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Side View	Left View	Bottom View	Pad Layout



Size Code	A(±0.2)	B(±0.2)	C(max.)	D(±0.3)	E(ref.)	F(ref.)	G(ref.)
201610	2.0	1.6	1.0	0.5	0.7	2.3	1.8
201612	2.0	1.6	1.2	0.5	0.7	2.3	1.8
252010	2.5	2.0	1.0	0.6	1.2	2.8	2.3
252012	2.5	2.0	1.2	0.6	1.2	2.8	2.3
322510	3.2±0.3	2.5	1.0	0.5	1.7	3.5	2.8
322512	3.2±0.3	2.5	1.2	0.5	1.7	3.5	2.8

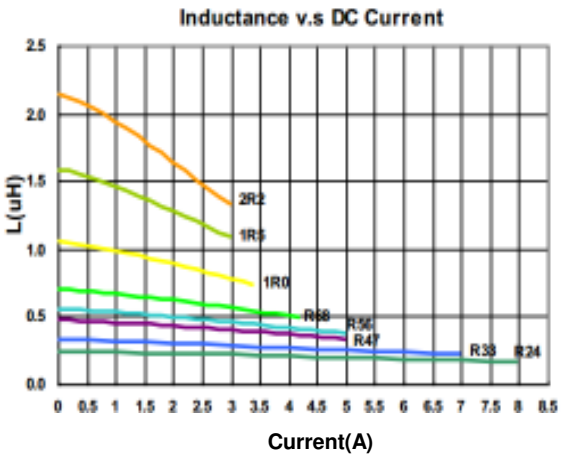
FMDB Series (Rev. 5.0)

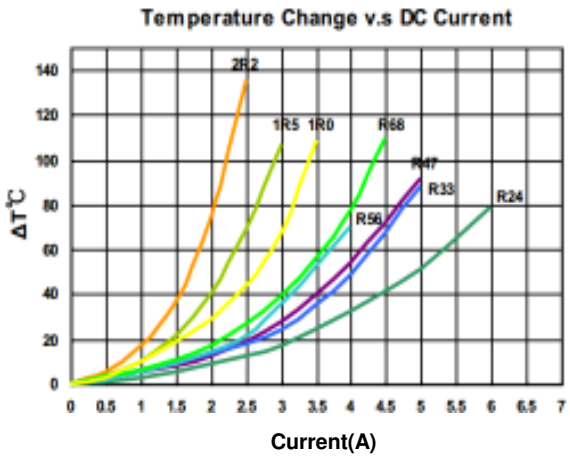
Electrical Characteristics

Part Number	Inductance (uH) @2MHz	Tolerance (± %)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
FMDB201610-R24M	0.24	20	40.0	4.0	4.2
FMDB201610-R33M	0.33	20	48.0	3.5	4.0
FMDB201610-R47M	0.47	20	54.0	3.0	3.2
FMDB201610-R56M	0.56	20	59.0	2.8	2.8
FMDB201610-R68M	0.68	20	72.0	2.4	2.7
FMDB201610-1R0M	1.00	20	96.0	2.0	2.2
FMDB201610-1R5M	1.50	20	150.0	1.6	2.1
FMDB201610-2R2M	2.20	20	204.0	1.3	2.0
FMDB201610-R24ML	0.24	20	30.0	3.8	5.0
FMDB201610-R33ML	0.33	20	35.0	3.4	4.5
FMDB201610-R47ML	0.47	20	41.0	2.9	4.0
FMDB201610-R68ML	0.68	20	53.0	2.5	3.3
FMDB201610-1R0ML	1.00	20	72.0	2.2	2.8
FMDB201610-1R5ML	1.50	20	110.0	1.8	2.2
FMDB201610-2R2ML	2.20	20	170.0	1.5	1.8

* Irms DC current (A) that will cause an approximate ΔT of 40°C.

* Isat DC current (A) that will cause L to drop approximately





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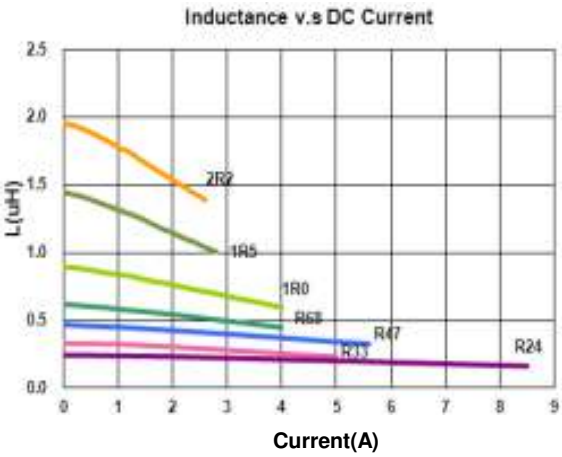
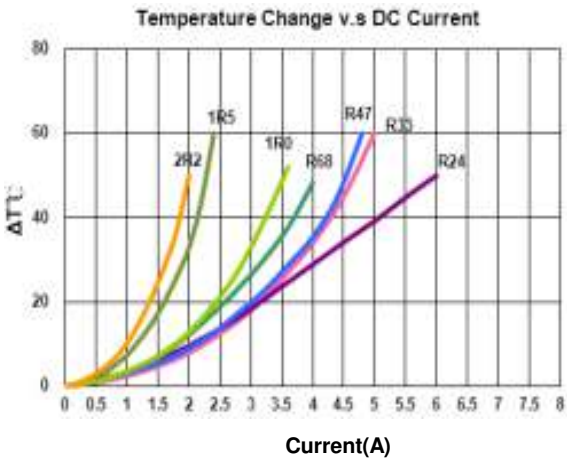




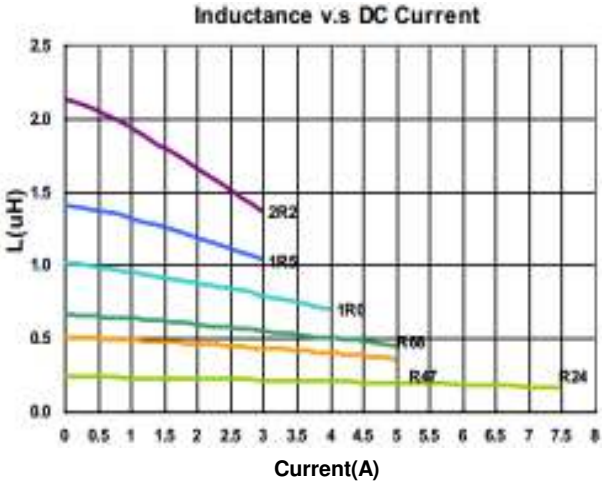
(Low RDC Type)

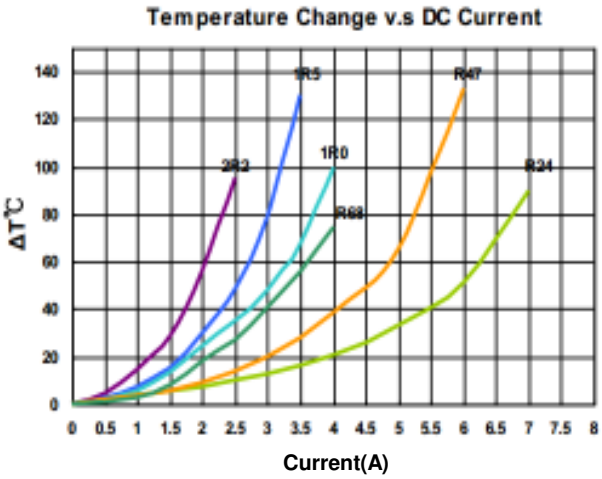
FMDB Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH) @2MHz	Tolerance (± %)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
FMDB201612-R24M	0.24	20	35.0	4.2	5.5
FMDB201612-R47M	0.47	20	52.0	3.2	3.8
FMDB201612-R68M	0.68	20	70.0	2.6	3.3
FMDB201612-1R0M	1.00	20	82.0	2.3	3.1
FMDB201612-1R5M	1.50	20	120.0	2.2	2.6
FMDB201612-2R2M	2.20	20	195.0	1.3	2.0

* Irms DC current (A) that will cause an approximate ΔT of 40°C.
* Isat DC current (A) that will cause L to drop approximately 30%.





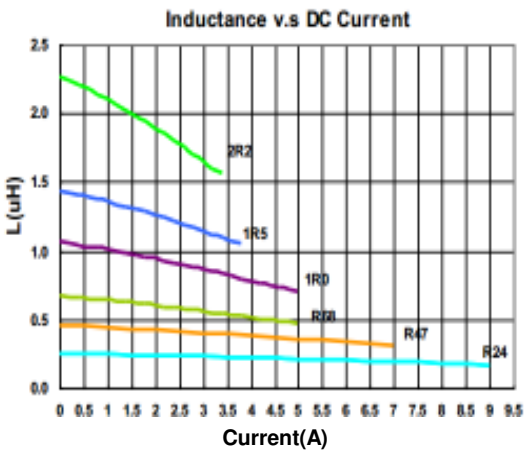
FMDB Series (Rev. 5.0)

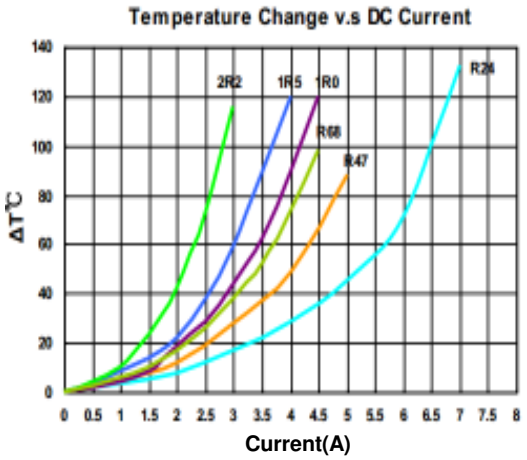
Electrical Characteristics

Part Number	Inductance (uH) @2MHz	Tolerance (± %)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
FMDB252010-R24M	0.24	20	40.0	4.5	7.5
FMDB252010-R47M	0.47	20	46.0	3.1	5.2
FMDB252010-R68M	0.68	20	65.0	2.9	3.8
FMDB252010-1R0M	1.00	20	78.0	2.5	3.4
FMDB252010-1R5M	1.50	20	105.0	2.2	3.2
FMDB252010-2R2M	2.20	20	156.0	1.4	2.6
FMDB252010-3R3M	3.30	20	228.0	1.2	1.5
FMDB252010-4R7M	4.70	20	300.0	1.0	1.3
FMDB252010-R33ML	0.33	20	31.0	3.8	5.0
FMDB252010-R47ML	0.47	20	35.0	3.4	4.2
FMDB252010-R68ML	0.68	20	48.0	3.0	3.7
FMDB252010-1R0ML	1.00	20	65.0	2.6	3.2
FMDB252010-1R5ML	1.50	20	94.0	2.1	2.9
FMDB252010-2R2ML	2.20	20	120.0	1.8	2.3

* Irms DC current (A) that will cause an approximate ΔT of 40°C.

* Isat DC current (A) that will cause L to drop approximately 30%.





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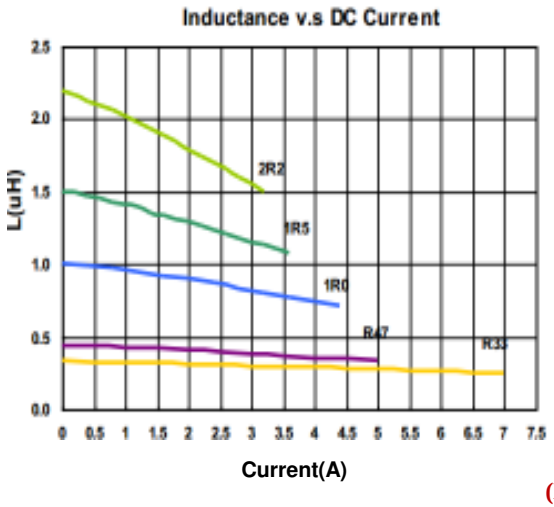
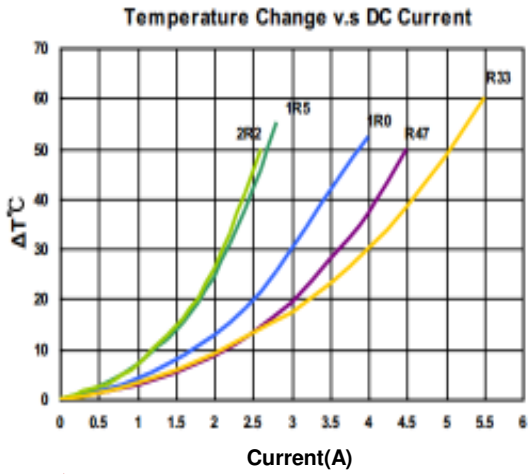




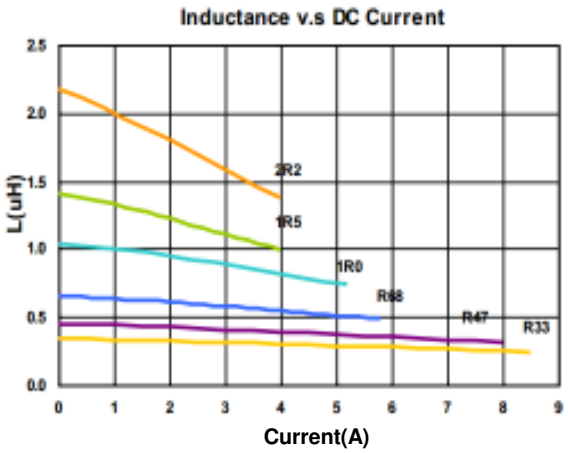
(Low RDC Type)

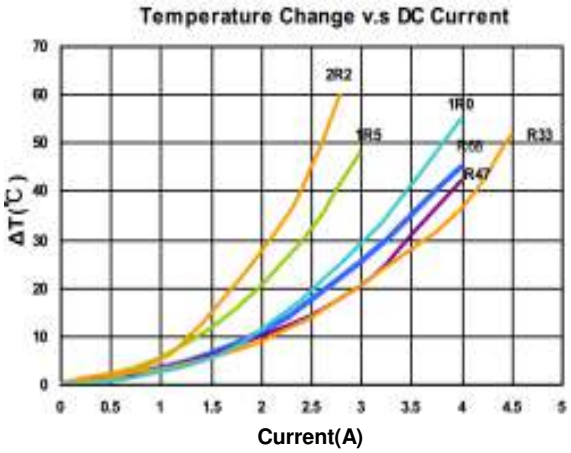
FMDB Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH) @2MHz	Tolerance (± %)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
FMDB252012-R33M	0.33	20	35.0	4.0	6.8
FMDB252012-R47M	0.47	20	39.0	3.7	6.2
FMDB252012-R68M	0.68	20	46.0	3.3	5.5
FMDB252012-1R0M	1.00	20	59.0	3.0	4.0
FMDB252012-1R5M	1.50	20	70.0	2.5	3.4
FMDB252012-2R2M	2.20	20	115.0	2.0	3.3
FMDB252012-R47ML	0.47	20	34.0	4.1	5.2
FMDB252012-1R0ML	1.00	20	56.0	3.2	3.6
FMDB252012-2R2ML	2.20	20	102.0	2.2	2.5

* Irms DC current (A) that will cause an approximate ΔT of 40°C. * Isat DC current (A) that will cause L to drop approximately 30%.





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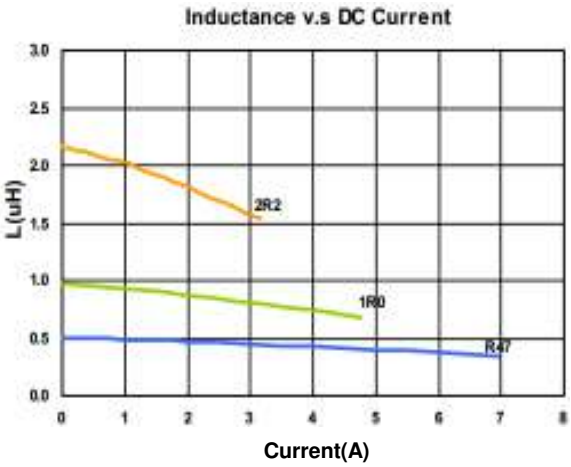
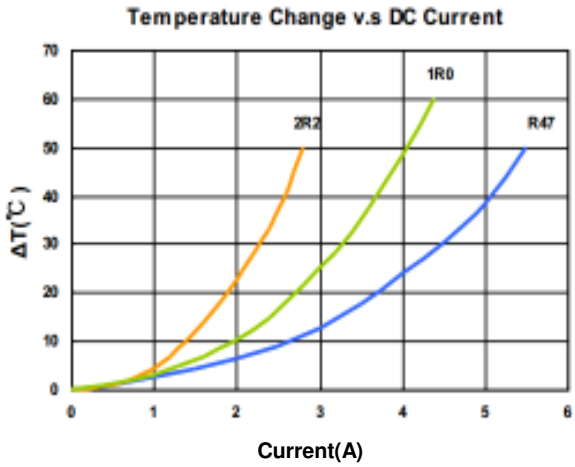




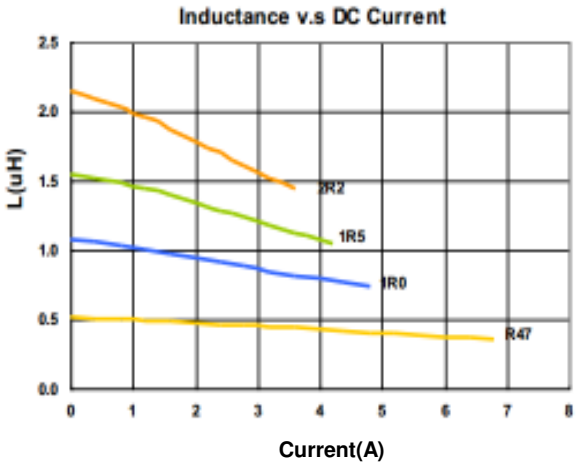
(Low RDC Type)

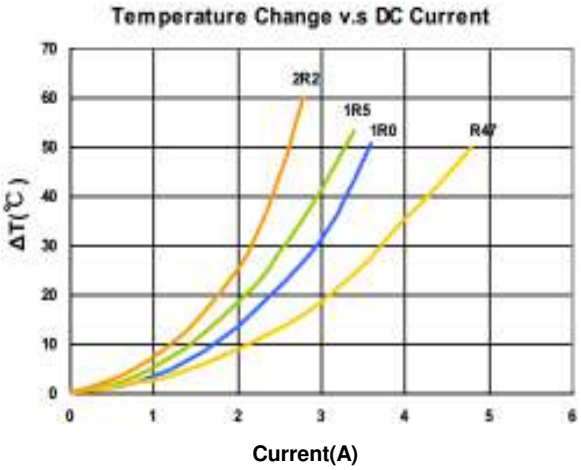
FMDB Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH) @2MHz	Tolerance (± %)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
FMDB322510-R47M	0.47	20	37.0	3.6	5.8
FMDB322510-1R0M	1.00	20	56.0	3.0	4.0
FMDB322510-1R5M	1.50	20	75.0	2.6	3.4
FMDB322510-2R2M	2.20	20	108.0	2.2	2.7

* Irms DC current (A) that will cause an approximate ΔT of 40°C.
* Isat DC current (A) that will cause L to drop approximately 30%.



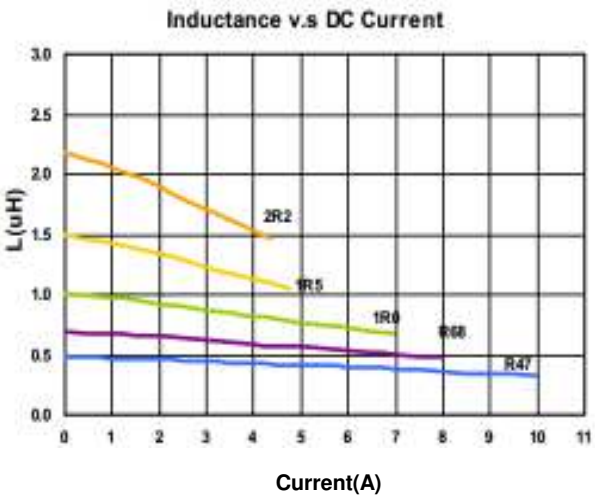


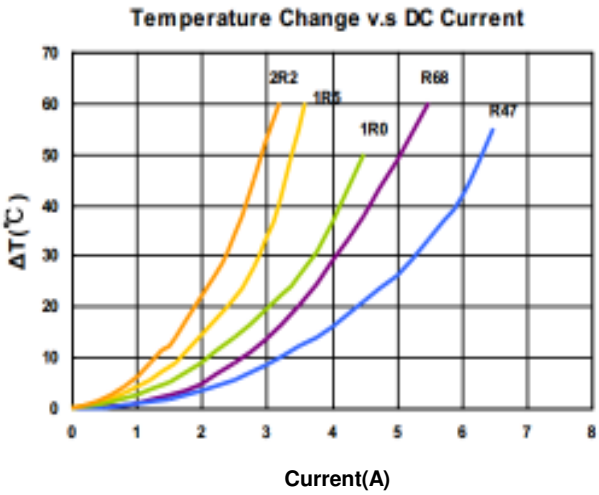
FMDB Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH) @2MHz	Tolerance (± %)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
FMDB322512-R47M	0.47	20	27.0	5.0	8.0
FMDB322512-R68M	0.68	20	34.0	4.0	6.3
FMDB322512-1R0M	1.00	20	42.0	3.8	5.8
FMDB322512-1R5M	1.50	20	68.0	2.8	4.0
FMDB322512-2R2M	2.20	20	85.0	2.4	3.6

* Irms DC current (A) that will cause an approximate ΔT of 40°C.
* Isat DC current (A) that will cause L to drop approximately 30%.





FMDC101008 Series (Rev. 5.0)

Features

* RoHS compliant
* Much lower resistance
* Much higher current rating
* High performance (Isat) realized by metal dust core

Applications

* Laptops and PCs
* Switchs and servers
* Base stations
* DC/DC converters
* New energy vehicles/ 5G

Product Identification

FMDC	101008	_	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp. : -40 to +125°C
* Storage Temp. : -25 to +35°C
* Storage Life Time : 12 Months @25°C , RH 65%

Test Equipment

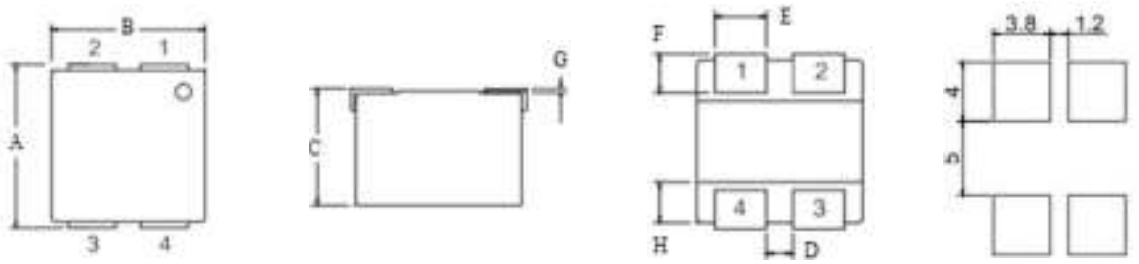
* Wayne kerr 3260B/G LCR Meter
* Wayne kerr 3265B Bias Current Source

Standard Atmospheric Conditions

* Ambient Temp : 20+/-5°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Top View	Side View	Bottom View	Pad Layout



Size Code	A(±0.3)	B(±0.3)	C(max.)	D(±0.2)	E(±0.3)	F(±0.3)	G(max.)	H(typ.)
101008	10.8	10.0	8.0	1.6	3.1	2.4	0.2	2.5

Electrical Characteristics

P/N	Inductance (uH)	DCR (mΩ) max.	Isat (A) max.	Irms (A) max.
FMDC101008-100M	10.0	37.2	10.6	5.0
FMDC101008-150M	15.0	46.8	9.1	4.6
FMDC101008-220M	22.0	72.0	6.6	3.5
FMDC101008-470M	47.0	108.0	5.4	2.6

* Test Condition: @100KHz/1.0V (Ambient temperature: 25°C)
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 30%

FMDL Series (Rev. 5.0)

FMDL provides high current in compact package size with magnetically shielded construction. This power inductor is an excellent power solution for space-limited devices.

Features

* RoHS, Halogen Free and REACH Compliance
* Monolithic, magnetically shielded
* Capable for large current

Applications

* Smartphones, tablets and wearable devices
* HDD, SSD and PC peripheral devices
* DSC, camcoders
* PND
* DC/DC converters

Product Identification

FMDL	252012	-	2R2	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 2.2uH
4. Tolerance: M= ±20%

Operating & Storage Condition

* Operating Temp. : -40 to +125°C
* Storage Temp. : -50 to +125°C
* Storage Life Time : 12 Months @25°C , RH 65%

Test Equipment

* Wayne kerr 3260B/G LCR Meter
* Wayne kerr 3265B Bias Current Source

Standard Atmospheric Conditions

* Ambient Temp : 20+/-5°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Side View	Bottom View	Pad Layout

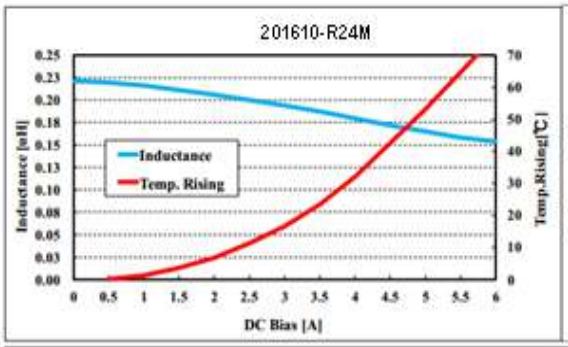
Size Code	A(±0.2)	B(±0.2)	C(max.)	D(±0.3)	E(ref.)	F(ref.)	G(ref.)
201610	2.0	1.6	1.0	0.5	0.9	2.0	1.6
252010	2.5	2.0	1.0	0.6	1.2	2.8	2.0
252012	2.5	2.0	1.2	0.6	1.2	2.8	2.0

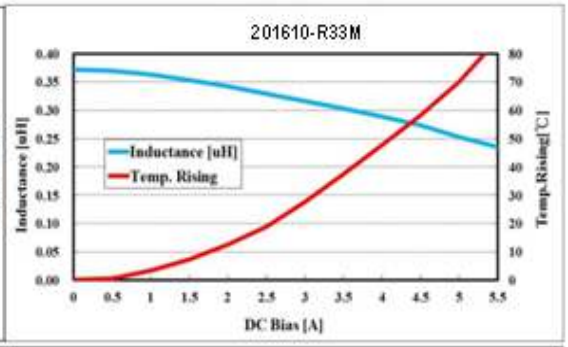
FMDL Series (Rev. 5.0)

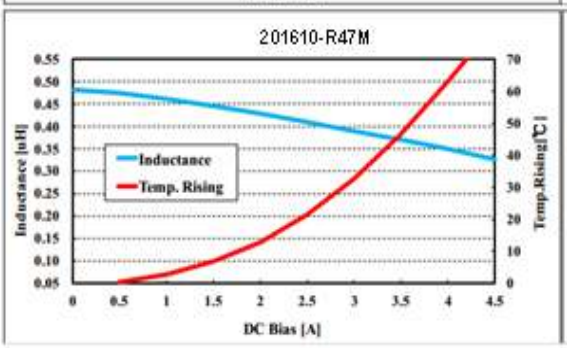
Electrical Characteristics

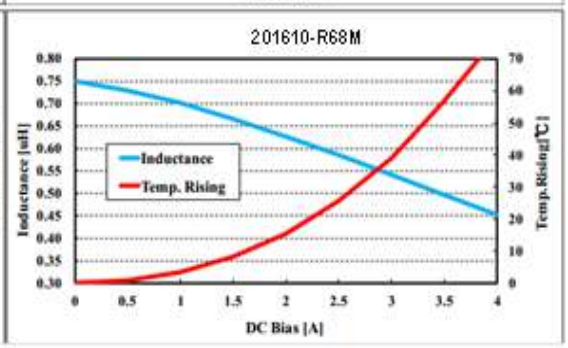
Part Number	Inductance (uH) @1MHz/1V	Tolerance (± %)	RDC (mΩ) max.	Isat (A)		Irms (A)	
				typ.	max.	typ.	max.
FMDL201610-R24M	0.24	20	21	5.6	5.0	5.0	4.5
FMDL201610-R33M	0.33	20	29	5.0	4.5	4.1	3.6
FMDL201610-R47M	0.47	20	40	4.4	4.0	3.5	3.1
FMDL201610-R68M	0.68	20	49	3.7	3.3	3.4	3.0
FMDL201610-1R0M	1.00	20	69	2.9	2.6	2.6	2.2
FMDL201610-1R5M	1.50	20	129	2.5	2.2	2.0	1.8
FMDL201610-2R2M	2.20	20	150	1.9	1.7	1.7	1.5

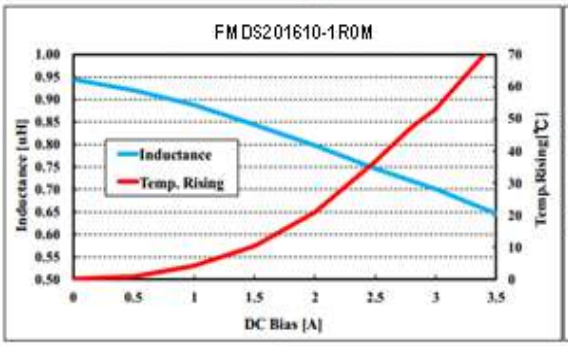
* Isat DC current (A) that will cause L to drop approximately 30%.
* Irms DC current (A) that will cause an approximate ΔT of 40°C, whichever is smaller.

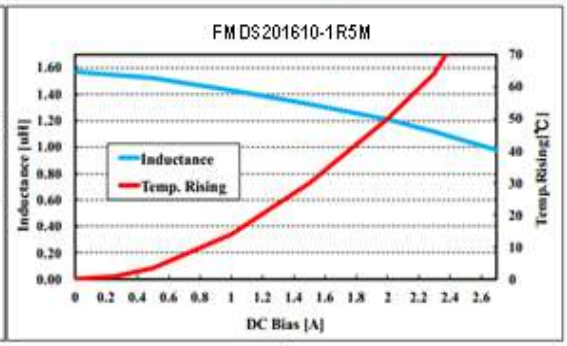


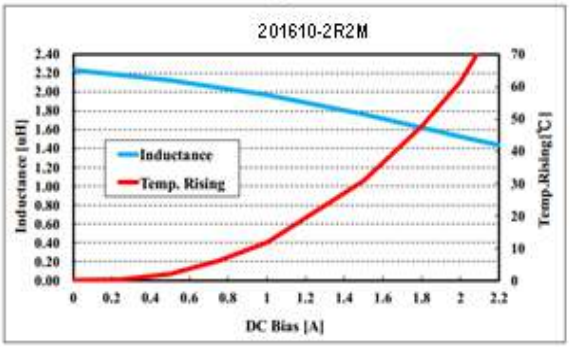










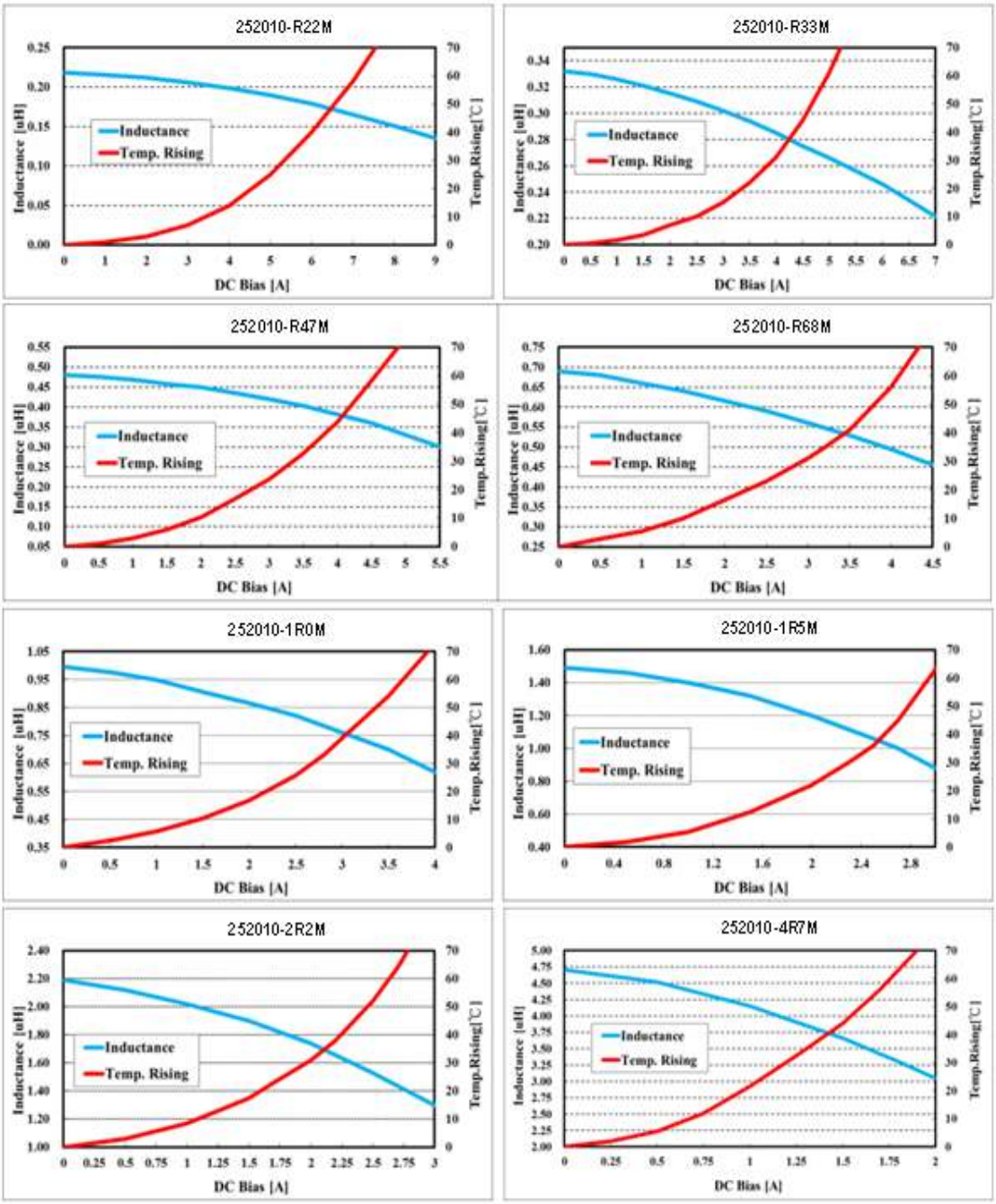


FMDL Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH) @1MHz/1V	Tolerance (± %)	DCR (mΩ) max.	Isat (A)		Irms (A)	
				typ.	max.	typ.	max.
FMDL252010-R22M	0.22	20	13	7.9	7.2	5.9	5.3
FMDL252010-R33M	0.33	20	26	6.6	6.0	4.4	4.0
FMDL252010-R47M	0.47	20	32	5.0	4.5	3.9	3.5
FMDL252010-R68M	0.68	20	44	4.3	3.8	3.4	3.0
FMDL252010-1R0M	1.00	20	54	3.5	3.1	3.0	2.7
FMDL252010-1R5M	1.50	20	91	2.6	2.3	2.5	2.2
FMDL252010-2R2M	2.20	20	119	2.4	2.1	2.3	2.0
FMDL252010-4R7M	4.70	20	262	1.8	1.6	1.3	1.2

* Isat DC current (A) that will cause L to drop approximately 30%.
* Irms DC current (A) that will cause an approximate ΔT of 40°C, whichever is smaller.

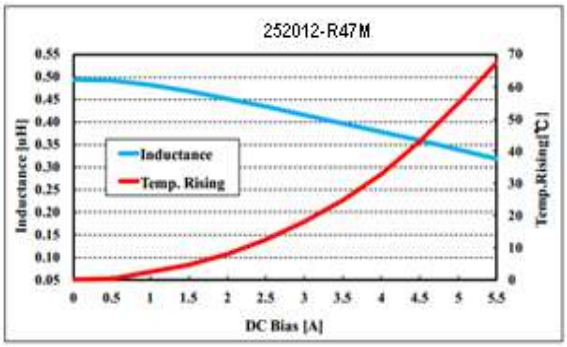


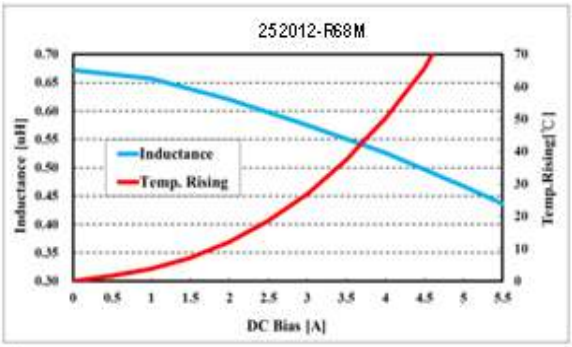
FMDL Series (Rev. 5.0)

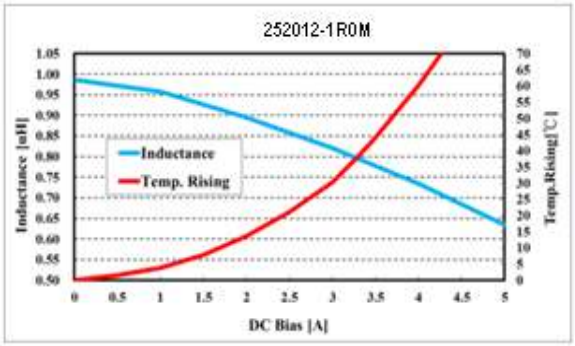
Electrical Characteristics

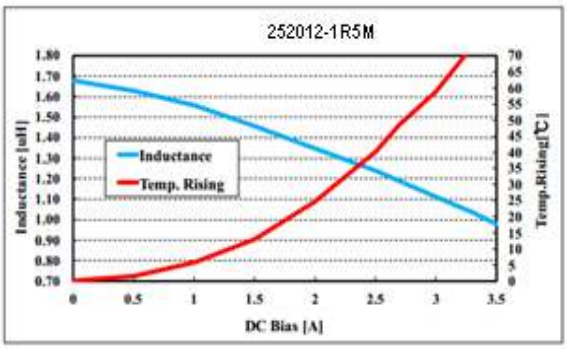
Part Number	Inductance (uH) @1MHz/1V	Tolerance (± %)	RDC (mΩ) max.	Isat (A)		Irms (A)	
				typ.	max.	typ.	max.
FMDL252012-R47M	0.47	20	25	5.3	4.9	4.6	4.1
FMDL252012-R68M	0.68	20	35	5.0	4.6	3.7	3.3
FMDL252012-1R0M	1.00	20	49	4.4	4.0	3.5	3.1
FMDL252012-1R5M	1.50	20	77	3.2	2.9	2.5	2.2
FMDL252012-2R2M	2.20	20	98	3.0	2.7	2.2	2.0
FMDL252012-3R3M	3.30	20	150	2.1	1.8	2.0	1.8
FMDL252012-4R7M	4.70	20	235	1.9	1.5	1.6	1.4

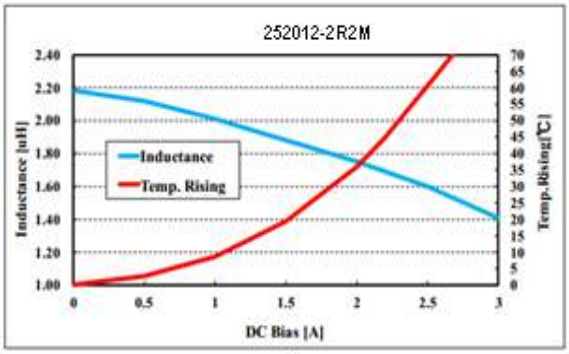
* Isat DC current (A) that will cause L to drop approximately 30%.
* Irms DC current (A) that will cause an approximate ΔT of 40°C, whichever is smaller.

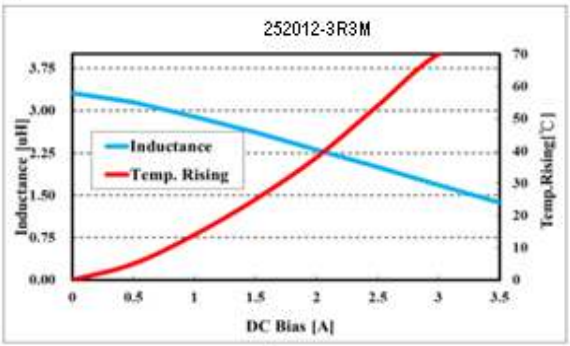


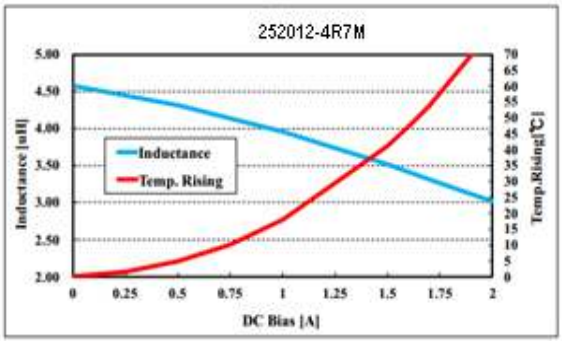












FMDS Series (Rev. 5.0)

Designed for low profile type with low RDC & ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering can be easily confirmed when mounting onto the board.

Features

* RoHS compliant
* Low profile type
* Shielded construction
* Ultra low buzz noise due to molding construction

Applications

* High density DC/DC converters
* POL converters/ High speed charger
* High current VRM/VRD for notebook/Server/CPUs
* Ultra thin NB/Monitor/TV/Tablet

Product Identification

FMDS	6030	_	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%, N=±30%

Operating & Storage Condition

* Operating Temp. : -55 to +125°C
* Storage Temp. : -25 to +35°C
* Storage Life Time : 12 Months @25°C , RH 70%

Test Equipment

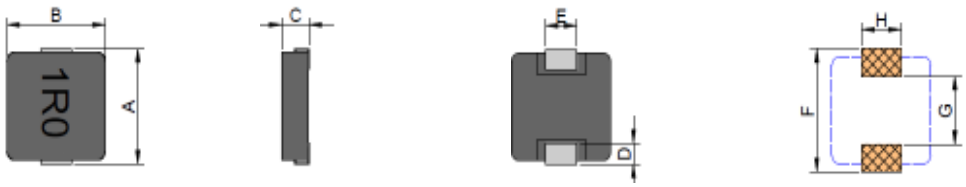
* Wayne kerr 3260B/G LCR Meter
* Wayne kerr 3265B Bias Current Source

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Top View	Side View	Bottom View	Pad Layout



Size Code	A(max.)	B(max.)	C(max.)	D(±0.5)	E(±0.5)	F(ref.)	G(ref.)	H(ref.)
3020	3.6	3.2	2.0	0.7±0.2	1.2±0.2	4.1	1.9	1.5
4020	4.9	4.4	2.0	1.0±0.3	1.5±0.3	5.0	2.2	2.3
5020	5.9	5.2	2.0	1.0±0.3	2.0±0.3	7.0	3.0	2.5
5030	5.9	5.2	3.0	1.0±0.3	2.0±0.3	7.0	3.0	2.5
6020	7.6	6.9	2.0	1.5	3.0±0.3	7.6	3.7	3.4
6024	7.6	6.9	2.4	1.5	3.0±0.3	7.6	3.7	3.4
6030	7.6	6.9	3.0	1.5	3.0±0.3	7.6	3.7	3.4
6040	7.6	6.9	4.0	1.5	3.0±0.3	7.6	3.7	3.4
6050	7.9	7.0	5.0	1.5	3.0±0.3	7.8	3.7	3.4
8060	9.5	8.5	6.2	2.5	3.0±0.3	9.2	3.8	3.4
1030	11.8	10.8	3.0	2.2	3.2	13.6	5.4	4.1
1040	11.8	10.8	4.0	2.2	3.2	13.6	5.4	4.1
1050	11.8	10.8	5.2	2.2	3.2	13.6	5.4	4.1
1055	11.8	10.8	5.8	2.2	3.0	13.6	5.4	4.1
1080	11.8	10.8	8.2	2.5	3.0±0.3	13.6	5.4	4.1
1235	14.5	13.0	3.5	2.5	3.5	14.5	6.0	4.5
1240	14.5	13.0	4.0	2.5	3.5	14.5	6.0	4.5
1250	14.5	13.0	5.0	2.5	3.5	14.5	6.0	4.5
1260	14.5	13.0	6.0	2.5	3.5	14.5	6.0	4.5
1265	14.5	13.0	6.8	2.5	3.5	14.5	6.0	4.5
1285	14.5	13.1	8.6	3.0	3.8	14.5	6.0	4.5
1770	19.0	17.5	7.0	3.3	11.7±0.3	19.5	11.2	13.0
2213	23.0	22.2	13.0	4.8	19.0±0.3	24.6	12.6	19.6

FMDS Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (± %)	DCR (mΩ) max.	Irms (A) typ.	Isat (A) typ.
FMDS3020-R47M	0.47	20	30.0	5.0	7.2
FMDS3020-R68M	0.68	20	40.0	4.0	6.1
FMDS3020-1R0M	1.00	20	60.0	3.0	5.5
FMDS3020-1R5M	1.50	20	85.0	3.3	4.0
FMDS3020-2R2M	2.20	20	115.0	3.0	3.4
FMDS3020-3R3M	3.30	20	210.0	2.0	3.1
FMDS3020-4R7M	4.70	20	293.0	1.6	2.8
FMDS3020-6R8M	6.80	20	400.0	1.4	2.0
FMDS3020-8R2M	8.20	20	463.0	1.2	1.7
FMDS3020-100M	10.00	20	550.0	1.0	1.4
FMDS4020-R10N	0.10	30	5.5	12.0	22.0
FMDS4020-R18N	0.18	30	7.5	10.0	15.0
FMDS4020-R22M	0.22	20	8.0	9.0	12.5
FMDS4020-R33M	0.33	20	14.0	9.0	18.0
FMDS4020-R36M	0.36	20	15.0	7.0	11.0
FMDS4020-R47M	0.47	20	14.0	7.0	9.5
FMDS4020-R56M	0.56	20	18.0	6.5	10.0
FMDS4020-R68M	0.68	20	21.0	5.2	8.0
FMDS4020-1R0M	1.00	20	27.0	4.5	7.0
FMDS4020-1R2M	1.20	20	27.0	4.5	7.0
FMDS4020-1R5M	1.50	20	48.0	4.0	6.0
FMDS4020-2R2M	2.20	20	58.0	3.0	4.0
FMDS4020-3R3M	3.30	20	87.0	2.0	3.0
FMDS4020-4R7M	4.70	20	105.0	2.0	3.0
FMDS4020-5R6M	5.60	20	150.0	1.5	2.0
FMDS4020-6R8M	6.80	20	150.0	1.8	2.0
FMDS4020-8R2M	8.20	20	220.0	1.8	2.0
FMDS4020-100M	10.00	20	290.0	1.5	1.8
FMDS4020-150M	15.00	20	374.0	1.5	1.7
FMDS4020-220M	22.00	20	500.0	1.2	1.4

* Test Condition: @100KHz/ 1.0V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 30%
* Tolerance： M= ±20%, N= ±30%

FMDS Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (± %)	DCR (mΩ) max.	Irms (A) typ.	Isat (A) typ.
FMDS5020-1R0M	1.0	20	22.0	6.0	8.0
FMDS5020-1R5M	1.5	20	36.0	4.5	7.0
FMDS5020-2R2M	2.2	20	48.0	4.5	7.0
FMDS5020-3R3M	3.3	20	80.0	3.5	6.0
FMDS5020-4R7M	4.7	20	90.0	2.5	4.0
FMDS5020-6R8M	6.8	20	90.0	2.0	3.0
FMDS5030-1R0M	1.0	20	16.0	7.0	11.0
FMDS5030-1R2M	1.2	20	16.0	6.5	10.5
FMDS5030-1R5M	1.5	20	33.0	4.5	7.0
FMDS5030-2R2M	2.2	20	37.4	4.5	7.0
FMDS5030-3R3M	3.3	20	60.0	3.5	6.0
FMDS5030-4R7M	4.7	20	85.0	3.0	4.5
FMDS5030-5R6M	5.6	20	86.0	3.0	4.5
FMDS5030-6R8M	6.8	20	90.0	2.0	4.0
FMDS5030-100M	10.0	20	100.0	1.5	2.5
FMDS6020-1R0M	1.0	20	20.0	7.0	14.0
FMDS6020-1R5M	1.5	20	30.0	6.0	12.0
FMDS6020-2R2M	2.2	20	64.0	5.0	10.0
FMDS6020-3R3M	3.3	20	68.0	3.3	7.0
FMDS6020-4R7M	4.7	20	70.0	3.0	5.0
FMDS6020-6R8M	6.8	20	115.0	3.0	4.0
FMDS6020-100M	10.0	20	154.0	2.8	3.5
FMDS6024-R10M	0.1	20	3.5	20.0	50.0
FMDS6024-R68M	0.7	20	9.4	9.0	18.0
FMDS6024-1R0M	1.0	20	15.0	7.0	14.0
FMDS6024-1R5M	1.5	20	22.0	6.5	12.0
FMDS6024-2R2M	2.2	20	30.0	6.0	10.0
FMDS6024-3R3M	3.3	20	50.0	5.0	8.5
FMDS6024-4R7M	4.7	20	63.0	3.5	8.0
FMDS6024-6R8M	6.8	20	90.0	3.0	5.5
FMDS6024-100M	10.0	20	110.0	2.0	3.5

* Test Condition: @100KHz/ 1.0V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 30%
* Tolerance：M= ±20%, N= ±30%

FMDS Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (± %)	DCR (mΩ) max.	Irms (A) typ.	Isat (A) typ.
FMDS6030-R22M	0.22	20	3.5	20.0	40.0
FMDS6030-R33M	0.33	20	3.9	20.0	30.0
FMDS6030-R47M	0.47	20	4.5	17.5	25.0
FMDS6030-R56M	0.56	20	5.5	15.5	24.0
FMDS6030-R68M	0.68	20	5.5	14.0	23.0
FMDS6030-R75M	0.75	20	6.6	14.0	23.0
FMDS6030-R82M	0.82	20	8.0	13.0	20.0
FMDS6030-1R0M	1.00	20	10.0	11.0	16.0
FMDS6030-1R5M	1.50	20	16.0	9.0	14.0
FMDS6030-1R8M	1.80	20	18.0	8.5	14.0
FMDS6030-2R2M	2.20	20	20.0	8.0	12.0
FMDS6030-2R5M	2.50	20	26.0	7.0	12.0
FMDS6030-3R3M	3.30	20	30.0	6.0	10.0
FMDS6030-4R7M	4.70	20	40.0	5.5	9.0
FMDS6030-5R6M	5.60	20	60.0	5.0	7.0
FMDS6030-6R8M	6.80	20	60.0	4.5	6.0
FMDS6030-8R2M	8.20	20	68.0	4.0	6.0
FMDS6030-100M	10.00	20	105.0	3.0	5.5
FMDS6030-150M	15.00	20	140.0	2.8	4.0
FMDS6030-220M	22.00	20	167.0	2.5	3.5
FMDS6040-R22M	0.22	20	3.00	23.00	35.00
FMDS6040-R50M	0.50	20	4.50	17.00	23.00
FMDS6040-1R1M	1.10	20	7.00	11.00	18.00
FMDS6040-1R5M	1.50	20	14.00	10.00	15.00
FMDS6040-2R2M	2.20	20	18.00	8.50	12.00
FMDS6040-3R3M	3.30	20	23.00	7.00	11.00
FMDS6040-4R7M	4.70	20	30.00	6.00	10.00
FMDS6040-5R6M	5.60	20	38.00	5.50	8.00
FMDS6040-6R8M	6.80	20	45.00	5.00	7.00
FMDS6040-8R2M	8.20	20	52.00	4.50	6.00
FMDS6040-100M	10.00	20	60.00	4.00	5.00
FMDS6040-120M	12.00	20	72.00	3.60	5.00
FMDS6040-150M	15.00	20	80.00	3.20	4.30

* Test Condition: @100KHz/ 1.0V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 30%
* Tolerance： M= ±20%, N= ±30%

FMDS Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (± %)	DCR (mΩ) max.	Irms (A) typ.	Isat (A) typ.
FMDS6050-R47M	0.47	20	3.9	18.0	21.0
FMDS6050-R56M	0.56	20	4.8	17.0	20.0
FMDS6050-R60M	0.60	20	5.5	16.0	20.0
FMDS6050-R68M	0.68	20	6.0	14.0	19.0
FMDS6050-R82M	0.82	20	4.9	14.0	17.0
FMDS6050-1R0M	1.00	20	6.5	13.0	15.0
FMDS6050-1R2M	1.20	20	9.0	12.0	18.0
FMDS6050-1R5M	1.50	20	12.0	10.0	18.0
FMDS6050-2R2M	2.20	20	12.5	8.0	12.0
FMDS6050-3R3M	3.30	20	20.9	7.0	9.0
FMDS6050-4R7M	4.70	20	25.0	6.5	7.0
FMDS6050-5R6M	5.60	20	31.0	6.0	7.0
FMDS6050-6R8M	6.80	20	38.0	5.0	7.0
FMDS6050-8R2M	8.20	20	45.0	5.0	6.0
FMDS6050-100M	10.00	20	60.0	4.0	6.0
FMDS6050-150M	15.00	20	85.0	3.0	5.0
FMDS6050-220M	22.00	20	85.0	3.0	4.0
FMDS6050-330M	33.00	20	237.0	2.0	3.0
FMDS6050-470M	47.00	20	280.0	2.0	2.5
FMDS8060-R82M	0.82	20	4.8	16.0	24.0
FMDS8060-1R0M	1.00	20	5.6	14.0	21.0
FMDS8060-2R2M	2.20	20	12.0	12.0	20.0
FMDS8060-3R3M	3.30	20	13.0	10.0	15.0
FMDS8060-4R7M	4.70	20	20.0	8.0	14.0
FMDS8060-6R8M	6.80	20	28.0	7.0	11.0
FMDS8060-100M	10.00	20	36.0	5.0	10.0
FMDS8060-150M	15.00	20	55.0	4.0	7.5
FMDS8060-220M	22.00	20	74.0	3.5	7.0
FMDS8060-330M	33.00	20	140.0	3.0	5.0
FMDS8060-470M	47.00	20	192.0	2.8	4.0
FMDS8060-560M	56.00	20	204.0	2.0	3.5
FMDS8060-680M	68.00	20	233.0	1.5	3.0
FMDS8060-101M	100.00	20	326.0	1.2	2.0
FMDS1030-R36M	0.36	20	1.6	23.0	40.0
FMDS1030-R47M	0.47	20	2.5	20.0	33.0
FMDS1030-R56M	0.56	20	3.0	16.0	24.0
FMDS1030-1R0M	1.00	20	6.0	15.0	20.0
FMDS1030-1R5M	1.50	20	7.5	13.0	20.0
FMDS1030-2R2M	2.20	20	9.0	12.0	16.0
FMDS1030-3R3M	3.30	20	16.0	9.0	14.0
FMDS1030-4R7M	4.70	20	22.5	7.0	13.0
FMDS1030-5R6M	5.60	20	32.5	7.0	12.0
FMDS1030-6R8M	6.80	20	35.0	6.5	9.5
FMDS1030-8R2M	8.20	20	48.0	6.0	8.5
FMDS1030-100M	10.00	20	55.0	5.0	8.0

* Test Condition: @100KHz/ 1.0V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 30%
* Tolerance：M= ±20%, N= ±30%

FMDS Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (± %)	DCR (mΩ) max.	Irms (A) typ.	Isat (A) typ.
FMDS1040-R22M	0.22	20	1.0	30.0	60.0
FMDS1040-R36M	0.36	20	1.4	30.0	50.0
FMDS1040-R39M	0.39	20	1.6	28.0	45.0
FMDS1040-R47M	0.47	20	1.8	26.0	38.0
FMDS1040-R56M	0.56	20	1.8	25.0	33.0
FMDS1040-R68M	0.68	20	3.0	23.0	32.0
FMDS1040-1R0M	1.00	20	4.1	18.0	28.0
FMDS1040-1R5M	1.50	20	6.0	16.0	21.0
FMDS1040-2R2M	2.20	20	9.0	12.0	18.0
FMDS1040-3R3M	3.30	20	13.5	10.0	16.0
FMDS1040-4R7M	4.70	20	18.0	8.0	14.0
FMDS1040-6R8M	6.80	20	28.0	7.0	12.0
FMDS1040-100M	10.00	20	36.5	5.0	9.0
FMDS1040-150M	15.00	20	55.0	4.0	7.0
FMDS1040-220M	22.00	20	60.0	3.5	5.0
FMDS1040-330M	33.00	20	145.0	3.0	4.0
FMDS1040-470M	47.00	20	145.0	3.0	3.0
FMDS1050-R82M	0.82	20	2.5	16.0	32.0
FMDS1050-1R0M	1.00	20	4.0	15.0	30.0
FMDS1050-1R8M	1.80	20	6.0	15.0	27.5
FMDS1050-2R2M	2.20	20	8.0	14.0	27.0
FMDS1050-3R3M	3.30	20	11.0	10.0	19.0
FMDS1050-4R7M	4.70	20	17.0	9.0	14.0
FMDS1050-6R8M	6.80	20	22.0	8.0	10.0
FMDS1050-100M	10.0	20	35.0	6.0	10.0
FMDS1050-150M	15.0	20	45.0	5.0	8.0
FMDS1050-220M	22.0	20	60.0	4.0	6.0
FMDS1050-330M	33.0	20	102.0	3.5	5.0
FMDS1050-470M	47.0	20	132.0	3.0	4.0
FMDS1055-150M	15.0	20	40.0	6.5	14.0
FMDS1055-220M	22.0	20	58.0	6.0	13.0
FMDS1055-330M	33.0	20	120.0	4.5	9.0
FMDS1055-470M	47.0	20	155.0	4.0	4.0
FMDS1055-101M	100.0	20	300.0	2.5	5.5
FMDS1080-6R8M	6.8	20	13.2	8.0	12.0
FMDS1080-100M	10.0	20	16.8	8.0	10.0
FMDS1080-150M	15.0	20	22.0	6.0	9.0
FMDS1080-220M	22.0	20	37.0	5.0	9.0
FMDS1080-330M	33.0	20	78.0	4.0	5.0
FMDS1080-470M	47.0	20	90.0	3.5	5.0

* Test Condition: @100KHz/ 1.0V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 30%
* Tolerance：M= ±20%, N= ±30%

FMDS Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (± %)	DCR (mΩ) max.	Irms (A) typ.	Isat (A) typ.
FMDS1235-R22M	0.22	20	1.3	25.0	65.0
FMDS1235-R47M	0.47	20	1.7	18.0	35.0
FMDS1235-R68M	0.68	20	2.5	20.0	49.0
FMDS1235-1R0M	1.00	20	3.5	15.0	26.0
FMDS1235-1R5M	1.50	20	5.0	15.0	24.0
FMDS1235-2R2M	2.20	20	8.0	14.0	20.0
FMDS1235-3R3M	3.30	20	12.0	12.0	16.0
FMDS1235-4R7M	4.70	20	15.0	10.0	14.0
FMDS1240-1R0M	1.00	20	3.5	19.0	38.0
FMDS1240-1R5M	1.50	20	4.5	16.0	30.0
FMDS1240-1R8M	1.80	20	8.3	16.0	26.0
FMDS1240-2R2M	2.20	20	9.5	15.0	22.0
FMDS1240-3R3M	3.30	20	11.0	14.0	20.0
FMDS1240-4R7M	4.70	20	14.0	9.0	15.0
FMDS1240-5R6M	5.60	20	18.0	8.0	14.0
FMDS1240-6R8M	6.80	20	24.0	7.0	12.0
FMDS1250-R33M	0.33	20	1.1	32.0	60.0
FMDS1250-R47M	0.47	20	1.5	25.0	48.0
FMDS1250-R56M	0.56	20	1.7	23.0	46.0
FMDS1250-R68M	0.68	20	1.7	20.0	40.0
FMDS1250-1R0M	1.00	20	3.5	18.0	35.0
FMDS1250-1R2M	1.20	20	4.0	18.0	34.0
FMDS1250-1R5M	1.50	20	5.0	18.0	33.0
FMDS1250-1R8M	1.80	20	6.0	17.0	30.0
FMDS1250-2R2M	2.20	20	7.2	16.0	25.0
FMDS1250-3R3M	3.30	20	13.0	15.0	23.0
FMDS1250-4R7M	4.70	20	15.0	12.0	21.0
FMDS1250-5R6M	5.60	20	17.0	12.0	20.0
FMDS1250-6R8M	6.80	20	19.0	11.0	18.0
FMDS1250-8R2M	8.20	20	22.5	10.0	17.0
FMDS1250-100M	10.00	20	25.5	6.0	13.0
FMDS1260-R33M	0.33	20	1.0	46.0	55.0
FMDS1260-R68M	0.68	20	2.5	35.0	45.0
FMDS1260-1R0M	1.00	20	4.0	21.0	40.0
FMDS1260-2R2M	2.20	20	7.2	20.0	32.0
FMDS1260-3R3M	3.30	20	8.2	15.0	30.0
FMDS1260-4R7M	4.70	20	15.0	12.0	25.0
FMDS1260-6R8M	6.80	20	23.0	11.0	20.0
FMDS1260-100M	10.00	20	25.0	10.0	12.5
FMDS1260-220M	22.00	20	50.0	5.0	7.5

* Test Condition: @100KHz/ 1.0V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 30%
* Tolerance：M= ±20%, N= ±30%

FMDS Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (± %)	DCR (mΩ) max.	Irms (A) typ.	Isat (A) typ.
FMDS1265-R47M	0.47	20	1.2	41.0	63.0
FMDS1265-R50M	0.50	20	1.3	40.0	60.0
FMDS1265-R56M	0.56	20	1.6	30.0	60.0
FMDS1265-R68M	0.68	20	1.8	28.0	54.0
FMDS1265-R82M	0.82	20	1.9	25.0	50.0
FMDS1265-1R0M	1.00	20	2.5	25.0	49.0
FMDS1265-1R5M	1.50	20	3.0	22.0	45.0
FMDS1265-1R8M	1.80	20	3.6	20.0	41.0
FMDS1265-2R2M	2.20	20	4.2	18.0	40.0
FMDS1265-3R3M	3.30	20	6.8	16.0	28.0
FMDS1265-4R7M	4.70	20	8.4	14.0	22.5
FMDS1265-5R6M	5.60	20	15.0	12.0	20.0
FMDS1265-6R8M	6.80	20	11.5	11.5	18.0
FMDS1265-8R2M	8.20	20	15.5	10.5	16.0
FMDS1265-100M	10.00	20	25.0	9.0	15.5
FMDS1265-150M	15.00	20	38.0	6.0	9.0
FMDS1265-220M	22.00	20	48.0	5.0	7.5
FMDS1265-330M	33.00	20	66.0	4.5	6.5
FMDS1265-470M	47.00	20	90.0	3.5	5.5
FMDS1265-101M	100.00	20	200.0	2.5	3.5
FMDS1285-220M	22.00	20	24.0	6.0	8.5
FMDS1285-330M	33.00	20	44.0	6.0	8.0
FMDS1285-470M	47.00	20	70.0	5.0	7.0
FMDS1770-R22M	0.22	20	0.7	60.0	100.0
FMDS1770-R33M	0.33	20	0.8	55.0	90.0
FMDS1770-R47M	0.47	20	1.0	50.0	80.0
FMDS1770-R56M	0.56	20	1.2	46.0	70.0
FMDS1770-R82M	0.82	20	1.3	42.0	60.0
FMDS1770-1R0M	1.00	20	1.7	38.0	50.0
FMDS1770-1R5M	1.50	20	2.2	35.0	45.0
FMDS1770-2R2M	2.20	20	2.6	25.0	34.0
FMDS1770-3R3M	3.30	20	3.5	17.0	24.0
FMDS1770-4R7M	4.70	20	5.0	15.0	21.0
FMDS1770-6R8M	6.80	20	7.0	15.0	18.0
FMDS1770-8R2M	8.20	20	9.0	12.0	18.0
FMDS1770-100M	10.00	20	10.0	11.0	17.0
FMDS1770-150M	15.00	20	15.0	9.0	12.0
FMDS1770-220M	22.00	20	25.0	7.0	9.5
FMDS1770-330M	33.00	20	35.0	6.5	9.0
FMDS1770-470M	47.00	20	40.0	6.0	7.5
FMDS1770-680M	68.00	20	80.0	4.0	5.0
FMDS1770-820M	82.00	20	105.0	4.0	4.5
FMDS1770-101M	100.00	20	120.0	3.0	4.0
FMDS2213-2R2M	2.20	20	1.5	50.0	48.0
FMDS2213-3R3M	3.30	20	2.0	49.0	41.0
FMDS2213-470M	47.00	20	17.7	13.5	10.0
FMDS2213-680M	68.00	20	33.0	10.0	12.0
FMDS2213-820M	82.00	20	35.0	10.2	9.0

* Test Condition: @100KHz/ 1.0V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 30%
* Tolerance：M= ±20%, N= ±30%

FMDT20&25 Series (Rev. 5.0)

Features

* RoHS compliant
* Much lower resistance
* Much higher current rating
* High performance (Isat) realized by metal dust core

Applications

* Laptops and PCs
* Switchs and servers
* Base stations
* DC/DC converters
* New energy vehicles/ 5G

Product Identification

FMDT	252012	_	2R2	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 2.2uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp. : -40 to +125°C
* Storage Temp. : -25 to +35°C
* Storage Life Time : 12 Months @25°C , RH 70%

Test Equipment

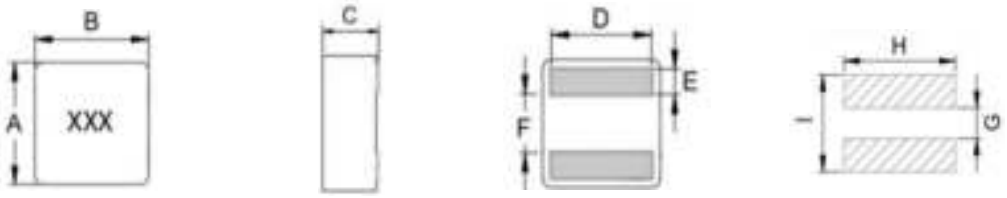
* Wayne kerr 3260B/G LCR Meter
* Wayne kerr 3265B Bias Current Source

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Top View | Side View | Bottom View | Pad Layout



Size Code	A(±0.2)	B(±0.2)	C(max.)	D(typ.)	E(typ.)	F(typ.)	G(ref.)	H(ref.)	I(ref.)
201610	2.0	1.6	1.0	1.6	0.7	0.6	0.5	1.8	2.2
252010	2.5	2.0	1.0	2.0	0.9	0.7	0.6	2.1	2.6
252012	2.5	2.0	1.2	2.0	0.9	0.7	0.6	2.1	2.6

Electrical Characteristics

P/N	Inductance (uH) @1MHz/1.0V	DCR (mΩ) max.	Isat (A) max.	Irms (A) max.
FMDT201610-R47M	0.47	25.0	6.0	6.0
FMDT201610-1R0M	1.00	43.0	4.2	4.1
FMDT201610-2R2M	2.20	150.0	2.8	2.1
FMDT252010-1R0M	1.00	30.0	4.8	4.1
FMDT252012-1R0M	1.00	42.0	4.3	3.3
FMDT252012-2R2M	2.20	75.0	3.3	2.2

* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 30%

FMDT Series (Rev. 5.0)

Applications

* Laptops and PCs
* Switchs and servers
* Base stations
* DC/DC converters
* New energy vehicles / 5G

Features

* RoHS compliant
* Much lower resistance
* Much higher current rating
* High performance (Isat) realized by metal dust core

Operating & Storage Condition

* Operating Temp. : -40 to +125°C
* Storage Temp. : -25 to +35°C
* Storage Life Time : 12 Months @25°C , RH 70%

Product Identification

FMDT	6030	_	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: K=±10%, M=±20%, N=±30%

Test Equipment

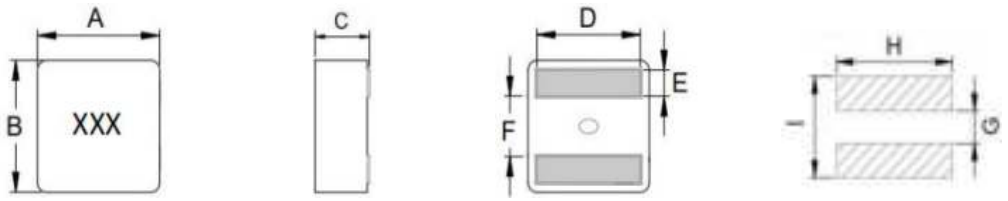
* Wayne kerr 3260B/G LCR Meter
* Wayne kerr 3265B Bias Current Source

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Top View	Side View	Bottom View	Pad Layout



Size Code	A(±0.2)	B(±0.2)	C(±0.2)	D(±0.3)	E(±0.3)	F(±0.3)	G(ref.)	H(ref.)	I(ref.)
4020	4.1	4.1	1.9	3.4	0.9	1.6	1.4	3.8	3.4
4030	4.4	4.1	2.8	3.4	0.9	1.6	1.4	3.8	3.4
5020	5.5	5.3	1.9	4.3	1.1	2.3	2.0	4.7	4.5
5030	5.5	5.3	2.9	4.3	1.1	2.3	2.0	4.7	4.5
5050	5.5	5.3	4.8	4.3	1.1	2.3	2.0	4.7	4.5
6030	6.6	6.4	2.9	See spec	1.4	2.6	2.5	5.6	5.6
6050	6.6	6.4	4.8	See spec	1.4	2.6	2.5	5.6	5.6
6060	6.6	6.4	5.8	5.3	1.4	2.6	2.5	5.6	5.6
7030	7.8±0.3	7.6	2.9	See spec	1.8	3.2	2.8	7.2	7.4
7070	7.8±0.3	7.6±0.3	6.7±0.3	See spec	1.8	3.2	2.8	7.2	7.4
1580	16.5±0.3	15.5±0.3	7.7±0.3	13.2±0.5	3.2	7.4±0.5	6.0	15.0	15.0
1510	16.5±0.3	15.5±0.3	9.7±0.3	13.2±0.5	3.2	7.4±0.5	6.0	15.0	15.0

FMDT Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	DCR (mΩ) max.	Isat (A) typ.	Irms (A) typ.
FMDT4020-R10M	0.10	2.4	33.0	18.0
FMDT4020-R22M	0.22	4.6	18.8	16.8
FMDT4020-R36M	0.36	6.3	15.0	14.5
FMDT4020-R40M	0.40	7.7	13.5	14.0
FMDT4020-R47M	0.47	8.6	13.0	12.5
FMDT4020-R56M	0.56	9.3	12.6	12.0
FMDT4020-R60M	0.60	9.5	12.3	11.7
FMDT4020-R72M	0.72	11.6	10.6	10.5
FMDT4020-1R0M	1.00	14.6	8.8	9.6
FMDT4020-1R2M	1.20	17.9	7.8	9.0
FMDT4020-1R5M	1.50	23.5	7.4	7.6
FMDT4020-1R8M	1.80	28.0	7.0	7.0
FMDT4020-2R2M	2.20	38.7	6.0	5.6
FMDT4030-R75M	0.75	10.8	9.0	10.0
FMDT4030-3R3M	3.30	28.6	5.5	6.6
FMDT4030-4R7M	4.70	44.1	4.5	5.1
FMDT4030-6R8M	6.80	74.1	3.6	3.9
FMDT5020-R15M	0.15	4.6	27.0	18.8
FMDT5020-R16M	0.16	4.6	27.0	18.8
FMDT5020-R33M	0.33	7.0	24.0	14.4
FMDT5020-R47M	0.47	8.1	20.0	14.1
FMDT5020-R56M	0.56	9.5	16.0	13.9
FMDT5020-R68M	0.68	10.2	14.0	13.4
FMDT5020-R80M	0.80	11.8	13.5	13.0
FMDT5020-R82M	0.82	12.7	13.0	12.0
FMDT5020-1R0M	1.00	13.8	12.8	10.5
FMDT5020-1R2M	1.20	16.3	12.2	9.4
FMDT5020-1R5M	1.50	18.7	11.7	8.8

* Test Condition: @100KHz/ 1.0V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 30%
* Tolerance： K=±10%, M= ±20%, N= ±30%

FMDT Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	DCR (mΩ) max.	Isat (A) typ.	Irms (A) typ.	Dimension-D (mm) ±0.3
FMDT5030-R15M	0.15	2.3	32.5	22.2	-
FMDT5030-R16M	0.16	2.3	32.0	22.2	-
FMDT5030-R33M	0.33	3.5	26.0	19.2	-
FMDT5030-R47M	0.47	4.5	24.0	18.4	-
FMDT5030-R56M	0.56	4.5	20.2	17.7	-
FMDT5030-R60M	0.60	4.5	20.0	17.7	-
FMDT5030-R80M	0.80	5.7	18.0	13.1	-
FMDT5030-R82M	0.82	5.8	17.6	12.9	-
FMDT5030-1R0M	1.00	7.6	14.3	12.2	-
FMDT5030-1R2M	1.20	9.7	13.5	11.0	-
FMDT5030-1R5M	1.50	11.2	12.5	10.5	-
FMDT5030-1R8M	1.80	12.7	11.3	10.1	-
FMDT5030-2R2M	2.20	14.5	9.0	9.7	-
FMDT5030-3R3M	3.30	23.1	8.7	8.1	-
FMDT5030-4R7M	4.70	36.3	7.0	5.9	-
FMDT5050-5R6M	5.60	24.2	7.2	7.2	-
FMDT5050-6R8M	6.80	28.6	6.6	6.4	-
FMDT5050-8R2M	8.20	32.5	6.1	6.1	-
FMDT5050-100M	10.00	43.0	5.4	5.0	-
FMDT6030-R18M	0.18	1.8	39.0	32.0	5.3
FMDT6030-R33M	0.33	2.5	30.0	25.0	5.3
FMDT6030-R56M	0.56	3.3	29.0	22.0	5.3
FMDT6030-R68M	0.68	5.2	25.0	20.0	5.3
FMDT6030-1R0M	1.00	6.0	23.0	18.0	5.2
FMDT6030-1R2M	1.20	7.4	22.0	16.0	5.2
FMDT6030-1R5M	1.50	9.1	20.0	15.0	5.1
FMDT6030-1R8M	1.80	10.2	18.2	14.0	5.1
FMDT6030-2R2M	2.20	12.2	15.9	10.0	5.0
FMDT6030-3R3M	3.30	20.8	12.2	8.0	5.0
FMDT6030-4R5M	4.50	25.3	10.0	7.0	5.0
FMDT6030-4R7M	4.70	26.0	9.0	6.0	5.0

* Test Condition: @100KHz/ 1.0V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 30%
* Tolerance： K=±10%, M= ±20%, N= ±30%

FMDT Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	DCR (mΩ) max.	Isat (A) typ.	Irms (A) typ.	Dimension-D (mm) ±0.3
FMDT6050-R82M	0.82	4.2	20.0	21.0	5.3
FMDT6050-1R0M	1.00	4.5	18.0	20.0	5.3
FMDT6050-1R2M	1.20	5.8	16.0	18.0	5.3
FMDT6050-1R5M	1.50	6.3	14.5	17.0	5.3
FMDT6050-1R8M	1.80	7.1	13.5	16.0	5.3
FMDT6050-2R2M	2.20	8.5	12.0	13.0	5.2
FMDT6050-3R3M	3.30	12.5	10.0	11.0	5.2
FMDT6050-4R3M	4.30	16.2	8.5	9.0	5.2
FMDT6050-4R7M	4.70	18.4	8.0	8.5	5.2
FMDT6050-5R6M	5.60	22.0	8.3	7.0	5.2
FMDT6050-6R8M	6.80	25.4	7.0	6.6	5.2
FMDT6050-8R2M	8.20	31.5	6.8	6.2	5.2
FMDT6060-4R7M	4.70	14.4	10.5	11.0	-
FMDT6060-5R6M	5.60	15.9	9.9	10.0	-
FMDT6060-6R8M	6.80	20.8	9.2	9.0	-
FMDT6060-8R2M	8.20	26.4	8.4	8.0	-
FMDT6060-100M	10.0	29.8	7.6	7.0	-
FMDT6060-150M	15.0	43.8	5.8	6.0	-
FMDT6060-220M	22.0	60.6	5.6	5.0	-
FMDT7030-1R0M	1.00	5.0	28.0	21.8	6.6
FMDT7030-1R5M	1.50	8.3	23.5	15.3	6.6
FMDT7030-2R2M	2.20	13.7	17.0	13.0	6.2
FMDT7030-2R7M	2.70	15.4	13.5	11.4	6.2
FMDT7030-3R3M	3.30	18.0	13.0	10.0	6.2
FMDT7030-4R7M	4.70	26.7	12.2	9.0	6.2
FMDT7030-5R6M	5.60	33.2	11.5	7.3	6.2
FMDT7030-6R8M	6.80	42.5	11.0	6.8	6.2
FMDT7030-8R2M	8.20	48.7	9.0	5.9	6.2
FMDT7070-3R3M	3.30	9.4	19.4	15.1	6.7
FMDT7070-4R7M	4.70	14.3	15.2	13.6	6.7
FMDT7070-6R8M	6.80	19.6	12.8	9.2	6.5

* Test Condition: @100KHz/ 1.0V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 30%
* Tolerance： K=±10%, M= ±20%, N= ±30%

FMDT Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	DCR (mΩ) max.	Isat (A) typ.	Irms (A) typ.	Dimension-D (mm) ±0.3
FMDT1580-2R0M	2.00	2.2	52.0	40.0	-
FMDT1580-2R2M	2.20	2.5	49.0	37.0	-
FMDT1580-3R0M	3.00	3.0	41.0	34.5	-
FMDT1580-4R2M	4.20	4.7	33.0	27.0	-
FMDT1580-4R7M	4.70	5.2	32.0	26.5	-
FMDT1580-5R3M	5.30	5.3	31.0	26.0	-
FMDT1580-6R2M	6.20	6.5	31.0	23.0	-
FMDT1580-7R2M	7.20	7.2	29.0	21.0	-
FMDT1580-8R2M	8.20	7.9	25.0	19.0	-
FMDT1510-4R7M	4.70	3.8	39.0	29.0	-
FMDT1510-5R6M	5.60	4.2	37.0	28.0	-
FMDT1510-6R8M	6.80	4.6	36.0	26.0	-
FMDT1510-8R2M	8.20	7.2	30.0	24.0	-
FMDT1510-100M	10.00	8.6	26.5	22.0	-
FMDT1510-150M	15.00	11.5	23.0	18.0	-
FMDT1510-220M	22.00	15.8	18.7	14.0	-
FMDT1510-330M	33.00	20.0	16.7	12.0	-

* Test Condition: @100KHz/ 1.0V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 30%
* Tolerance： K=±10%, M= ±20%, N= ±30%

FMDI76 Series (Rev. 5.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

FMDI	76	-	3R3	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 3.3uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp.: -25 to +125°C
* Storage Temp.: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH 65%

Test Equipment

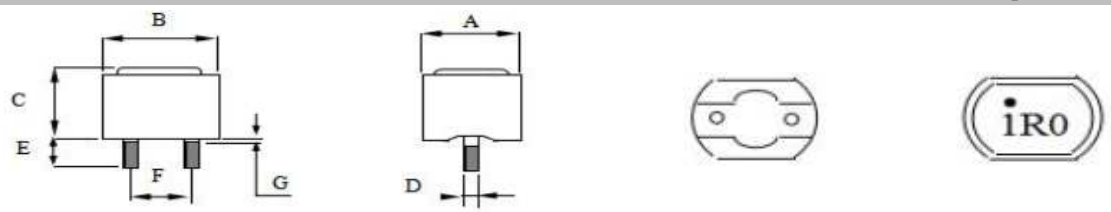
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension: [mm]

Front View	Side View	Bottom View	Top View



Size Code	A(max.)	B(max.)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
76	7.5	9.5	8.5	by p/n	3.4	6.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
FMDI76-1R0M	1.0	5.0	13.0	15.0
FMDI76-2R8M	2.8	6.9	11.0	12.0
FMDI76-3R3M	3.3	11.0	9.0	6.5
FMDI76-4R7M	4.7	16.0	7.0	6.0

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

FMDI0707 Series (Rev. 5.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

FMDI	0707	-	3R3	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 3.3uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp.: -25 to +125°C
* Storage Temp.: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH 65%

Test Equipment

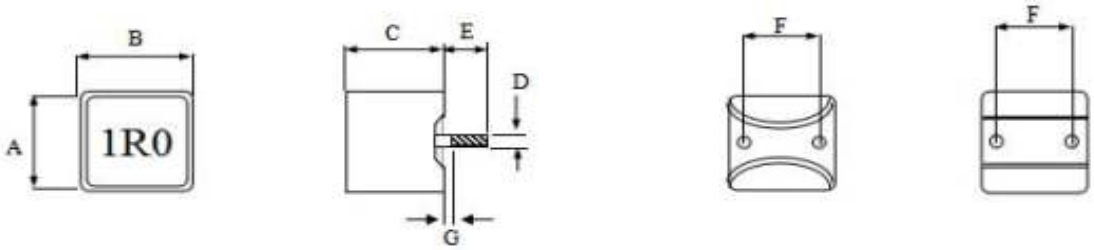
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension: [mm]

Top View | Side View | Bottom View



Size Code	A(±0.5)	B(±0.5)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
0707	7.4	7.4	7.5	by p/n	3.4	5.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
FMDI0707-1R0M	1.0	4.0	13.0	20.0
FMDI0707-2R2M	2.2	6.5	11.0	12.0
FMDI0707-3R3M	3.3	10.0	9.0	10.0
FMDI0707-4R7M	4.7	17.0	7.0	6.0

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

FMDI0808R Series (Rev. 5.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

FMDI	0808R	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp.: -25 to +125°C
* Storage Temp.: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH 65%

Test Equipment

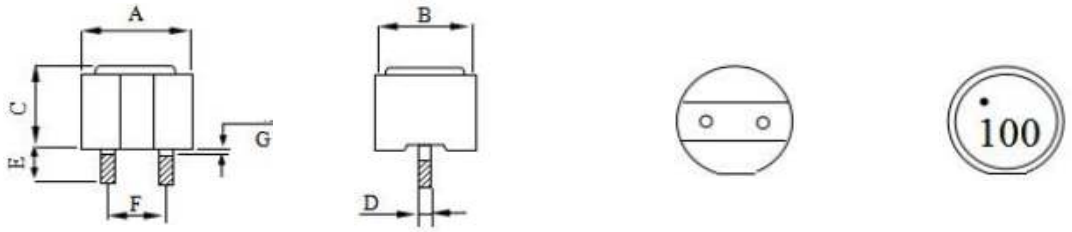
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension: [mm]

Front View	Side View	Bottom View	Top View



Size Code	A(max.)	B(max.)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
0808R	8.8	8.5	10.0	by p/n	3.4	5.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
FMDI0808R-100M	10.0	29.0	5.0	5.8
FMDI0808R-150M	15.0	38.0	5.5	4.0
FMDI0808R-220M	22.0	49.0	4.0	4.5

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

FMDI0808H Series (Rev. 5.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

FMDI	0808H	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp.: -25 to +125°C
* Storage Temp.: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH 65%

Test Equipment

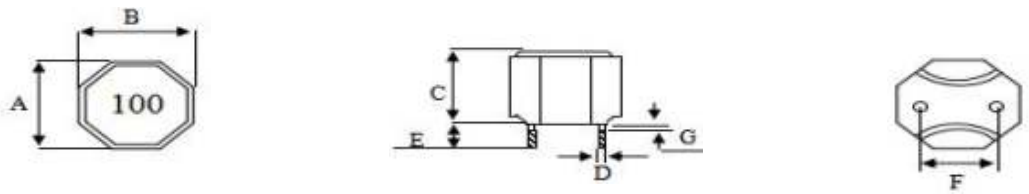
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension: [mm]

Top View	Side View	Bottom View



Size Code	A(±0.5)	B(±0.5)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
0808H	8.0	8.0	10.0	by p/n	3.4	5.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
FMDI0808H-100M	10.0	29.0	5.0	5.8
FMDI0808H-150M	15.0	38.0	5.5	4.0
FMDI0808H-220M	22.0	49.0	4.0	4.5

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

FMDI0910 Series (Rev. 5.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

FMDI	0910	-	100	M	S
1	2		3	4	5

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%
5. S: special

Operating & Storage Condition

* Operating Temp.: -25 to +125°C
* Storage Temp.: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH 65%

Test Equipment

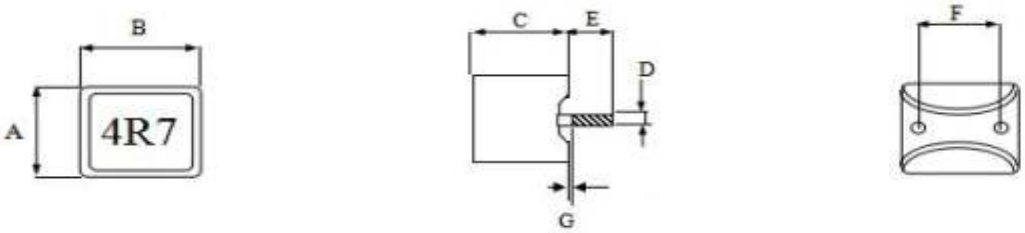
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension: [mm]

Top View | Side View | Bottom View



Size Code	A(±0.5)	B(±0.5)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
0910	9.0	9.0	10.0	by p/n	3.4	6.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
FMDI0910-4R7M	4.7	17.0	5.0	10.0
FMDI0910-100M	10.0	16.0	7.0	9.0
FMDI0910-100MS	10.0	17.0	4.0	9.0

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

FMDI1010R Series (Rev. 5.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

FMDI	1010R	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp.: -25 to +125°C
* Storage Temp.: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH 65%

Test Equipment

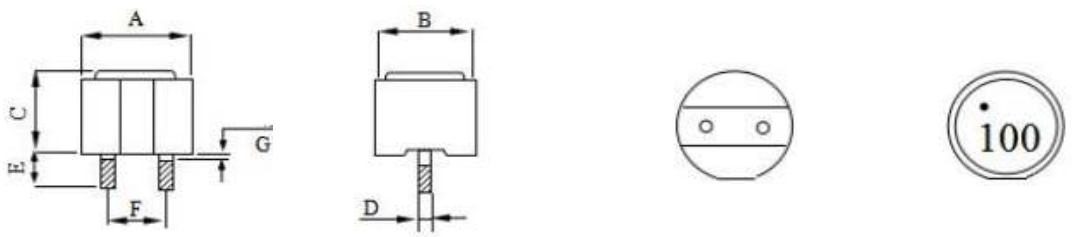
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension: [mm]

Front View	Side View	Bottom View	Top View



Size Code	A(max.)	B(max.)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
1010R	11.0	10.0	11.0	by p/n	3.4	5.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
FMDI1010R-4R7M	4.7	12.0	9.0	13.0
FMDI1010R-6R8M	6.8	16.0	8.0	11.0
FMDI1010R-100M	10.0	22.0	7.0	9.0
FMDI1010R-150M	15.0	35.0	5.0	9.0
FMDI1010R-220M	22.0	33.0	7.0	5.5
FMDI1010R-330M	33.0	54.0	4.5	5.5

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

FMDI1010H Series (Rev. 5.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

FMDI	1010H	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp.: -25 to +125°C
* Storage Temp.: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH 65%

Test Equipment

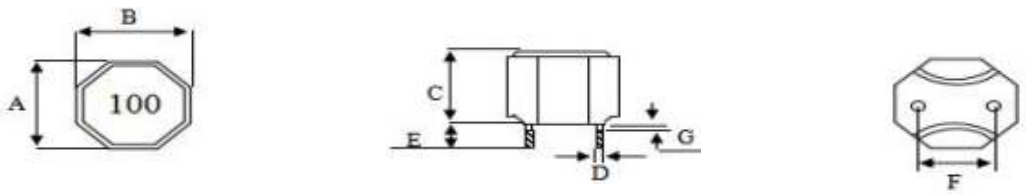
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension: [mm]

Top View	Side View	Bottom View



Size Code	A(±0.5)	B(±0.5)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
1010H	10.0	10.0	10.0	by p/n	3.4	6.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
FMDI1010H-100M	10.0	22.0	7.5	10.0
FMDI1010H-150M	15.0	26.0	7.0	8.0
FMDI1010H-220M	22.0	33.0	6.0	6.0
FMDI1010H-330M	33.0	54.0	4.5	5.5

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

FMDI1210 Series (Rev. 5.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

FMDI	1210	-	3R3	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 3.3uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp.: -25 to +125°C
* Storage Temp.: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH 65%

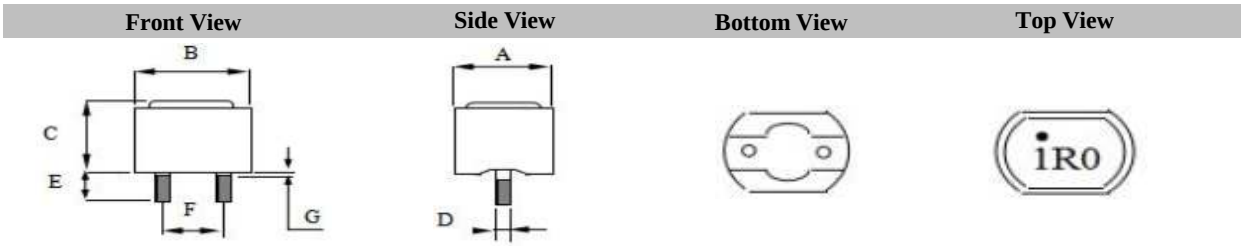
Test Equipment

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension: [mm]



Size Code	A(±0.5)	B(±0.5)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
1210	10.5	12.5	11.0	by p/n	3.4	8.0/8.5	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
FMDI1210-1R0M	1.0	2.0	21.0	25.0
FMDI1210-2R2M	2.2	3.3	15.0	22.0
FMDI1210-3R3M	3.3	4.3	11.0	16.0
FMDI1210-4R7M	4.7	5.8	10.0	14.0
FMDI1210-100M	10.0	17.0	8.5	9.5
FMDI1210-150M	15.0	21.0	7.5	8.5
FMDI1210-220M	22.0	27.0	7.0	8.0

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

FMDI1215 Series (Rev. 5.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

FMDI	1215	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp.: -25 to +125°C
* Storage Temp.: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH 65%

Test Equipment

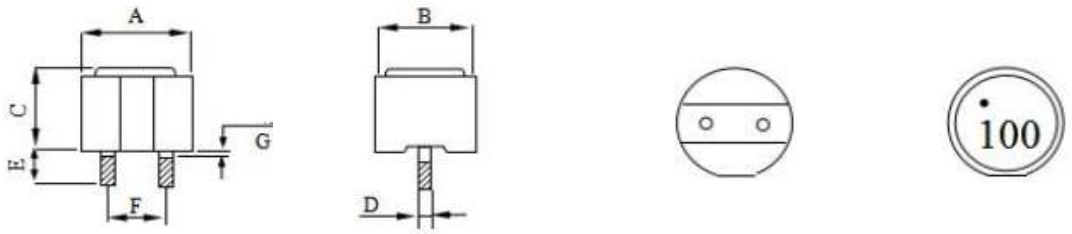
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension: [mm]

Front View	Side View	Bottom View	Top View



Size Code	A(max.)	B(max.)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
1215	13.0	11.9	15.0	by p/n	3.4	6.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
FMDI1215-100M	10.0	13.0	12.0	14.0
FMDI1215-150M	15.0	17.0	11.0	8.0
FMDI1215-220M	22.0	21.0	10.0	6.0

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

FMDI1316 Series (Rev. 5.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

FMDI	1316	-	4R7	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 4.7uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp.: -25 to +125°C
* Storage Temp.: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH 65%

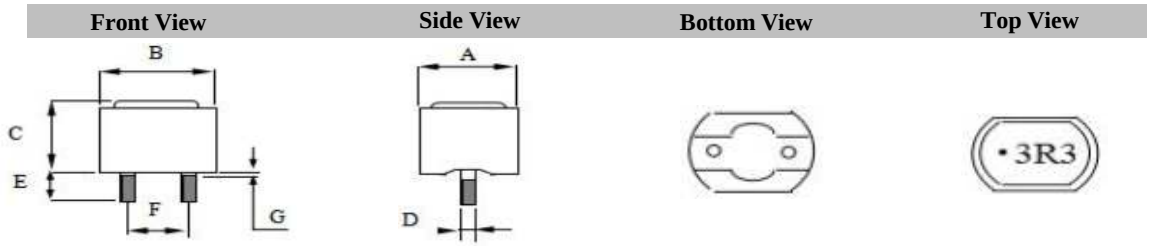
Test Equipment

* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension: [mm]



Size Code	A(max.)	B(max.)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
1316	13.3	14.6	16.9	by p/n	3.4	8.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
FMDI1316-3R3M	3.3	4.3	15.0	20.0
FMDI1316-4R7M	4.7	5.7	14.0	17.0
FMDI1316-100M	10.0	12.8	10.0	13.0
FMDI1316-150M	15.0	19.0	10.0	12.0
FMDI1316-220M	22.0	21.0	8.0	7.5
FMDI1316-330M	33.0	33.0	7.0	7.5

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

FMDI1810 Series (Rev. 5.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

FMDI	1810	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp.: -25 to +125°C
* Storage Temp.: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH 65%

Test Equipment

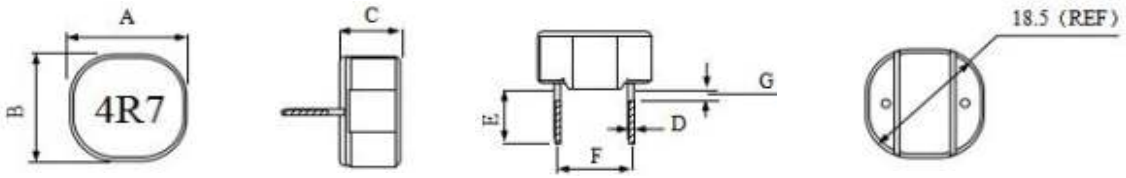
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension: [mm]

Top View	Side View	Bottom View



Size Code	A(max.)	B(max.)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(max.)
1810	17.8	17.8	10.0	by p/n	3.4	13.0	1.0
1812	17.8	17.8	12.0	by p/n	3.4	13.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
FMDI1810-4R7M	4.7	3.0	17.0	26.0
FMDI1810-100M	10.0	8.6	12.0	18.0
FMDI1812-150M	15.0	10.0	13.0	15.0
FMDI1812-330M	33.0	25.0	9.0	10.0

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

FMDI4424 Series (Rev. 5.0)

Designed with low RDC and ultra large current. Molded magnetic shielded type is suitable for high -density mounting and ultra low buzz noise. Soldering conditions are easily confirmed when mounting onto the board.

Features

* Shielded construction
* Ultra low buzz noise, due to un-assembly structure
* 100% Lead-free

Applications

* High density DC/DC converters
* POL convertes
* High current VRM/VRD for notebook / Server / desktop CPUs
* High speed charger

Product Identification

FMDI	4424	-	180	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 18uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp.: -25 to +125°C
* Storage Temp.: -25 to +125°C
* Storage Life Time: 12 Months @25°C,RH 65%

Test Equipment

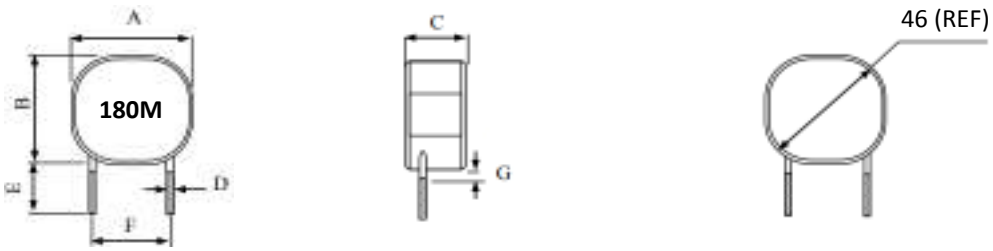
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension: [mm]

Top View	Side View	Front View



Size Code	A(max.)	B(max.)	C(max.)	D(±0.1)	E(±0.5)	F(±1.0)	G(max.)
4424	44.0	44.0	24.0	by p/n	3.5	29.0	1.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) max.	Irms (A) max.	Isat (A) max.
FMDI4424-100M	10.0	2.0	56.0	44.0
FMDI4424-180M	18.0	2.5	50.0	40.0

* Test Condition: @100KHz/ 0.1V, 25°C Ambient
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 20%

FAIS Series (Rev. 5.0)

Applications

* For widely use in a variety of circuits, flyback, multi-output buck and SEPIC.
* Power supply for Automotive, PC, LED, digital amplifier featuring, etc.

Features

* Super Irms.& extremely low resistance property especially above 100KHz, and super Isat.
* Compact structure, lower profile, lower buzz noise;
* High reliability on high temperature condition.

Operating & Storage Condition

* Operating Temp : -40 to +125°C
* Storage Temp : -40 to +85°C
* Storage Life Time: 12 months @25°C, RH 65%

Product Identification

FAIS	1811	-	220	M	□
1	2		3	4	5

1. Product Code
2. Size Code
3. Inductance: 22 uH
4. Tolerance: M = ±20%
5. Special

Test Equipment

* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

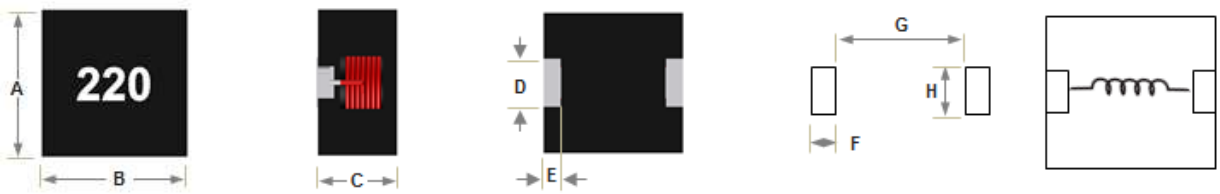
Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

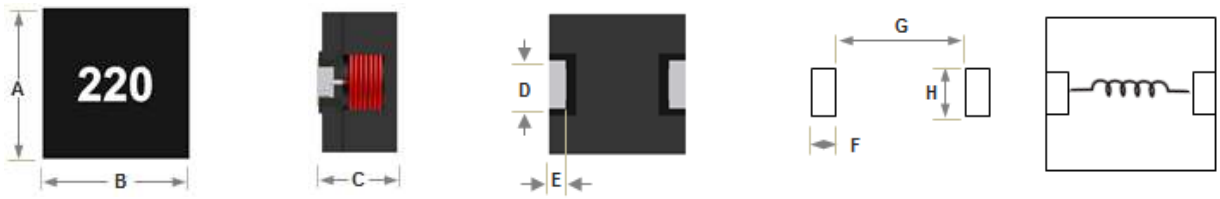
Dimension & Recommended Pad Layout: [mm]

Top View	Side View	Bottom View	Pad Layout	Schematic

(Size: 10XX)



(Size: 18XX~22XX)



Size Code	A(max.)	B(max.)	C(max.)	D(±0.2)	E(±0.2)	F(ref.)	G(ref.)	H(ref.)
1060	10.9	11.2	6.0	3.3	3.1	3.5	3.5	4.3
1811	18.5	18.5	11.5	6.3	2.2	2.8	12.7	7.0
1814	18.5	18.5	14.5	6.3	2.2	2.8	12.7	7.0
2213	22.5	23.0	13.5	6.3	2.2	2.8	16.5	7.0

FAIS Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance (uH)	DCR (mΩ) typ.	DCR (mΩ) max.	Irms. (A) max.	Isat. (A) max.
FAIS1060-100M	10.0	14.7	17.6	8.9	9.3
FAIS1060-150M	15.0	23.8	28.6	6.8	7.2
FAIS1060-220M	22.0	30.1	36.1	6.0	5.8
FAIS1060-330M	33.0	52.9	63.5	4.1	4.8
FAIS1060-470M	47.0	65.3	78.4	3.8	4.2
FAIS1060-680M	68.0	99.5	119.4	3.0	3.2
FAIS1060-101M	100.0	125.0	150.0	2.6	2.8
FAIS1811-1R0M	1.0	1.1	1.2	43.0	83.0
FAIS1811-2R2M	2.2	1.7	1.9	34.0	53.0
FAIS1811-3R3M	3.3	3.1	3.6	26.0	45.0
FAIS1811-4R0M	4.0	3.8	4.4	22.0	45.0
FAIS1811-4R7M	4.7	4.0	4.6	22.0	38.0
FAIS1811-6R8M	6.8	5.9	6.8	17.5	31.0
FAIS1811-100M	10.0	6.8	7.8	16.5	25.0
FAIS1811-220M	22.0	16.8	19.3	10.2	17.5
FAIS1811-330M	33.0	31.5	36.2	8.1	16.2
FAIS1811-470M	47.0	37.0	42.6	7.2	12.5
FAIS1811-560M	56.0	52.0	59.8	6.0	11.0
FAIS1811-680M	68.0	55.0	63.3	6.0	10.0
FAIS1811-820M	82.0	63.2	72.7	5.5	9.1
FAIS1811-101M	100.0	81.0	93.2	5.0	8.1
FAIS1811-151M	150.0	128.6	147.9	3.8	6.7
FAIS1811-201M	200.0	150.0	172.5	3.6	5.9

* Test Condition: @100KHz/ 0.25V ; Ambient temperature: 25°C ;
* Temperature rise current (Irms.): The value of D.C. current when the temperature rise is ΔT=50°C.
* Saturation current (Isat.): This indicates the value of D.C. current when inductance becomes 30% lower than its value without current.
* Tolerance: K=±10%, M=±20%, N=±30%.

FAIS Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance (uH)	DCR (mΩ) typ.	DCR (mΩ) max.	Irms. (A) max.	Isat. (A) max.
FAIS1814-1R0ME	1.0	0.40	0.46	72.0	87.0
FAIS1814-2R2M	2.2	1.18	1.36	42.0	55.0
FAIS1814-3R3M	3.3	1.52	1.75	37.0	47.0
FAIS1814-4R0M	4.0	2.60	2.99	28.5	47.0
FAIS1814-4R7M	4.7	2.60	2.99	28.5	41.0
FAIS1811-6R8M	6.8	4.64	5.34	21.5	33.5
FAIS1814-100M	10.0	4.64	5.34	21.5	26.0
FAIS1814-220M	22.0	10.87	12.50	14.0	18.0
FAIS1814-330M	33.0	27.40	31.51	8.8	15.2
FAIS1814-470M	47.0	31.18	35.86	8.3	12.2
FAIS1814-560M	56.0	35.00	40.25	8.0	11.5
FAIS1814-680M	68.0	38.80	44.62	7.5	10.5
FAIS1814-820M	82.0	42.60	48.99	7.0	9.5
FAIS1814-101M	100.0	73.60	84.64	5.5	8.5
FAIS1814-151M	150.0	93.10	107.07	4.7	7.0
FAIS1814-201M	200.0	121.00	139.15	4.2	6.0
FAIS2213-1R0M	1.0	0.91	1.05	54.0	132.0
FAIS2213-2R2MD	2.2	1.28	1.47	45.5	84.0
FAIS2213-2R2M	2.2	2.26	2.60	34.5	84.0
FAIS2213-3R3MD	3.3	2.50	2.88	32.5	72.0
FAIS2213-3R3M	3.3	3.30	3.80	28.5	72.0
FAIS2213-4R0M	4.0	4.03	4.63	25.5	72.0
FAIS2213-4R7M	4.7	4.03	4.63	25.5	62.0
FAIS2213-6R8M	6.8	4.77	5.49	23.5	50.0
FAIS2213-100M	10.0	5.50	6.33	22.0	40.0
FAIS2213-220M	22.0	18.07	20.78	12.1	27.5
FAIS2213-330M	33.0	26.60	30.59	10.0	23.0
FAIS2213-470M	47.0	30.27	34.81	9.4	18.5
FAIS2213-560M	56.0	40.70	46.81	8.0	17.5
FAIS2213-680M	68.0	42.90	49.34	7.8	15.1
FAIS2213-820M	82.0	47.30	54.40	7.5	14.0
FAIS2213-101M	100.0	67.40	77.51	6.3	13.0
FAIS2213-151M	150.0	108.20	124.43	5.0	10.5
FAIS2213-201M	200.0	122.90	141.34	4.6	8.8

* Test Condition: @100KHz/ 0.25V ; Ambient temperature: 25°C ;
* Temperature rise current (Irms.): The value of D.C. current when the temperature rise is ΔT=50°C.
* Saturation current (Isat.): This indicates the value of D.C. current when inductance becomes 30% lower than its value without current.
* Tolerance: K=±10%, M=±20%, N=±30%.

FHIS Series (Rev. 5.0)

Applications

* For widely use in a variety of circuits, flyback, multi-output buck and SEPIC.
* Power supply for LED, digital amplifier featuring etc.

Features

* Higher Irms.& lower resistance property especially above 50KHZ, and higher Isat.
* Stronger product structure
* Smaller size, lower noise

Operating & Storage Condition

* Operating Temp.:-40 to +125°C
* Storage Temp.: -40 to +85°C
* Storage Life Time: 12 months @25°C, RH 65%

Product Identification

FHIS	2213	-	220	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 22 uH
4. Tolerance: M = ±20%

Test Equipment

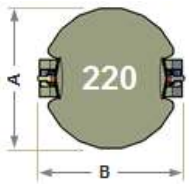
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

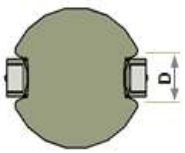
Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

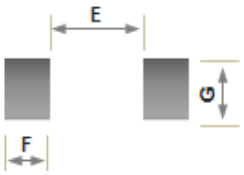
Dimension & Recommended Pad Layout: [mm]

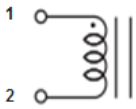
Top View	Side View	Bottom View





Recommended Pad Layout:	Schematic:





Remark: Keep the core away from PCB pad layout when assembling.

Size Code	A(±0.5)	B(±0.5)	C(±0.5)	D(±0.2)	E(ref.)	F(ref.)	G(ref.)
2213	21.7	22.8	13.5	5.8	17.6	3.2	5.0

Electrical Characteristics

P/N	L (uH)	DCR (mΩ) typ.	DCR (mΩ) max.	Irms. (A) max.	Isat. (A) max.
FHIS2213-100M	10	5.0	6.2	13.5	20.0
FHIS2213-150M	15	5.0	6.2	13.5	13.5
FHIS2213-220M	22	10.1	11.6	11.0	11.0
FHIS2213-330M	33	16.6	19.8	8.5	10.5
FHIS2213-470M	47	18.2	21.8	8.0	8.5
FHIS2213-680M	68	29.7	35.2	6.0	7.2
FHIS2213-101M	100	45.9	55.0	5.0	5.7

* Test Condition: Inductance @100KHz/ 0.25V.
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 30%

FSIS Series (Rev. 5.0)

Applications

* For widely use in a variety of circuits, flyback, multi-output buck and SEPIC.
* Power supply for LED, digital amplifier featuring etc.

Features

* Compact structure, lower profile, lower noise
* Super Irms.& much lower resistance property, especially above 50KHz, and super Isat.
* High reliability available for automotive application

Operating & Storage Condition

* Operating Temp.: -40 to +125°C
* StorageTemp.: -40 to +85°C
* Storage Life Time: 12 months@25°C, RH 65%

Product Identification

FSIS	2408	-	220	M	□
1	2		3	4	5

1. Product Code
2. Size Code
3. Inductance: 22 uH
4. Tolerance: M = ±20%
5. Various type： N-type; S-type

Test Equipment

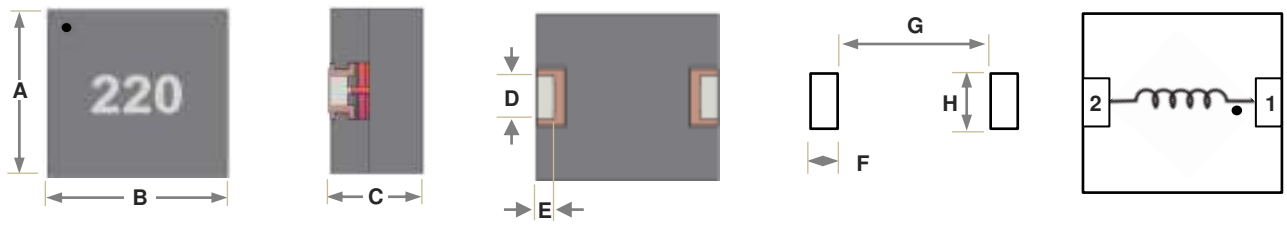
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

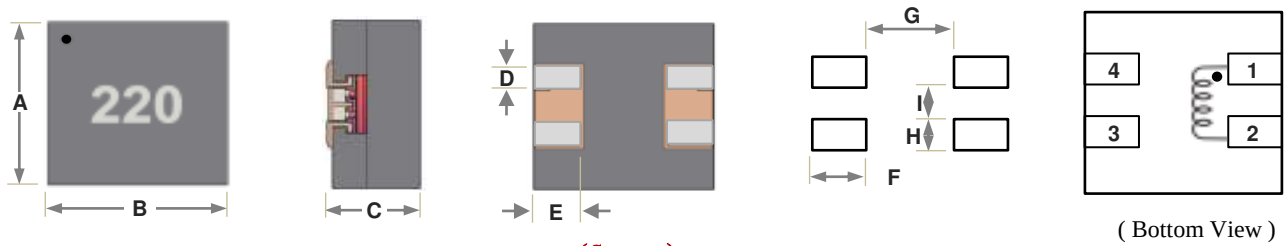
* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended Pad Layout: [mm]

Top View	Side View	Bottom View	Pad Layout	Schematic



（N-type）



（S-type）

(Bottom View)

Remark: Keep the core away from PCB pad layout when assembling.

Size Code	A(±0.4)	B(±0.4)	C(±0.4)	D(±0.2)	E(±0.2)	F(ref.)	G(ref.)	H(ref.)	I(ref.)
FSIS1811-N	18.0	18.0	11.5	6.3	2.2	2.8	18.4	7.0	-
FSIS1811-S	18.0	18.0	11.5	3.5	4.0	4.6	14.5	4.0	4.0
FSIS1814-N	18.0	18.0	14.5	6.3	2.2	2.8	18.4	7.0	-
FSIS1814-S	18.0	18.0	14.5	3.5	4.0	4.6	14.5	4.0	4.0
FSIS2408-N	24.0	24.0	8.2	6.3	2.2	2.8	18.4	7.0	-
FSIS2408-S	24.0	24.0	8.6	3.5	4.0	4.6	14.5	4.0	4.0
FSIS2410-N	24.0	24.0	10.2	6.3	2.2	2.8	18.4	7.0	-
FSIS2410-S	24.0	24.0	10.6	3.5	4.0	4.6	14.5	4.0	4.0
FSIS2413-N	24.0	24.0	13.2	6.3	2.2	2.8	18.4	7.0	-
FSIS2413-S	24.0	24.0	13.6	3.5	4.0	4.6	14.5	4.0	4.0

FSIS Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance (uH)	DCR (mΩ) typ.	DCR (mΩ) max.	Irms. (A) max.	Isat. (A) max.
FSIS1811-1R0MS	1.0	0.9	1.0	36.2	55.4
FSIS1811-2R2MS	2.2	1.3	1.5	29.5	37.7
FSIS1811-3R3MS	3.3	1.7	2.0	25.6	33.6
FSIS1811-4R0MS	4.0	1.7	2.0	25.6	27.7
FSIS1811-4R7MS	4.7	1.7	2.0	25.6	23.6
FSIS1811-6R8MS	6.8	5.1	5.9	14.8	24.4
FSIS1811-100MS	10.0	5.1	5.9	14.8	16.6
FSIS1811-220MS	22.0	13.3	15.2	9.2	12.6
FSIS1811-330MN	33.0	20.1	23.1	7.3	10.5
FSIS1811-470MN	47.0	23.3	26.8	6.9	8.5
FSIS1811-560MN	56.0	26.5	30.5	6.5	8.2
FSIS1811-680MN	68.0	26.5	30.5	6.5	6.7
FSIS1811-820MN	82.0	59.4	68.4	4.3	6.2
FSIS1811-101MN	100.0	69.1	79.4	4.0	6.0
FSIS1811-151MN	150.0	85.1	97.9	3.6	4.9
FSIS1811-201MN	200.0	101.2	116.4	3.3	4.4
FSIS1814-100MS	10.0	6.0	6.9	14.8	19.4
FSIS1814-220MS	22.0	9.4	10.8	11.8	14.5
FSIS1814-330MN	33.0	14.6	16.8	9.4	11.9
FSIS1814-470MN	47.0	22.4	25.7	7.6	9.6
FSIS1814-560MN	56.0	30.9	35.6	6.5	9.1
FSIS1814-680MN	68.0	32.7	37.6	6.3	7.9
FSIS1814-820MN	82.0	36.2	41.7	6.0	7.3
FSIS1814-101MN	100.0	43.3	49.8	5.5	7.1
FSIS1814-151MN	150.0	63.0	72.4	4.5	5.3
FSIS1814-201MN	200.0	94.8	109.0	3.7	4.6
FSIS2408-1R0MS	1.0	2.5	2.9	20.5	55.0
FSIS2408-2R2MS	2.2	3.7	4.3	17.0	45.0
FSIS2408-3R0MS	3.0	3.7	4.3	17.0	36.0
FSIS2408-3R3MS	3.3	3.7	4.3	17.0	34.0
FSIS2408-4R7MS	4.7	3.7	4.3	17.0	28.0
FSIS2408-6R8MS	6.8	3.7	4.3	17.0	19.5
FSIS2408-100MS	10.0	5.1	5.9	15.5	17.5
FSIS2408-150MS	15.0	7.3	8.4	13.0	14.5

* Test Condition: @100KHz/ 0.25V ; Ambient temperature: 25°C ;
* Irms.: The value of D.C. current when the temperature rise is ΔT=40°C.
* Isat.: This indicates the value of D.C. current when inductance becomes 30% lower than its value without current.
* Tolerance: K=±10%, M=±20%, N=±30%.

FSIS Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance (uH)	DCR (mΩ) typ.	DCR (mΩ) max.	Irms. (A) max.	Isat. (A) max.
FSIS2408-220MS	22.0	10.0	11.5	11.0	11.5
FSIS2408-330MN	33.0	24.8	28.5	7.0	13.0
FSIS2408-470MN	47.0	30.2	34.7	6.3	9.5
FSIS2408-560MN	56.0	33.8	38.9	6.0	8.5
FSIS2408-680MN	68.0	33.8	38.9	6.0	7.0
FSIS2408-101MN	100.0	76.2	87.6	4.5	7.0
FSIS2410-1R0MS	1.0	1.0	1.2	30.0	65.0
FSIS2410-2R2MS	2.2	1.6	1.8	27.0	54.0
FSIS2410-3R3MS	3.3	1.6	1.8	27.0	36.0
FSIS2410-4R0MS	4.0	2.0	2.2	25.0	35.0
FSIS2410-4R7MS	4.7	2.0	2.2	25.0	34.0
FSIS2410-6R8MS	6.8	2.0	2.2	25.0	26.0
FSIS2410-100MS	10.0	5.3	6.1	15.5	21.0
FSIS2410-220MS	22.0	7.5	8.6	11.0	12.0
FSIS2410-330MN	33.0	21.2	24.4	7.0	14.0
FSIS2410-470MN	47.0	21.2	24.4	7.0	10.0
FSIS2410-560MN	56.0	28.6	32.9	5.8	9.5
FSIS2410-680MN	68.0	31.3	36.0	5.5	9.0
FSIS2410-101MN	100.0	48.5	55.8	5.0	7.0
FSIS2413-1R0MS	1.0	1.0	1.2	32.0	75.0
FSIS2413-2R2MS	2.2	1.6	1.8	28.0	58.0
FSIS2413-3R3MS	3.3	1.6	1.8	28.0	38.0
FSIS2413-4R0MS	4.0	2.0	2.2	26.0	37.0
FSIS2413-4R7MS	4.7	2.0	2.2	26.0	36.0
FSIS2413-6R8MS	6.8	2.6	2.9	23.0	29.0
FSIS2413-100MS	10.0	3.1	3.6	22.0	24.0
FSIS2413-150MS	15.0	4.9	5.6	17.0	18.0
FSIS2413-220MS	22.0	8.9	10.2	13.5	16.0
FSIS2413-330MN	33.0	12.5	14.4	11.0	15.0
FSIS2413-470MN	47.0	18.6	21.4	9.0	12.0
FSIS2413-560MN	56.0	22.6	26.0	8.5	11.0
FSIS2413-680MN	68.0	26.3	30.2	7.8	10.0
FSIS2413-800MN	80.0	36.6	42.1	6.5	9.5
FSIS2413-101MN	100.0	39.0	44.9	6.0	8.0
FSIS2413-151MN	150.0	49.0	56.4	5.0	6.4
FSIS2413-201MN	200.0	65.4	75.2	4.5	5.6
FSIS2413-301MN	300.0	84.3	96.9	3.5	3.8

* Test Condition: @100KHz/ 0.25V ; Tolerance: K=±10%, M=±20%, N=±30%.
* Irms.: The value of D.C. current when the temperature rise is ΔT=40°C.
* Isat.: This indicates the value of D.C. current when inductance becomes 30% lower than its value without current.

FWHC Series (Rev. 5.0)

FWHC is the newest in open type ferrite wire wound chip inductors. It supports higher SRF, lower DCR & superior Q values than other ferrite chip inductors.

Features

* RoHS compliant
* Strong solderability by reflow soldering and soldering iron
* Highly accurate dimensions
* Low DCR & better Q value in ferrite series
* Terminals are highly resistant to external forces
* Highly resistant to mechanical shocks and pressure
* Highly reliable in environments of sudden temperature change and humidity

Applications

* Telecom and datacom applications such as Xdsl
* Cable modem
* Set-top box
* CATV filter/tuner
* Wireless LAN, etc

Product Indentfication

FWHC	0805	-	2R2	J	R
1	2		3	4	5

1. Product Code
2. Size Code
3. Inductance: 2.2uH
4. Tolerance: J=±5%, K=±10%, M=±20%
5. R: Low DCR Type

Operating & Storage Condition

* Operating Temp : -40 to +85°C
* Storage Temp : -40 to +85°C
* Storage Life Time: 12 Months @25°C , RH 65%

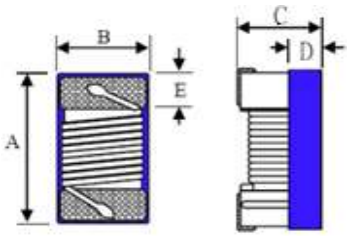
Test Equipment

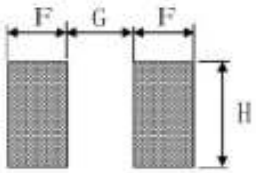
* HP4291A-Z, HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Sework Analyzer- SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 75+/-10%

Dimension & Recommended PAD Layout: [mm]





Size Code	A(max.)	B(max.)	C(max.)	D(ref.)	E(±0.1)	F(ref.)	G(ref.)	H(ref.)
0603	1.80	1.20	1.00	0.45	0.33	0.64	0.64	1.02
0805	2.40	1.65	1.2±0.1	0.65	0.44	1.02	0.76	1.78
1008	2.90	2.54	2.00	1.30	0.50	1.02	1.27	2.54
1210	3.60	2.90	2.40	1.10	0.50	1.20	2.00	2.70

FWHC Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH) @MHz	Tolerance	Q (min.) @MHz	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.	Irms (mA) typ.	Color Coding
FWHC0603-47N□	0.047/7.9	K	12/7.9	2000	0.075	1800	1600	White
FWHC0603-51N□	0.051/7.9	J	12/7.9	1500	0.075	1800	1500	Violet
FWHC0603-68N□	0.068/7.9	J	12/7.9	1500	0.120	1800	1400	Gray
FWHC0603-72N□	0.072/7.9	K	12/7.9	1500	0.120	1800	1400	Brown
FWHC0603-R10□	0.1/7.9	K	12/7.9	1150	0.130	1700	1300	Black
FWHC0603-R12□	0.12/7.9	J, K	12/7.9	1100	0.150	1700	1300	Orange
FWHC0603-R15□	0.15/7.9	J, K	15/7.9	1050	0.150	1600	1200	Brown
FWHC0603-R18□	0.18/7.9	J, K	15/7.9	950	0.150	1500	1100	Green
FWHC0603-R22□	0.22/7.9	J, K	15/7.9	900	0.300	1200	940	Red
FWHC0603-R24□	0.24/7.9	J, K	15/7.9	850	0.160	1460	1000	Green
FWHC0603-R27□	0.27/7.9	J, K	15/7.9	835	0.300	1460	950	Yellow
FWHC0603-R33□	0.33/7.9	J, K	15/7.9	725	0.400	1420	940	Orange
FWHC0603-R39□	0.39/7.9	J, K	15/7.9	680	0.410	1400	860	Bule
FWHC0603-R47□	0.47/7.9	J, K	15/7.9	640	0.430	1400	820	Black
FWHC0603-R56□	0.56/7.9	J, K	15/7.9	630	0.440	1400	770	Brown
FWHC0603-R68□	0.68/7.9	J, K	15/7.9	510	0.520	1340	730	Red
FWHC0603-R78□	0.78/7.9	J, K	15/7.9	465	0.630	1300	730	Orange
FWHC0603-R82□	0.82/7.9	J, K	15/7.9	460	0.690	1200	660	Yellow
FWHC0603-1R0□	1.0/7.9	J, K	15/7.9	320	0.810	1100	630	Green
FWHC0603-1R2□	1.2/7.9	J, K	15/7.9	270	0.870	1000	540	Blue
FWHC0603-1R5□	1.5/7.9	J, K	15/7.9	230	0.960	920	560	Violet
FWHC0603-2R2□	2.2/7.9	J, K	15/7.9	115	1.200	740	500	White
FWHC0603-2R7□	2.7/7.9	J, K	15/7.9	100	1.380	700	460	Black
FWHC0603-3R3□	3.3/7.9	J, K	15/7.9	84	1.500	680	420	Brown
FWHC0603-3R9□	3.9/7.9	J, K	15/7.9	75	1.500	600	400	Red
FWHC0603-4R7□	4.7/7.9	J, K	15/7.9	67	2.100	580	350	Orange
FWHC0603-5R6□	5.6/7.9	J, K	15/7.9	55	2.370	540	340	Yellow
FWHC0603-6R8□	6.8/7.9	J, K	15/7.9	48	3.100	500	330	Green
FWHC0603-7R8□	7.8/7.9	J, K	15/7.9	40	3.350	460	320	Blue
FWHC0603-8R2□	8.2/7.9	J, K	15/7.9	38	3.500	440	300	Violet
FWHC0603-100□	10/7.9	J, K	15/7.9	32	4.460	400	250	Gray

* IDC for Inductance drop 10% from its value without current.
* Irms for a 15°C rise above 25°C ambient.

FWHC Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH) @MHz	Tolerance	Q (min.) @MHz	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.	Irms (mA) typ.	Color Coding
FWHC0603-1R0□R	1.0/7.9	K,M	16/7.9	390	0.320	860	700	Black
FWHC0603-1R5□R	1.5/7.9	K,M	16/7.9	160	0.400	720	600	Brown
FWHC0603-1R8□R	1.8/7.9	K,M	16/7.9	121	0.430	640	580	Red
FWHC0603-2R2□R	2.2/7.9	K,M	16/7.9	103	0.560	600	580	Orange
FWHC0603-2R7□R	2.7/7.9	K,M	16/7.9	72	0.620	540	500	Yellow
FWHC0603-3R3□R	3.3/7.9	K,M	16/7.9	66	0.700	500	500	Green
FWHC0603-3R9□R	3.9/7.9	K,M	16/7.9	61	0.830	460	460	Blue
FWHC0603-4R7□R	4.7/7.9	K,M	16/7.9	51	0.970	400	420	Violet
FWHC0603-5R6□R	5.6/7.9	K,M	16/7.9	47	1.100	380	380	Gray
FWHC0603-6R8□R	6.8/7.9	K,M	16/7.9	43	1.500	340	340	White
FWHC0603-8R2□R	8.2/7.9	K,M	16/7.9	40	1.680	300	300	Black
FWHC0603-100□R	10/2.5	K,M	14/2.5	36	1.850	280	280	Brown
FWHC0603-120□R	12/2.5	K,M	14/2.5	32	2.280	260	260	Red
FWHC0603-150□R	15/2.5	K,M	14/2.5	29	2.600	240	240	Orange
FWHC0603-180□R	18/2.5	K,M	14/2.5	28	2.900	220	220	Yellow
FWHC0603-220□R	22/2.5	K,M	14/2.5	24	3.610	200	200	Green
FWHC0603-270□R	27/2.5	K,M	14/2.5	20	5.200	140	140	Blue
FWHC0603-330□R	33/2.5	K,M	14/2.5	15	6.600	120	120	Violet
FWHC0805-R47□R	0.47/7.9	K,M	14/7.9	850	0.120	1400	1500	Blue
FWHC0805-R68□R	0.68/7.9	K,M	14/7.9	765	0.150	1200	1300	Gray
FWHC0805-1R0□R	1.0/7.9	K,M	14/7.9	208	0.130	1100	1300	Black
FWHC0805-1R2□R	1.2/7.9	K	14/7.9	159	0.160	960	1270	Red
FWHC0805-1R5□R	1.5/7.9	K,M	14/7.9	159	0.170	920	1260	Brown
FWHC0805-2R2□R	2.2/7.9	K,M	13/7.9	87	0.220	740	1040	Red
FWHC0805-2R7□R	2.7/7.9	K,M	13/7.9	72	0.250	680	1040	Yellow
FWHC0805-3R3□R	3.3/7.9	K,M	12/7.9	70	0.280	620	1020	Orange
FWHC0805-3R9□R	3.9/7.9	K,M	14/7.9	61	0.380	580	960	Green
FWHC0805-4R7□R	4.7/7.9	K,M	14/7.9	51	0.430	520	840	Yellow
FWHC0805-5R6□R	5.6/7.9	K,M	12/7.9	47	0.500	480	800	Blue
FWHC0805-6R8□R	6.8/7.9	K,M	14/7.9	46	0.680	420	700	Green
FWHC0805-8R2□R	8.2/7.9	K,M	13/7.9	33	0.730	400	680	Violet
FWHC0805-100□R	10/2.5	J,K,M	14/2.5	31	0.850	360	560	Blue
FWHC0805-120□R	12/2.5	J,K,M	14/2.5	30	0.900	340	460	Gray
FWHC0805-150□R	15/2.5	J,K,M	15/2.5	28	1.400	300	380	Violet
FWHC0805-180□R	18/2.5	J,K,M	15/2.5	27	1.550	280	360	White
FWHC0805-220□R	22/2.5	J,K,M	15/2.5	20	1.760	240	340	Gray
FWHC0805-270□R	27/2.5	J,K,M	15/2.5	17	2.000	220	300	Black
FWHC0805-330□R	33/2.5	J,K,M	15/2.5	17	2.350	200	300	White
FWHC0805-470□R	47/2.5	J,K,M	14/2.5	15	3.400	160	280	Black
FWHC0805-560□R	56/2.5	J,K,M	14/2.5	10	4.420	150	240	Yellow
FWHC0805-680□R	68/2.5	J,K,M	14/2.5	10	4.450	140	240	Brown
FWHC0805-820□R	82/2.5	J,K,M	14/2.5	10	7.500	100	180	Orange
FWHC0805-101□R	100/1.0	J,K,M	10/1.0	9	7.500	100	180	Red

* IDC for Inductance drop 10% from its value without current.
* Irms for a 15°C rise above 25°C ambient.

FWHC Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH) @MHz	Tolerance	Q (min.) @MHz	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.	Irms (mA) typ.	Color Coding		
								1st	2nd	3rd
FWHC1008-R22□	0.22/25	J,K	35/25	800	0.150	2600	2400	Red	Red	Brown
FWHC1008-R47□	0.47/25	K	35/25	460	0.200	2400	1100	Yellow	Violet	Brown
FWHC1008-R82□	0.82/25	J,K	35/25	360	0.350	1800	1000	Gray	Red	Brown
FWHC1008-1R0□	1/7.9	K	32/7.9	340	0.340	2100	900	Brown	Black	Red
FWHC1008-1R2□	1.2/7.9	J,K	25/7.9	300	0.250	1900	860	Brown	Red	Red
FWHC1008-1R5□	1.5/7.9	J,K	32/7.9	230	0.420	1500	740	Brown	Green	Red
FWHC1008-2R2□	2.2/7.9	J,K	27/7.9	140	0.500	1200	700	Red	Red	Red
FWHC1008-2R7□	2.7/7.9	J,K	27/7.9	130	0.550	1300	560	Red	Violet	Red
FWHC1008-3R3□	3.3/7.9	J,K	27/7.9	125	0.600	1300	540	Orange	Orange	Red
FWHC1008-3R9□	3.9/7.9	J,K	27/7.9	100	0.800	1200	480	Orange	White	Red
FWHC1008-4R7□	4.7/7.9	J,K	30/7.9	90	0.900	1100	400	Yellow	Violet	Red
FWHC1008-5R6□	5.6/79	J,K	27/7.9	60	1.000	1000	400	Green	Blue	Red
FWHC1008-6R8□	6.8/7.9	J,K	27/7.9	60	1.050	950	420	Blue	Gray	Red
FWHC1008-8R2□	8.2/7.9	J,K	25/7.9	55	1.200	850	380	Gray	Red	Red
FWHC1008-100□	10/2.5	J,K	23/2.5	55	1.550	800	240	Brown	Black	Orange
FWHC1008-120□	12/2.5	J,K	23/2.5	36	2.100	630	220	Brown	Red	Orange
FWHC1008-150□	15/2.5	J,K	23/2.5	36	2.380	650	200	Brown	Green	Orange
FWHC1008-180□	18/2.5	J,K	23/2.5	32	2.500	550	180	Brown	Gray	Orange
FWHC1008-220□	22/2.5	J,K	23/2.5	29	2.920	550	180	Red	Red	Orange
FWHC1008-330□	33/2.5	J,K	23/2.5	21	4.100	450	140	Orange	Orange	Orange
FWHC1008-470□	47/2.5	J,K	23/2.5	17	7.800	350	100	Yellow	Violet	Orange
FWHC1008-101□	100/1	J,K	13/1	4	13.200	200	100	Brown	Black	Yellow
FWHC1008-221□	100/1	J,K	13/1	3	26.500	140	60	Red	Red	Yellow
FWHC1008-331□	100/1	J,K	13/1	2	32.500	110	50	Orange	Orange	Yellow

* IDC for Inductance drop 10% from its value without current.
* Irms for a 15°C rise above 25°C ambient.

FWHC Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH) @MHz	Tolerance	Q (min.) @MHz	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.	Irms (mA) typ.	Color Coding		
								1st	2nd	3rd
FWHC1210-R39□	0.39/25	J	40/25	500	0.090	3000		Orange	White	Brown
FWHC1210-R56□	0.56/25	K	40/25	500	0.100	3000		Green	Blue	Brown
FWHC1210-1R0□	1/7.9	J,K	35/7.9	340	0.125	2600		Brown	Black	Red
FWHC1210-1R2□	1.2/7.9	J,K	35/7.9	28	0.135	2400		Brown	Red	Red
FWHC1210-1R5□	1.5/7.9	J,K	30/7.9	160	0.145	2200		Brown	Green	Red
FWHC1210-2R2□	2.2/7.9	J,K	30/7.9	100	0.170	1800		Red	Red	Red
FWHC1210-2R5□	2.5/7.9	J,K	30/7.9	80	0.190	1700		Red	Green	Red
FWHC1210-3R3□	3.3/7.9	J,K	30/7.9	70	0.210	1500		Orange	Orange	Red
FWHC1210-4R7□	4.7/7.9	J,K	28/7.9	55	0.300	1300		Yellow	Violet	Red
FWHC1210-6R8□	6.8/7.9	J,K	28/7.9	45	0.370	1000		Blue	Gray	Red
FWHC1210-8R2□	8.2/7.9	J,K	28/7.9	45	0.470	940		Gray	Red	Red
FWHC1210-100□	10/2.5	J,K	22/2.5	47	0.500	900		Brown	Black	Orange
FWHC1210-120□	12/2.5	J,K	22/2.5	42	0.680	770		Brown	Red	Orange
FWHC1210-150□	15/2.5	J,K	22/2.5	34	0.720	740		Brown	Green	Orange
FWHC1210-180□	18/2.5	J,K	22/2.5	28	0.950	630		Brown	Gray	Orange
FWHC1210-220□	22/2.5	J,K	22/2.5	25	1.100	600		Red	Red	Orange
FWHC1210-270□	27/2.5	J,K	20/2.5	18	1.250	520		Red	Violet	Orange
FWHC1210-330□	33/2.5	J,K	20/2.5	13	1.370	490		Orange	Orange	Orange
FWHC1210-470□	47/2.5	J,K	20/2.5	12	1.880	400		Yellow	Violet	Orange
FWHC1210-560□	56/2.5	J,K	22/2.5	10	2.750	360		Green	Gray	Orange
FWHC1210-680□	68/2.5	J,K	22/2.5	10	3.000	340		Blue	Gray	Orange
FWHC1210-820□	82/2.5	J,K	22/2.5	10	4.100	300		Gray	Red	Orange
FWHC1210-101□	100/1	J,K	15/1	8	4.682	270		Brown	Black	Yellow
FWHC1210-121□	120/1	J,K	15/1	7	5.800	220		Brown	Red	Yellow
FWHC1210-151□	150/1	J,K	13/1	7	6.102	220		Brown	Green	Yellow
FWHC1210-181□	180/1	J,K	13/1	3	7.100	200		Brown	Gray	Yellow
FWHC1210-221□	220/1	J,K	13	3	7.650	180		Red	Red	Yellow
FWHC1210-331□	330/1	J,K	13/1	3	12.620	160		Orange	Orange	Yellow
FWHC1210-471□	470/1	J,K	13/1	3	25.000	120		Yellow	Violet	Yellow
FWHC1210-561□	560/1	J,K	13/1	2	27.000	100		Green	Blue	Yellow
FWHC1210-681□	680/1	J,K	13/1	2	31.000	100		Blue	Gray	Yellow
FWHC1210-821□	820/1	J,K	10	2	42.000	50		Gray	Red	Yellow
FWHC1210-101□	1000/1	J,K	10/1	2	46.000	50		Brown	Black	Red

* IDC for Inductance drop 10% from its value without current.
* Irms for a 15°C rise above 25°C ambient.

FWHF Series (Rev. 5.0)

Due to accurate wire winding technology, these chip inductors are designed for filtering, impedance matching, resonance and choke circuits for RF designer. Both standard series custom designs are available.

Features

* Can be used for high frequency bands up to GHz and stable inductance at high frequency.
* The high self resonant frequency realizes high Q value.
* Resin-coated surface enables excellent mounting.
* Low DC resistance design is ideal for low loss.
* High output and low power consumption.

Applications

* For high-frequency applications including mobile phones,portable phones.
* Base Station.
* Wireless LAN/ mouse/ keyboard/ earphone
* Bluetooth
* Remote control
* Repeater

Product Indentfication

FWHF	0805	-	2R2	J
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 2.2uH
4. Tolerance: G=2%, J=±5%, K=±10%

Operating & Storage Condition

* Operating Temp : -40 to +85°C
* Storage Temp : -40 to +85°C
* Storage Life Time: 12 Months @25°C , RH 65%

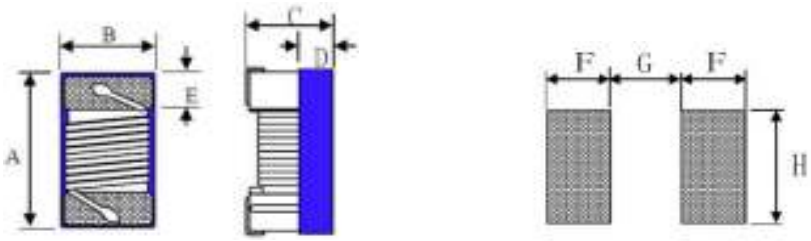
Test Equipment

* HP4291A-Z, HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Setwork Analyzer- SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]



Size Code	A(max.)	B(max.)	C(max.)	D(ref.)	E(±0.1)	F(ref.)	G(ref.)	H(ref.)
0402	1.27	0.76	0.61	0.15	0.23	0.50	0.46	0.66
0603	1.80	1.20	1.02	0.45	0.33	0.64	0.64	1.02
0805	2.40	1.73	1.52	0.65	0.44	1.02	0.76	1.78
1008	2.90	2.54	2.03	1.30	0.45	1.02	1.27	2.54

FWHF Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (nH) @MHz	Tolerance	Q @MHz min.	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.	900MHz		1.7GHz	
							L typ.	Q typ.	L typ.	Q typ.
FWHF0402-1N0□	1.0/250	K	16/250	12.70	0.045	1360	1.02	77	1.02	69
FWHF0402-1N9□	1.9/250	J,K	16/250	11.30	0.070	1040	1.72	68	1.74	82
FWHF0402-2N0□	2.0/250	J,K	16/250	11.10	0.070	1040	1.93	54	1.93	75
FWHF0402-2N2□	2.2/250	J,K	19/250	10.80	0.070	960	2.19	59	2.23	100
FWHF0402-2N4□	2.4/250	J,K	15/250	10.50	0.070	790	2.24	51	2.27	68
FWHF0402-2N7□	2.7/250	J,K	16/250	10.40	0.120	640	2.23	42	2.25	61
FWHF0402-3N3□	3.3/250	J,K	19/250	7.00	0.066	840	3.10	65	3.12	87
FWHF0402-3N6□	3.6/250	J,K	19/250	6.80	0.066	840	3.56	45	3.62	71
FWHF0402-3N9□	3.9/250	J,K	19/250	5.80	0.066	840	3.89	50	4.00	75
FWHF0402-4N3□	4.3/250	J,K	18/250	6.00	0.091	700	4.19	47	4.30	71
FWHF0402-4N7□	4.7/250	J,K	15/250	4.70	0.130	640	4.55	48	4.68	68
FWHF0402-5N1□	5.1/250	J,K	20/250	4.80	0.083	800	5.15	56	5.25	82
FWHF0402-5N6□	5.6/250	J,K	20/250	4.80	0.083	760	5.16	54	5.28	81
FWHF0402-6N2□	6.2/250	J,K	20/250	4.80	0.083	760	6.16	52	6.37	76
FWHF0402-6N8□	6.8/250	J,K	20/250	4.80	0.083	680	6.56	63	6.93	78
FWHF0402-7N5□	7.5/250	J,K	22/250	4.80	0.104	680	7.91	60	8.22	88
FWHF0402-8N2□	8.2/250	J,K	22/250	4.40	0.104	680	8.50	57	8.85	84
FWHF0402-8N7□	8.7/250	J,K	18/250	4.10	0.200	480	8.78	54	9.21	73
FWHF0402-9N0□	9.0/250	J,K	22/250	4.16	0.104	680	9.07	62	9.53	78
FWHF0402-9N5□	9.5/250	J,K	18/250	4.00	0.200	480	9.42	54	9.98	69
FWHF0402-10N□	10/250	J,K	21/250	3.90	0.195	480	9.80	50	10.10	67
FWHF0402-11N□	11/250	J,K	24/250	3.68	0.120	640	10.70	52	11.20	78
FWHF0402-12N□	12/250	J,K	24/250	3.60	0.120	640	11.90	53	12.70	71
FWHF0402-13N□	13/250	J,K	24/250	3.45	0.210	440	13.40	51	14.60	57
FWHF0402-15N□	15/250	J,K	24/250	3.28	0.172	560	14.60	55	15.50	77
FWHF0402-16N□	16/250	J,K	24/250	3.10	0.220	560	16.60	46	18.80	47
FWHF0402-18N□	18/250	J,K	24/250	3.10	0.230	420	18.30	57	20.30	62
FWHF0402-19N□	19/250	J,K	24/250	3.04	0.202	480	19.10	50	21.10	67
FWHF0402-20N□	20/250	J,K	25/250	3.00	0.250	420	20.70	52	23.70	53
FWHF0402-22N□	22/250	J,K	25/250	2.80	0.300	400	23.20	53	26.80	53
FWHF0402-23N□	23/250	J,K	22/250	2.72	0.300	400	23.80	49	26.90	64
FWHF0402-24N□	24/250	J,K	25/250	2.70	0.300	400	25.10	51	29.50	50
FWHF0402-27N□	27/250	G,J,K	24/250	2.48	0.300	400	28.70	49	33.50	63
FWHF0402-30N□	30/250	J,K	25/250	2.35	0.350	400	31.10	46	38.50	39
FWHF0402-33N□	33/250	J,K	24/250	2.35	0.350	400	34.90	31	41.70	32
FWHF0402-36N□	36/250	J,K	24/250	2.32	0.440	320	39.50	44	48.40	53
FWHF0402-39N□	39/250	J,K	25/250	2.10	0.550	200	41.70	47	50.20	45
FWHF0402-40N□	40/250	J,K	24/250	2.24	0.440	320	39.00	44	47.40	33
FWHF0402-43N□	43/250	J,K	25/250	2.03	0.810	100	45.80	46	61.60	34
FWHF0402-47N□	47/250	J,K	20/250	2.10	0.830	150	50.00	38	55.80	37
FWHF0402-51N□	51/250	J,K	25/250	1.75	0.820	100	50.40	47	59.40	37
FWHF0402-56N□	56/250	J,K	22/250	1.76	0.970	100	57.40	49	72.40	40
FWHF0402-68N□	68/250	J,K	22/250	1.62	1.120	100	69.60	45	83.40	38
FWHF0402-75N□	75/250	J	22/250	1.50	1.300	80				
FWHF0402-R10□	100/250	J	22/250	1.16	2.000	30				
FWHF0402-R12□	120/250	J,K	20/250	>1.80	2.660	50				

* Tolerance: G=±2%, J=±5%, K=±10%
* Irms for a 15°C rise above 25°C ambient.

FWHF Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (nH) @MHz	Tolerance	Q @MHz min.	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.	900MHz		1.7GHz		Color Coding
							L typ.	Q typ.	L typ.	Q typ.	
FWHF0603-1N6□	1.6/250	J,K	24/250	12500	0.030	700	1.61	73	1.61	90	Red
FWHF0603-1N8□	1.8/250	J,K	16/250	12500	0.045	700	1.77	47	1.77	60	Black
FWHF0603-2N2□	2.2/250	J,K	13/250	12500	0.025	700	2.14	26	2.13	34	Yellow
FWHF0603-3N3□	3.3/250	J,K	30/250	5900	0.045	700	3.42	73.45	3.46	95	Blue
FWHF0603-3N6□	3.6/250	J,K	22/250	5900	0.063	700	3.68	64	3.73	83	Red
FWHF0603-3N9□	3.9/250	J,K	22/250	6900	0.080	700	3.90	50.11	3.94	67	Brown
FWHF0603-4N3□	4.3/250	J,K	22/250	5900	0.063	700	4.44	68	4.59	82	Orange
FWHF0603-4N7□	4.7/250	J,K	20/250	5800	0.085	700	4.65	58.79	4.75	75	Violet
FWHF0603-5N1□	5.1/250	J,K	20/250	5700	0.115	700	5.07	55	5.21	70	Green
FWHF0603-5N6□	5.6/250	J,K	20/250	5800	0.160	700	5.48	43.67	5.66	55	Black
FWHF0603-6N3□	6.3/250	J,K	26/250	5700	0.115	700	6.54	69	6.71	89	White
FWHF0603-6N8□	6.8/250	J,K	27/250	5800	0.125	700	6.89	62.87	7.08	82	Red
FWHF0603-7N5□	7.5/250	J,K	28/250	4800	0.115	700	7.57	65	7.84	86	Brown
FWHF0603-8N2□	8.2/250	J,K	30/250	4700	0.125	700	8.13	65.01	8.47	82	Orange
FWHF0603-8N7□	8.7/250	J,K	28/250	4600	0.109	700	8.76	64	9.22	76	Yellow
FWHF0603-9N1□	9.1/250	J,K	28/250	4600	0.120	700	9.21	62	9.77	76	Black
FWHF0603-9N5□	9.5/250	J,K	28/250	5400	0.145	700	9.79	62	10.58	69	Blue
FWHF0603-10N□	10/250	G,J,K	31/250	4800	0.145	700	10.36	69.22	10.81	91	Orange
FWHF0603-11N□	11/250	G,J,K	30/250	4000	0.145	700	11.22	68	11.80	86	Gray
FWHF0603-12N□	12/250	G,J,K	35/250	4000	0.140	700	12.37	69.26	13.22	83	Yellow
FWHF0603-15N□	15/250	G,J,K	35/250	4000	0.180	700	15.22	77	16.37	89	Green
FWHF0603-16N□	16/250	G,J,K	34/250	3300	0.170	700	16.60	79.11	18.38	80	White
FWHF0603-18N□	18/250	G,J,K	35/250	3100	0.180	700	18.44	76	20.05	80	Blue
FWHF0603-19N□	19/250	G,J,K	35/250	3000	0.190	700	19.71	73.77	23.35	63	Brown
FWHF0603-20N□	20/250	G,J,K	38/250	3000	0.180	700	20.50	80	23.27	87	Red
FWHF0603-22N□	22/250	G,J,K	38/250	3000	0.190	700	22.66	78.78	25.67	84	Violet
FWHF0603-23N□	23/250	G,J,K	38/250	2850	0.205	700	24.19	71	28.48	73	Orange
FWHF0603-24N□	24/250	G,J,K	36/250	2650	0.205	700	25.74	70.93	31.01	63	Black
FWHF0603-25N□	25/250	G,J,K	38/250	2800	0.210	600	25.93	85	29.73	90	Yellow
FWHF0603-27N□	27/250	G,J,K	40/250	2800	0.220	600	29.03	59.83	37.43	46	Gray
FWHF0603-30N□	30/250	G,J,K	37/250	2250	0.220	600	32.91	69	41.66	60	Brown
FWHF0603-33N□	33/250	G,J,K	40/250	2300	0.220	600	35.72	61.57	47.39	50	White
FWHF0603-36N□	26/250	G,J,K	37/250	2080	0.250	600	39.45	64	50.92	60	Red
FWHF0603-39N□	39/250	G,J,K	40/250	2200	0.260	600	42.71	61.22	58.42	48	Black
FWHF0603-43N□	43/250	G,J,K	38/250	2000	0.280	600	47.21	63	64.17	53	Orange
FWHF0603-47N□	47/250	G,J,K	38/200	2000	0.280	600	51.82	52.98	77.03	39	Brown
FWHF0603-51N□	51/250	G,J,K	38/250	2130	0.300	600	59.27	51	103.80	24	Violet
FWHF0603-56N□	56/250	G,J,K	38/200	1900	0.310	600	64.38	51.47	108.10	29	Red
FWHF0603-62N□	62/250	G,J,K	37/200	1800	0.330	600	73.30	43	156.50	16	Gray
FWHF0603-68N□	68/250	G,J,K	37/200	1700	0.340	600	80.23	44.33	174.00	18	Orange
FWHF0603-72N□	72/250	G,J,K	34/150	1700	0.490	400	86.67	41	212.90	16	Yellow
FWHF0603-79N□	79/250	G,J,K	34/150	1700	0.500	400	87.02	44.18			White
FWHF0603-82N□	82/250	G,J,K	34/150	1700	0.540	400	101.20	38	300.60	12	Green
FWHF0603-91N□	91/250	G,J,K	34/150	1500	0.560	400	111.80	49.36			Brown
FWHF0603-R10□	100/150	G,J,K	34/150	1400	0.580	400	126.90	36			Blue
FWHF0603-R11□	110/150	G,J,K	32/150	1350	0.610	300	146.80	34.58			Violet
FWHF0603-R12□	120/150	G,J,K	32/150	1300	0.650	300	166.80	29			Gray
FWHF0603-R13□	130/150	G,J,K	32/150	1200	0.750	280	180.10	36.93			Orange
FWHF0603-R15□	150/150	G,J,K	28/150	990	0.920	280	234.90	22			White
FWHF0603-R17□	170/100	G,J,K	25/100	990	1.150	240	228.40	34.96			Yellow
FWHF0603-R18□	180/100	G,J,K	25/100	990	1.250	240	289.10	20			Black
FWHF0603-R19□	190/100	G,J,K	25/100	990	1.350	200	279.10	30.83			Green
FWHF0603-R20□	200/100	G,J,K	25/100	990	1.500	200					Orange
FWHF0603-R22□	220/100	G,J,K	25/100	900	1.600	250					Brown
FWHF0603-R24□	240/100	G,J,K	25/100	900	1.900	200					Violet
FWHF0603-R27□	270/100	G,J,K	25/100	900	2.000	170					Red
FWHF0603-R33□	330/100	G,J,K	25/100	900	2.750	100					Blue
FWHF0603-R34□	34/100	G,J,K	25/100	900	2.900	100					Gray
FWHF0603-R39□	390/100	G,J,K	25/100	900	3.150	100					Yellow
FWHF0603-R47□	470/100	G,J,K	25/100	750	4.000	80					Green

* Tolerance: G=±2%, J=±5%, K=±10%
* Irms for a 15°C rise above 25°C ambient.

FWHF Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (nH) @MHz	Tolerance	Q @MHz min.	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.	Color Coding
FWHF0805-2N8□	2.8/250	J,K	55/1500	7900	0.06	800	Gray
FWHF0805-3N0□	3.0/250	J,K	55/1500	7900	0.08	800	White
FWHF0805-5N1□	5.1/250	J,K	60/1000	5800	0.06	600	Yellow
FWHF0805-5N6□	5.6/250	J,K	65/1000	5500	0.08	600	Orange
FWHF0805-6N2□	6.2/250	J,K	50/1000	5500	0.11	800	Violet
FWHF0805-6N8□	6.8/250	J,K	50/1000	5500	0.11	600	Brown
FWHF0805-7N5□	7.5/250	J,K	50/1000	4500	0.14	600	Green
FWHF0805-8N2□	8.2/250	J,K	50/1000	4700	0.16	600	Red
FWHF0805-8N7□	8.7/250	J,K	50/1000	4700	0.23	600	Violet
FWHF0805-10N□	10/250	G,J,K	60/500	4200	0.10	600	Blue
FWHF0805-12N□	12/250	G,J,K	50/500	4000	0.15	600	Orange
FWHF0805-15N□	15/250	G,J,K	50/500	3400	0.17	700	Yellow
FWHF0805-18N□	18/250	G,J,K	50/500	3300	0.20	600	Green
FWHF0805-22N□	22/250	G,J,K	55/500	2600	0.22	500	Blue
FWHF0805-24N□	24/250	G,J,K	50/500	2000	0.22	500	Gray
FWHF0805-27N□	27/250	G,J,K	55/500	2500	0.25	500	Violet
FWHF0805-33N□	33/250	G,J,K	60/500	2050	0.27	500	Gray
FWHF0805-36N□	36/250	G,J,K	55/500	1700	0.27	500	Orange
FWHF0805-39N□	39/250	G,J,K	60/500	2000	0.29	500	White
FWHF0805-43N□	43/200	G,J,K	60/500	1650	0.34	500	Yellow
FWHF0805-47N□	47/200	G,J,K	60/500	1650	0.31	700	Black
FWHF0805-56N□	56/200	G,J,K	60/500	1550	0.34	500	Brown
FWHF0805-68N□	68/200	G,J,K	60/500	1450	0.38	500	Red
FWHF0805-75N□	75/200	G,J,K	60/500	1400	0.40	400	Violet
FWHF0805-82N□	82/150	G,J,K	65/500	1300	0.42	400	Orange
FWHF0805-91N□	91/150	G,J,K	65/500	1200	0.48	400	Black
FWHF0805-R10□	100/150	G,J,K	65/500	1200	0.46	400	Yellow
FWHF0805-R11□	110/150	G,J,K	50/250	1000	0.48	400	Brown
FWHF0805-R12□	120/150	G,J,K	50/250	1100	0.51	400	Green
FWHF0805-R15□	150/100	G,J,K	50/250	920	0.56	400	Blue
FWHF0805-R16□	160/100	G,J,K	50/250	900	0.60	400	Gray
FWHF0805-R18□	180/100	G,J,K	50/250	870	0.64	400	Violet
FWHF0805-R20□	200/100	G,J,K	50/250	865	0.68	400	Red
FWHF0805-R22□	220/100	G,J,K	50/250	850	0.70	400	Gray
FWHF0805-R24□	240/100	G,J,K	44/250	690	1.00	350	Red
FWHF0805-R25□	250/100	G,J,K	48/250	680	1.00	350	Yellow
FWHF0805-R27□	270/100	G,J,K	48/250	650	1.00	350	White
FWHF0805-R33□	330/100	G,J,K	48/250	750	1.40	310	Black
FWHF0805-R36□	360/100	J,K	48/250	650	1.45	300	Orange
FWHF0805-R39□	390/100	G,J,K	48/250	560	1.50	290	Brown
FWHF0805-R43□	430/50	G,J,K	33/100	430	1.70	270	Blue
FWHF0805-R47□	470/50	G,J,K	30/100	375	1.76	250	Violet
FWHF0805-R56□	560/25	G,J,K	23/50	340	1.90	230	Orange
FWHF0805-R62□	620/25	G,J,K	23/50	220	2.20	210	White
FWHF0805-R68□	680/25	G,J,K	23/50	188	2.20	190	Green
FWHF0805-R75□	750/25	G,J,K	23/50	200	2.30	180	Violet
FWHF0805-R82□	820/25	G,J,K	23/50	215	2.35	180	Blue
FWHF0805-R91□	910/25	J,K	22/50	210	2.40	180	Yellow
FWHF0805-1R0□	1000/25	G,J,K	22/50	200	2.45	180	Violet
FWHF0805-1R2□	1200/7.9	G,J,K	16/7.9	160	2.45	170	Green
FWHF0805-1R5□	1500/7.9	G,J,K	16/7.9	120	2.50	170	Black
FWHF0805-1R8□	1800/7.9	G,J,K	16/7.9	80	2.50	170	Brown
FWHF0805-2R2□	2200/7.9	G,J,K	16/7.9	60	2.70	160	Red
FWHF0805-2R7□	2700/7.9	G,J,K	16/7.9	50	3.80	160	Orange

* Tolerance: G=±2%, J=±5%, K=±10%
* Irms for a 15°C rise above 25°C ambient.

FWHF Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (nH) @MHz	Tolerance	Q @MHz min.	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.	Color Coding		
							1st	2nd	3rd
FWHF1008-10N□	10/50	G,J,K	50/500	4100	0.08	1000	Brown	Black	Black
FWHF1008-12N□	12/50	G,J,K	50/500	3300	0.09	1000	Brown	Red	Black
FWHF1008-15N□	15/50	G,J,K	50/500	2500	0.16	1000	Brown	Green	Black
FWHF1008-18N□	18/50	G,J,K	50/350	2500	0.11	1000	Brown	Gray	Black
FWHF1008-22N□	22/50	G,J,K	55/350	2400	0.12	1000	Red	Red	Black
FWHF1008-27N□	27/50	G,J,K	50/350	1600	0.13	1000	Red	Violet	Black
FWHF1008-33N□	33/50	G,J,K	60/350	1600	0.14	1000	Orange	Orange	Black
FWHF1008-39N□	39/50	G,J,K	60/350	1500	0.15	1000	Orange	White	Black
FWHF1008-47N□	47/50	G,J,K	65/350	1500	0.16	1000	Yellow	Violet	Black
FWHF1008-56N□	56/50	G,J,K	65/350	1300	0.18	1000	Green	Blue	Black
FWHF1008-68N□	68/50	G,J,K	65/350	1300	0.20	1000	Blue	Gray	Black
FWHF1008-82N□	82/50	G,J,K	60/350	1000	0.22	1000	Gray	Red	Black
FWHF1008-R10□	100/25	G,J,K	60/350	1000	0.56	650	Brown	Black	Brown
FWHF1008-R12□	120/25	G,J,K	60/350	950	0.63	650	Brown	Red	Brown
FWHF1008-R15□	150/25	G,J,K	45/100	850	0.70	580	Brown	Green	Brown
FWHF1008-R18□	180/25	G,J,K	45/100	750	0.77	620	Brown	Gray	Brown
FWHF1008-R22□	220/25	G,J,K	45/100	700	0.84	500	Red	Red	Brown
FWHF1008-R27□	270/25	G,J,K	45/100	600	0.91	500	Red	Violet	Brown
FWHF1008-R33□	330/25	G,J,K	45/100	570	1.05	450	Orange	Orange	Brown
FWHF1008-R39□	390/25	G,J,K	45/100	500	1.12	470	Orange	White	Brown
FWHF1008-R47□	470/25	G,J,K	45/100	450	1.19	470	Yellow	Violet	Brown
FWHF1008-R56□	560/25	G,J,K	45/100	415	1.33	400	Green	Blue	Brown
FWHF1008-R62□	620/25	G,J,K	45/100	375	1.40	300	Blue	Red	Brown
FWHF1008-R68□	680/25	G,J,K	45/100	375	1.47	400	Blue	Gray	Brown
FWHF1008-R75□	750/25	G,J,K	45/100	360	1.54	360	Violet	Green	Brown
FWHF1008-R82□	820/25	G,J,K	45/100	350	1.61	400	Gray	Red	Brown
FWHF1008-R91□	910/25	G,J,K	35/50	320	1.68	380	White	Brown	Brown
FWHF1008-1R0□	1000/25	G,J,K	35/50	290	1.75	400	Brown	Black	Red
FWHF1008-1R2□	1200/7.9	G,J,K	35/50	250	2.00	310	Brown	Red	Red
FWHF1008-1R5□	1500/7.9	G,J,K	28/50	200	2.30	330	Brown	Green	Red
FWHF1008-1R8□	1800/7.9	G,J,K	28/50	160	2.60	300	Brown	Gray	Red
FWHF1008-2R2□	2200/7.9	G,J,K	28/50	160	2.80	280	Red	Red	Red
FWHF1008-2R7□	2700/7.9	G,J,K	22/25	135	3.20	290	Red	Violet	Red
FWHF1008-3R3□	3300/7.9	G,J,K	22/25	110	3.40	290	Orange	Orange	Red
FWHF1008-3R9□	3900/7.9	G,J,K	20/25	100	3.60	260	Orange	White	Red
FWHF1008-4R7□	4700/7.9	G,J,K	20/25	90	4.00	260	Yellow	Violet	Red
FWHF1008-5R6□	5600/7.9	G,J,K	18/7.9	40	4.20	240	Green	Blue	Red
FWHF1008-6R8□	6800/7.9	G,J,K	18/7.9	40	4.90	200	Blue	Gray	Red
FWHF1008-8R2□	8200/7.9	G,J,K	18/7.9	25	6.00	170	Gray	Red	Red
FWHF1008-100□	10000/2.5	G,J,K	18/7.9	25	8.00	150	Brown	Black	Orange

* Tolerance: G=±2%, J=±5%, K=±10%
* Irms for a 15°C rise above 25°C ambient.

FLQH Series (Rev. 5.0)

FLQH Series is a type of miniature wire-wound chip inductor designed on a special ferrite core. Excellent for use in DC power supply circuits.

Features

* RoHS compliant
* Low DC resistance, high current capacity, and high impedance characteristics
* Excellent solder heat resistance
* Both flow and reflow soldering methods can be employed

Applications

* Personal computers
* Disk drives and computer peripherals
* Pagers, cordless phone
* DC power supply circuit

Product Identification

FLQH	32	L	-	470	M
1	2	3		4	5

1. Product Code
2. Size Code
3. H: High current ; L: Lower height
4. Inductance: 47uH
5. Tolerance: J=±5%, K=±10%, M=±20%, N=±30%

Operating & Storage Condition

* Operating Temp.: -40 to +85°C
* Storage Temp.: -40 to +85°C
* Storage Life Time: 6 Months @25°C,RH 65%

Test Equipment

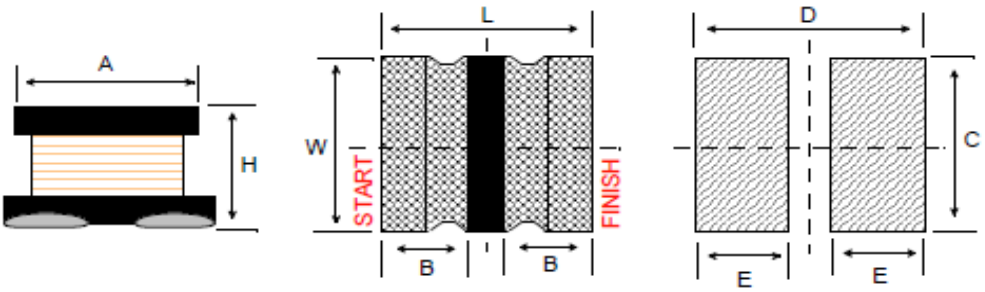
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-5°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Side View | Bottom View | Recommended Pad Layout



Size Code	A(±0.3)	B(ref.)	C(ref.)	D(ref.)	E(ref.)	H(±0.4)	L(±0.3)	W(±0.3)
20L	2.0±0.2	0.4～0.8	2.0	2.7	1.0	1.05max	2.0±0.2	1.6±0.2
20	2.0	0.4～0.8	1.8	2.5	0.7	1.4	2.1	1.5
25L	2.5±0.2	0.6～1.0	2.5	3.2	1.2	1.05max	2.5±0.2	2.1±0.2
25	2.5	0.4～0.8	2.8	3.5	0.7	1.8	2.5	2
32	3.2	0.7～1.2	3.5	4.5	1.6	2.0	3.2	2.5
43	4.3	1.0～1.8	4.2	5.5	2.3	2.6	4.5	3.2
56	5.0	1.1～1.9	6.5	7.0	2.5	4.7	5.7	5.0

FLQH Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	Test Freq. (MHz/0.25V)	DCR (Ω) max.	Isat (A) typ.	Irms (A) typ.
FLQH20L-1R0N	1.0	1	0.180	1.70	1.42
FLQH20L-1R5N	1.5	1	0.250	1.30	1.34
FLQH20L-2R2N	2.2	1	0.340	1.10	1.04
FLQH20L-3R3N	3.3	1	0.435	0.98	0.90
FLQH20L-4R7M	4.7	1	0.590	0.82	0.72
FLQH20L-5R6M	5.6	1	0.740	0.74	0.68
FLQH20L-6R8M	6.8	1	0.840	0.67	0.62
FLQH20L-100M	10.0	1	1.200	0.58	0.58
FLQH20L-220M	22.0	1	2.680	0.38	0.40

P/N	Inductance (uH)	Test Freq. (MHz/0.25V)	DCR (Ω) max.	IDC (A) max.	
FLQH20-R10M	0.10	100	0.018	4.24	
FLQH20-R12M	0.12	100	0.022	3.97	
FLQH20-R15M	0.15	100	0.023	3.87	
FLQH20-R18M	0.18	100	0.029	3.10	
FLQH20-R22M	0.22	100	0.034	3.07	
FLQH20-R27M	0.27	100	0.042	2.46	
FLQH20-R33M	0.33	100	0.048	2.07	
FLQH20-R39M	0.39	100	0.059	1.61	
FLQH20-R47M	0.47	100	0.068	1.53	
FLQH20-R56M	0.56	100	0.091	1.48	
FLQH20-R68M	0.68	100	0.101	1.37	
FLQH20-R82M	0.82	100	0.116	1.28	
FLQH20-1R0M	1.00	100	0.160	0.75	
FLQH20-1R5M	1.50	100	0.247	0.70	
FLQH20-2R0M	2.00	100	0.300	0.65	
FLQH20-2R2M	2.20	100	0.330	0.61	
FLQH20-2R7M	2.70	100	0.360	0.55	
FLQH20-3R3M	3.30	100	0.500	0.50	
FLQH20-3R9M	3.90	100	0.700	0.49	
FLQH20-4R7M	4.70	100	0.740	0.47	
FLQH20-6R8M	6.80	100	0.970	0.45	
FLQH20-8R2M	8.20	100	1.490	0.40	
FLQH20-100M	10.00	1	1.620	0.37	
FLQH20-120M	12.00	1	1.890	0.34	
FLQH20-150K/M	15.00	1	2.170	0.32	
FLQH20-220K/M	22.00	1	3.420	0.25	
FLQH20-270K/M	27.00	1	4.280	0.21	
FLQH20-330K/M	33.00	1	5.470	0.20	
FLQH20-390K/M	39.00	1	6.290	0.17	
FLQH20-470K/M	47.00	1	9.870	0.13	
FLQH20-680K/M	68.00	1	12.170	0.11	
FLQH20-820K/M	82.00	1	14.500	0.09	
FLQH20-101K/M	100.00	1	19.062	0.08	
FLQH20-121K/M	120.00	1	22.030	0.02	

* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 10%
* Tolerance: J=±5%, K=±10%, M=±20%, N=±30%

FLQH Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	Test Freq. (MHz/0.25V)	DCR (Ω) max.	Isat (A) typ.	Irms (A) typ.
FLQH25L-1R0M	1.0	1	0.15	2.00	1.90
FLQH25L-1R5M	1.5	1	0.19	1.80	1.64
FLQH25L-2R2M	2.2	1	0.30	1.40	1.60
FLQH25L-3R3M	3.3	1	0.39	1.20	1.10
FLQH25L-4R7M	4.7	1	0.51	1.00	1.02
FLQH25L-5R6M	5.6	1	0.63	0.96	0.88
FLQH25L-6R8M	6.8	1	0.79	0.84	0.82
FLQH25L-100M	10.0	1	1.05	0.70	0.74
FLQH25L-220M	22.0	1	2.40	0.49	0.46

P/N	Inductance (uH)	Test Freq. (KHz/0.25V)	DCR (Ω) max.	IDC (mA) max.	
FLQH25-R22M	0.2	1	0.03	350	
FLQH25-R39M	0.4	1	0.42	330	
FLQH25-1R0M	1.0	1	0.78	300	
FLQH25-1R2M	1.2	1	0.09	290	
FLQH25-1R5M	1.5	1	0.10	280	
FLQH25-1R8M	1.8	1	0.11	270	
FLQH25-2R2M	2.2	1	0.12	250	
FLQH25-2R7M	2.7	1	0.20	240	
FLQH25-3R3M	3.3	1	0.24	230	
FLQH25-3R9M	3.9	1	0.28	220	
FLQH25-4R7M	4.7	1	0.30	210	
FLQH25-5R6M	5.6	1	0.34	205	
FLQH25-6R8M	6.8	1	0.44	200	
FLQH25-8R2M	8.2	1	0.59	195	
FLQH25-100K/M	10.0	1	0.68	190	
FLQH25-120K/M	12.0	1	0.77	185	
FLQH25-150K/M	15.0	1	0.87	180	
FLQH25-180K/M	18.0	1	1.20	175	
FLQH25-220K/M	22.0	1	1.34	170	
FLQH25-270K/M	27.0	1	2.86	165	
FLQH25-330K/M	33.0	1	2.10	160	
FLQH25-390K/M	39.0	1	2.35	155	
FLQH25-470K/M	47.0	1	3.30	150	
FLQH25-560K/M	56.0	1	3.70	145	
FLQH25-680K/M	68.0	1	6.00	135	
FLQH25-820K/M	82.0	1	6.90	125	
FLQH25-101K/M	100.0	1	7.75	110	
FLQH25-221K/M	220.0	1	13.42	90	

* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 10%
* Tolerance: J=±5%, K=±10%, M=±20%, N=±30%

FLQH Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	Q (ref.) @ KHz	DCR (Ω) max.	SRF (MHz) min.	IDC (mA) max.
FLQH32-R10M	0.1	10@2520	0.250	200.00	700
FLQH32-R18M	0.2	10@2520	0.250	200.00	650
FLQH32-R27M	0.3	10@2520	0.250	200.00	600
FLQH32-R33M	0.3	10@2520	0.250	200.00	550
FLQH32-R39M	0.4	10@2520	0.250	200.00	530
FLQH32-R56M	0.6	10@2520	0.250	160.00	530
FLQH32-R68M	0.7	10@2520	0.250	160.00	470
FLQH32-R82M	0.8	10@2520	0.250	120.00	450
FLQH32-1R0M	1.0	10@2520	0.500	100	445
FLQH32-1R2M	1.2	10@2520	0.600	100	425
FLQH32-1R5M	1.5	10@2520	0.600	75	400
FLQH32-1R8M	1.8	10@2520	0.700	60	390
FLQH32-2R2M	2.2	10@2520	0.800	50	370
FLQH32-2R7K	2.7	10@2520	0.900	43	320
FLQH32-3R3K	3.3	10@2520	1.000	38	300
FLQH32-3R9K	3.9	10@2520	1.100	35	290
FLQH32-4R7K	4.7	20@1000	1.200	31	270
FLQH32-5R6K	5.6	20@1000	1.300	28	250
FLQH32-6R8K	6.8	20@1000	1.500	25	240
FLQH32-8R2K	8.2	20@1000	1.600	23	225
FLQH32-100K	10.0	25@1000	1.800	20	190
FLQH32-120K	12.0	25@1000	2.000	18	180
FLQH32-150K	15.0	25@1000	2.200	16	170
FLQH32-180K	18.0	25@1000	2.500	15	160
FLQH32-220K	22.0	25@1000	2.800	14	150
FLQH32-270K	27.0	25@1000	3.100	13	125
FLQH32-330K	33.0	25@1000	3.500	12	115
FLQH32-390K	39.0	25@1000	3.900	11	110
FLQH32-470K	47.0	25@1000	4.300	11	100
FLQH32-560J	56.0	25@1000	4.900	10	85
FLQH32-680J	68.0	25@1000	5.500	9	80
FLQH32-820J	82.0	25@1000	6.200	9	80
FLQH32-101J	100.0	30@796	7.000	8	80
FLQH32-121J	120.0	30@796	8.000	8	75
FLQH32-151J	150.0	30@796	9.300	7	70
FLQH32-181J	180.0	30@796	10.200	6	65
FLQH32-221J	220.00	30@796	11.800	5.00	65
FLQH32-271J	270.00	30@796	12.500	5.00	65
FLQH32-331J	330.00	30@796	13.000	5.00	65
FLQH32-391J	390.00	30@796	22.000	5.00	50
FLQH32-471J	470@1KHZ	30@796	25.000	5.00	45
FLQH32-501J	500@1KHZ	30@796	27.000	5.00	42
FLQH32-561J	560@1KHZ	30@796	28.000	5.00	40
FLQH32-681J	680@1KHZ	30@796	30.000	5.00	35
FLQH32-102J	1000@1KHZ	30@796	39.200	5.00	30

* Inductance Test Condition: @1MHz/0.25v
* IDC current (A) that will cause L to drop approximately 10%
* Tolerance: J=±5%, K=±10%, M=±20%, N=±30%

FLQH Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	DCR (Ω) max.	SRF (MHz) min.	SRF (MHz) typ.	IDC (mA) max.
FLQH32H-R47ML	0.5	0.038	100.0	200.0	2290
FLQH32H-1R0ML	1.0	0.078	100.0	200.0	1000
FLQH32H-2R2ML	2.2	0.126	64.0	120.0	790
FLQH32H-4R7ML	4.7	0.195	43.0	77.0	650
FLQH32H-100KL	10.0	0.390	26.0	50.0	450
FLQH32H-1R0M	1.0	0.117	100.0	150.0	800
FLQH32H-1R8M	1.8	0.140	64.0	100.0	780
FLQH32H-2R2M	2.2	0.169	64.0	100.0	600
FLQH32H-3R3M	3.3	0.180	54.0	100.0	500
FLQH32H-4R7M	4.7	0.260	43.0	66.0	450
FLQH32H-6R8M	6.8	0.350	30.0	45.0	380
FLQH32H-100K	10.0	0.572	26.0	40.0	300
FLQH32H-220K	22.0	0.923	19.0	27.0	250
FLQH32H-330K	33.0	1.350	17.0	22.0	220
FLQH32H-470K	47.0	1.690	15.0	19.0	170
FLQH32H-101K	100.0	4.550	10.0	13.0	100
FLQH32H-221K	220.0	10.920	6.8	8.5	70
FLQH32H-331K	330.0	13.000	5.6	7.0	60
FLQH32H-391K	390.0	22.100	5.0	6.6	60
FLQH32H-471K	470.0	24.700	5.0	6.2	60
FLQH32H-561K	560.0	28.600	5.0	5.7	60

* The suffix "**L**" means the part with low DCR.

P/N	Inductance (uH)	DCR (Ω) max.	IDC (mA) max.		
FLQH43H-1R0M	1.0	0.080	1080		
FLQH43H-1R5M	1.5	0.090	1000		
FLQH43H-2R2M	2.2	0.110	900		
FLQH43H-3R3M	3.3	0.130	800		
FLQH43H-4R7M	4.7	0.150	750		
FLQH43H-6R8M	6.8	0.200	720		
FLQH43H-100M	10.0	0.240	650		
FLQH43H-150M	15.0	0.320	570		
FLQH43H-220M	22.0	0.600	420		
FLQH43H-330M	33.0	1.000	310		
FLQH43H-470M	47.0	1.100	280		
FLQH43H-560M	56.0	1.340	260		
FLQH43H-680M	68.0	1.700	220		
FLQH43H-101M	100.0	2.200	190		
FLQH43H-151M	150.0	3.500	130		
FLQH43H-221M	220.0	4.000	110		
FLQH43H-331M	330.0	6.800	100		
FLQH43H-471M	470.0	8.500	90		

* Inductance Test Condition: @1MHz/0.25v
* IDC current (A) that will cause L to drop approximately 10%

FLQH Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	DCR (Ω) max.	SRF (MHz) min.	IDC (mA) max.
FLQH56-R12M	0.1	0.010	450.0	6000
FLQH56-R27M	0.3	0.014	300.0	5300
FLQH56-R47M	0.5	0.018	200.0	4800
FLQH56-1R0M	1.0	0.027	150.0	4000
FLQH56-1R5M	1.5	0.031	110.0	3700
FLQH56-2R2M	2.2	0.041	80.0	3200
FLQH56-3R3M	3.3	0.050	40.0	2900
FLQH56-4R7M	4.7	0.057	30.0	2700
FLQH56-6R8M	6.8	0.104	25.0	2000
FLQH56-100K/M	10.0	0.130	20.0	1700
FLQH56-150K/M	15.0	0.210	17.0	1400
FLQH56-220K/M	22.0	0.266	15.0	1200
FLQH56-330K/M	33.0	0.448	12.0	900
FLQH56-470K/M	47.0	0.560	10.0	800
FLQH56-680K/M	68.0	0.938	7.6	640
FLQH56-101K/M	100	1.204	6.5	560
FLQH56-151K/M	150	2.660	5.0	420
FLQH56-221K/M	220	3.360	4.0	320
FLQH56-331K/M	330	6.160	3.1	270
FLQH56-471K/M	470	7.560	2.4	240
FLQH56-681K/M	680	11.34	1.9	190
FLQH56-102K/M	1000	14.42	1.7	150
FLQH56-222K/M	2200	30.10	1.2	100
FLQH56-472K/M	4700	61.04	0.8	70
FLQH56-103K/M	10000	140.00	0.5	50

* Inductance Test Condition: @1KHz/0.25v
* IDC current (A) that will cause L to drop approximately 10%
* Tolerance: J=±5%, K=±10%, M=±20%, N=±30%

FRFD Series (Rev. 5.0)

Applications

* Mobile phones,portable phones.
* Base Station/ Bluetooth
* Wireless LAN/ mouse/ keyboard/ earphone.

Features

* Used for high frequency bands up to GHz and stable inductance at high frequency
* High self resonant frequency realizes high Q value
* Resin-coated surface enables excellent mounting
* Low DC resistance design is ideal for low loss
* High output and low power consumption

Operating & Storage Condition

* Operating Temp : -40 to +85°C
* Storage Temp : -40 to +85°C
* Storage Life Time: 12 Months @25°C , RH 65%

Product Indentfication

FRFD	6626	-	372	J
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 3.7mH
4. Tolerance: J=±5%

Test Equipment

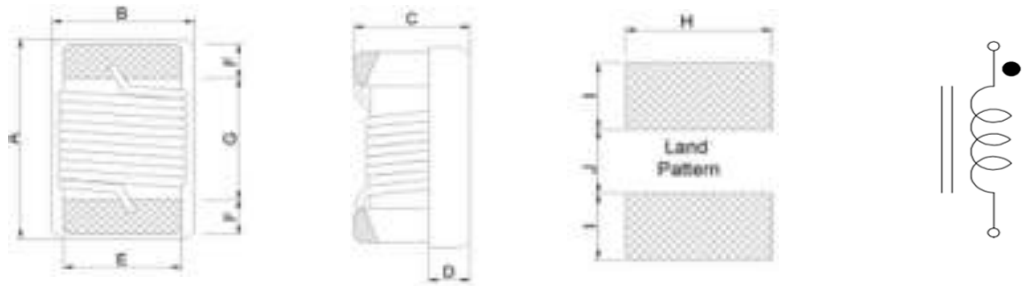
* HP4291A-Z, HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Setwork Analyzer- SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Bottom View	Side View	Layout	Schematic



A(±0.3)	B(±0.3)	C(max.)	D(ref.)	E(typ.)	F(typ.)	G(typ.)	H(typ.)	I(typ.)	J(typ.)
6.6	2.6	2.1	0.9	2.00	0.85	4.7	2.3	1.2	4.8

Electrical Characteristics

P/N	Inductance (mH)	DCR (Ω) max.	Q (typ.)	SRF (KHz) typ.
FRFD6626-232J	2.38	175	35	1000
FRFD6626-372J	3.70	-	25	700
FRFD6626-472J	4.70	-	25	600
FRFD6626-492J	4.91	-	25	600
FRFD6626-722J	7.20	-	20	450
FRFD6626-902J	9.00	-	20	300

* Test condition: @125KHz/ 0.25V

FCMC Series (Rev. 5.0)

(L-Type)

(P-Type)

Applications

* Mobile Device
* Handheld Device
* LowProfile Device, LCD.

Features

* Common Mode Filter for high Current Capacity
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard

Operating & Storage Condition

* OperatingTemp.: -40 to +125°C
* Storage Temp.: -40 to +125°C
* Storage Life Time: 12 months @25°C, RH 65%

Product Identification

FCMC	7060	-	701	T	L
1	2		3	4	5

1. Product Code
2. Size Code
3. Impedance: 700Ω
4. Tolerance: T=typical, S=high current
5. Type: L= landscape, P= portrait

Test Equipment

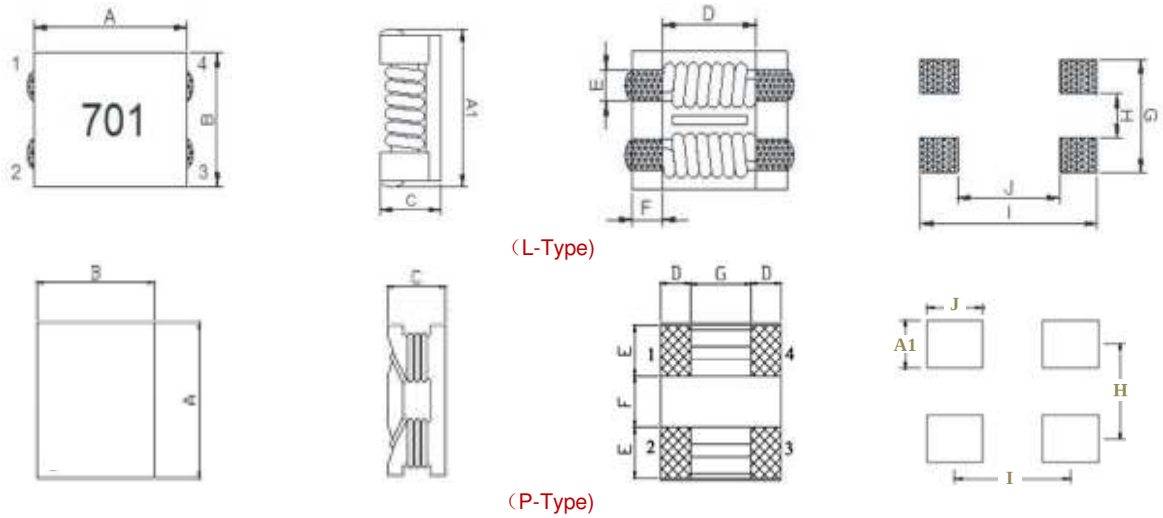
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

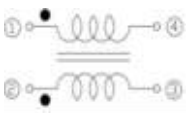
* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended Pad Layout: [mm]

Top View	Side View	Bottom View	Pad Layout



Schematic:



Size Code	A(±0.5)	A1(±0.5)	B(±0.5)	C(max.)	D(ref.)	E(ref.)	F(ref.)	G(ref.)	H(ref.)	I(ref.)	J(ref.)
4520L	4.7	5.0	4.5	2.0	2.7	0.8	1.0	3.0	1.0	6.0	2.0
7060L	7.0	7.5	6.0	3.8	3.5	1.5	1.7	5.0	1.5	8.0	3.0
9070L	9.0	9.5	7.0	4.8	5.6	1.5	1.7	5.5	1.5	10.5	5.0
1211L	12.0	12.5	10.8	6.4	7.0	2.7	2.5	8.5	2.0	12.5	6.5
1513L	15.0	15.6	13.0	6.6	9.4	2.6	2.5	9.5	3.3	16.0	8.8
7060P	7.5	3.0	6.0	3.8	1.5	2.5	2.0	2.0	4.0	5.0	3.5
1008P	10.0	3.4	8.0	5.5	1.8	2.8	4.5	3.2	5.6	7.2	3.8
1210P	12.0	4.2	10.0	6.5	2.5	2.5	4.3	3.8	6.8	8.2	4.8

FCMC Series (Rev. 5.0)

Electrical Characteristics

Part No.	/Z/ Pin(1-4) & (2-3) (Ω) @100MHz/ 0.5V		Rated Voltage (V) max.	Insulation Resistance (MΩ) min.	DCR Pin(1-4) & (2-3) (mΩ) max.	IDC (A) max.
	min.	typ.				
FCMC4520-900TL	60	90	50	10.0	35.0	3.2
FCMC4520-151TL	90	150	50	10.0	40.0	3.1
FCMC4520-231TL	180	230	50	10.0	45.0	3.0
FCMC4520-301TL	200	300	50	10.0	45.0	3.0
FCMC4520-401TL	300	420	50	10.0	50.0	2.5
FCMC4520-701TL	500	700	50	10.0	59.0	2.2
FCMC4520-901TL	650	900	50	10.0	68.0	2.1
FCMC4520-102TL	800	1000	50	10.0	68.0	2.1
FCMC4520-122TL	1000	1200	50	10.0	74.0	2.0
FCMC4520-142TL	1200	1400	50	10.0	81.0	1.9
FCMC7060-400TL	40	70	80	10.0	5.0	15.0
FCMC7060-101TL	100	140	80	10.0	10.0	9.0
FCMC7060-301TL	225	300	80	10.0	10.0	5.0
FCMC7060-501TL	275	500	80	10.0	10.0	5.0
FCMC7060-601TL	500	700	80	10.0	15.0	4.0
FCMC7060-701TL	500	700	80	10.0	15.0	4.0
FCMC7060-102TL	800	1020	80	10.0	17.0	3.0
FCMC7060-132TL	910	1300	80	10.0	21.0	2.5
FCMC7060-272TL	2000	2700	80	10.0	63.0	1.0
FCMC7060-302TL	2500	3000	80	10.0	75.0	0.9
FCMC9070-301TL	225	300	80	10.0	6.0	6.0
FCMC9070-501TL	450	500	80	10.0	8.0	5.5
FCMC9070-701TL	500	700	80	10.0	10.0	5.0
FCMC9070-102TL	750	1000	80	10.0	13.0	4.0
FCMC9070-222TL	1700	2200	80	10.0	50.0	3.0
FCMC9070-272TL	2000	2700	80	10.0	86.0	2.0
FCMC1211-800TL	80	230	125	10.0	2.0	10.0
FCMC1211-701TL	500	700	125	10.0	6.0	8.0
FCMC1211-801TL	600	800	125	10.0	8.0	8.0
FCMC1211-102TL	750	1000	125	10.0	14.0	6.0
FCMC1211-222TL	2200	2500	125	10.0	35.0	1.8
FCMC1211-272TL	2300	2700	125	10.0	50.0	1.5
FCMC1513-301TL	225	300	80	10.0	5.0	13.0
FCMC1513-301SL	225	300	80	10.0	4.0	15.0
FCMC1513-551TL	400	550	80	10.0	5.0	10.0
FCMC1513-551SL	400	550	80	10.0	6.0	12.0
FCMC1513-501TL	400	500	80	10.0	6.0	10.0
FCMC1513-601TL	500	600	80	10.0	7.0	10.0
FCMC1513-701TL	500	700	80	10.0	7.0	10.0
FCMC1513-102TL	800	1000	80	10.0	10.0	9.0
FCMC1513-152TL	1200	1500	80	10.0	23.0	5.0

* IDC: The actual value of D.C. current when the temperature rise is △t＝40℃(Ta＝20℃).

FCMC Series (Rev. 5.0)

Electrical Characteristics

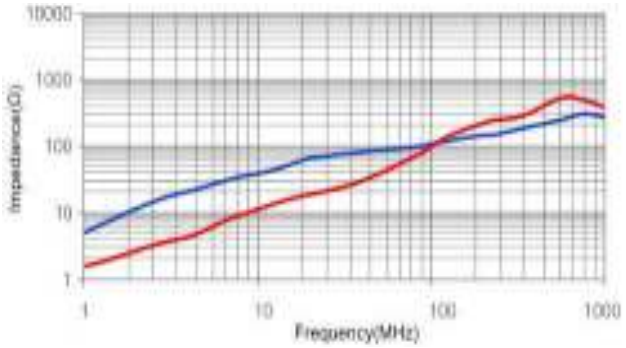
Part No.	/Z/ Pin(1-4) & (2-3) (Ω) @100MHz/ 0.5V		DCR Pin(1-4) & (2-3) (mΩ) max.	IDC (A) max.
	min.	typ.		
FCMC7060-201IP	200	250	20.0	2.0
FCMC7060-301IP	300	500	25.0	2.0
FCMC7060-601IP	600	800	30.0	2.0
FCMC1008-551IP	500	550	10.0	5.0
FCMC1008-601IP	500	600	30.0	4.5
FCMC1008-651IP	500	650	30.0	4.5
FCMC1008-701IP	500	700	30.0	4.5
FCMC1008-102IP	700	1000	45.0	4.0
FCMC1210-701IP	700	900	12.0	6.0
FCMC1210-801IP	800	1200	20.0	5.0
FCMC1210-102IP	1000	1200	20.0	5.0
FCMC1210-132IP	1200	1400	36.0	4.0

* IDC: The actual value of D.C. current when the temperature rise is △t＝40℃(Ta＝20℃).

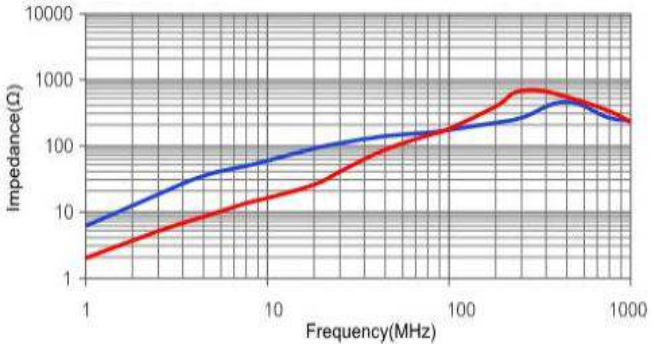
FCMC Series (Rev. 5.0)

CHARACTERISTICS(REFERENCE)

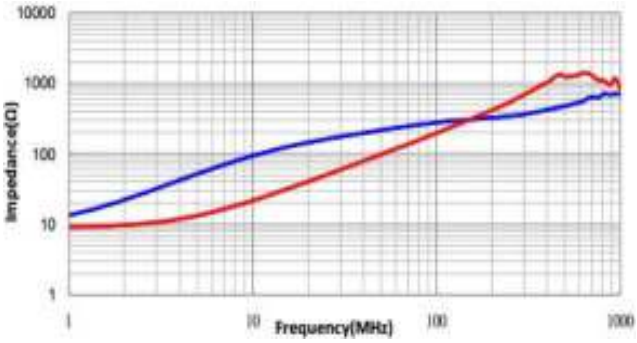
4520-900



4520-151



4520-231&301



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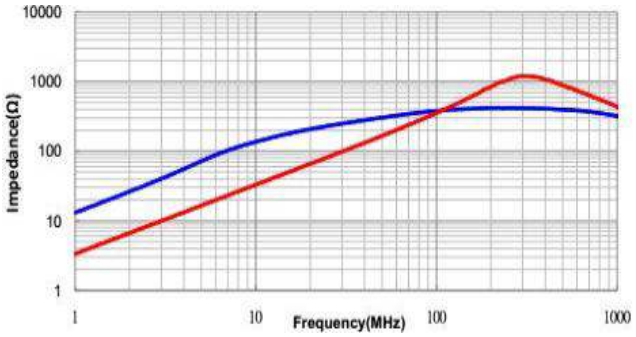

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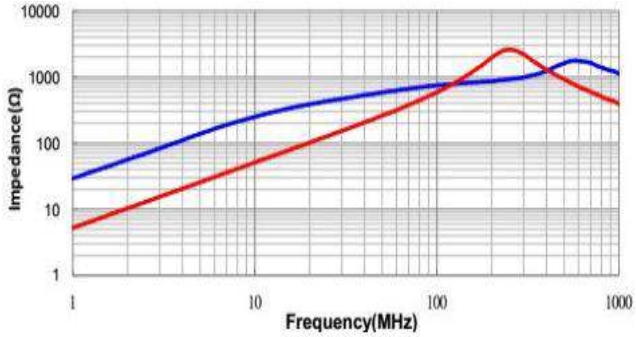
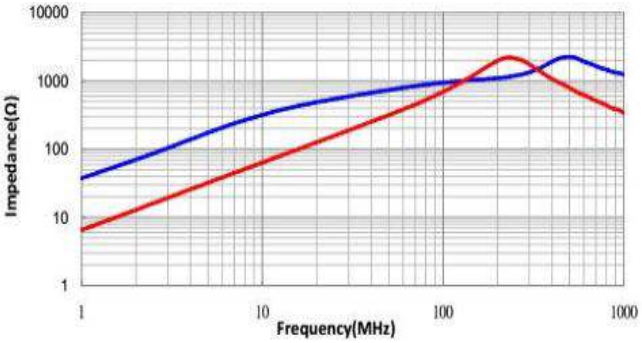
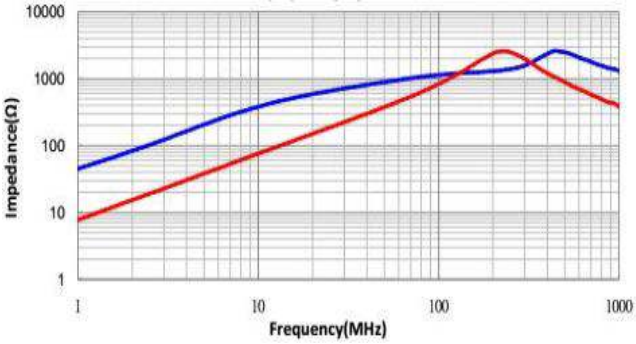


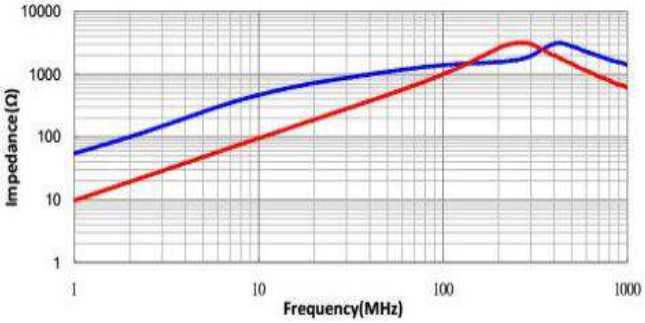
4520-901&102



4520-122



4520-142

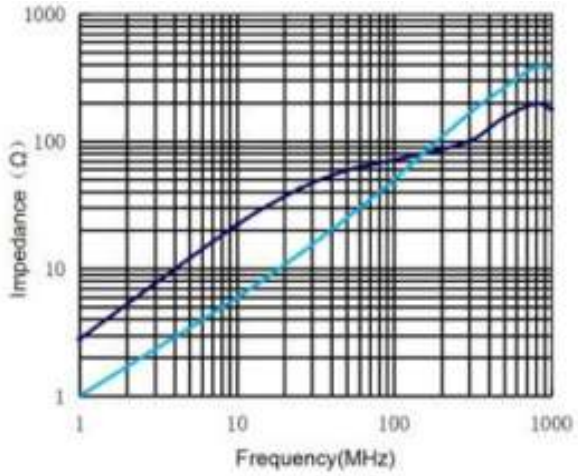


Common Mode Differential Mode

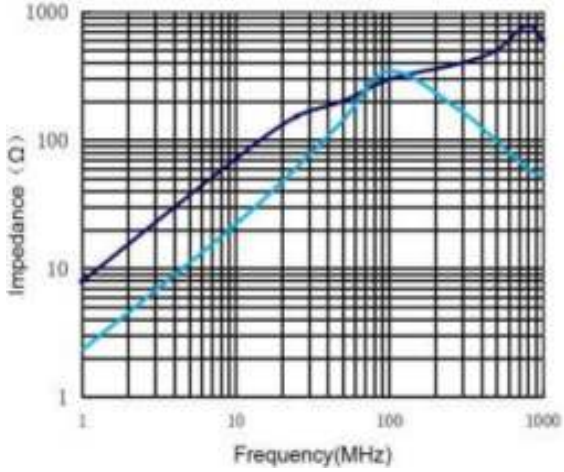
FCMC Series (Rev. 5.0)

CHARACTERISTICS(REFERENCE)

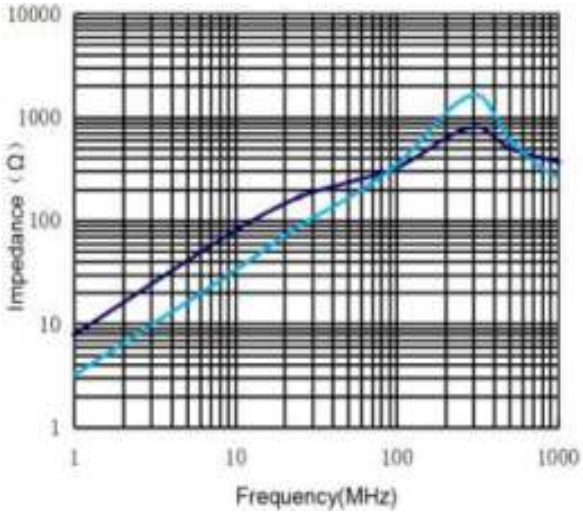
7060-400



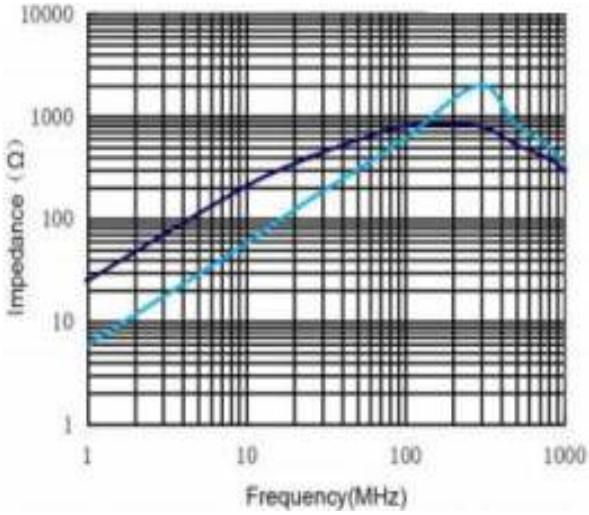
7060-101



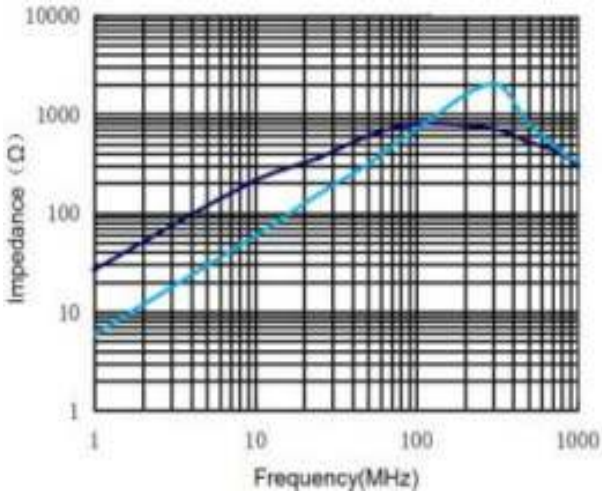
7060-301



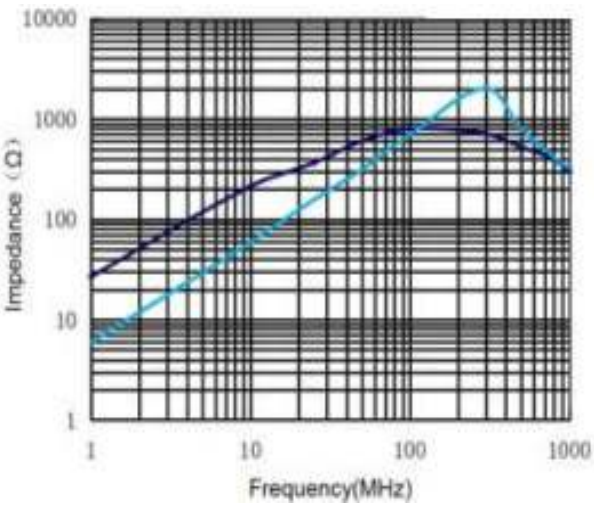
7060-501



7060-601



7060-701

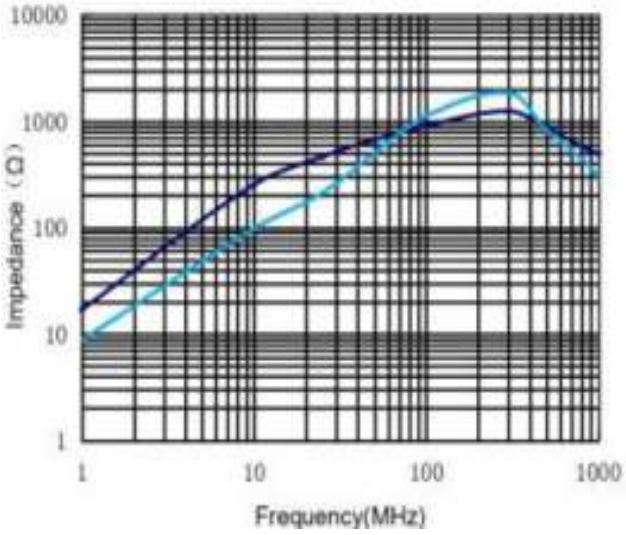


Common Mode　Differential Mode

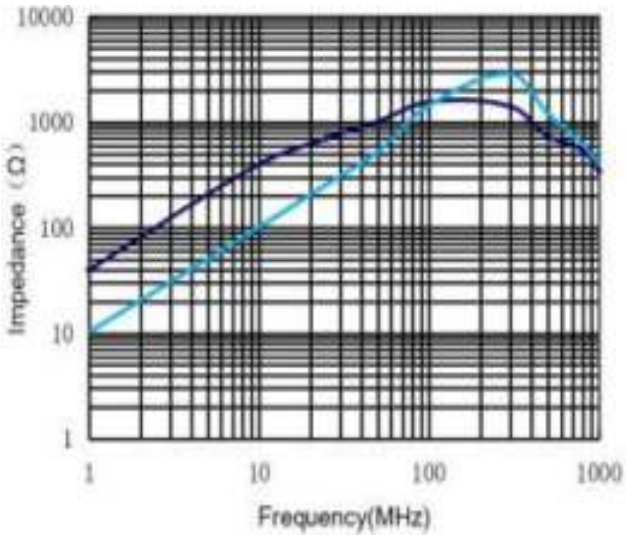
FCMC Series (Rev. 5.0)

CHARACTERISTICS(REFERENCE)

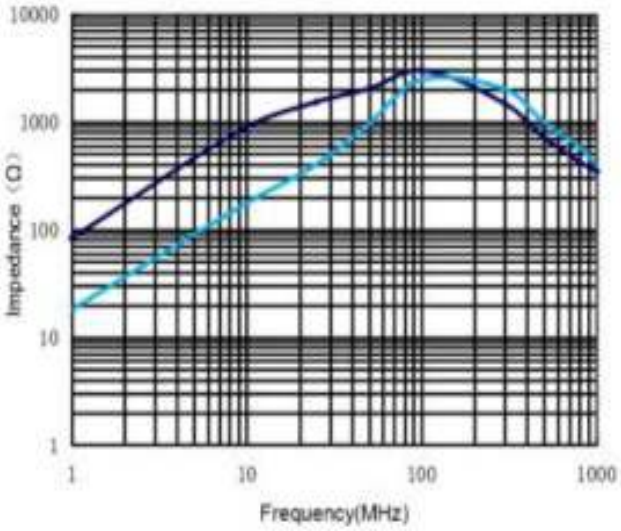
7060-102



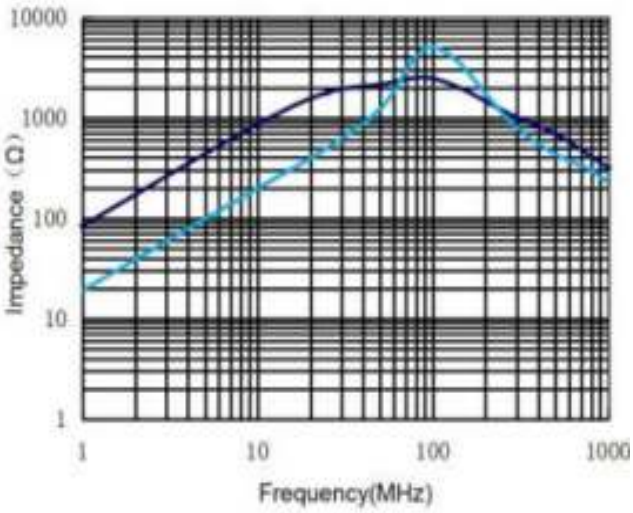
7060-132



7060-272



7060-302

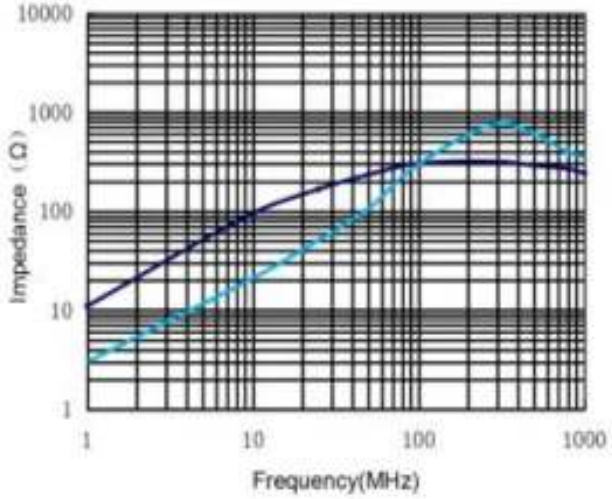


— Common Mode — Differential Mode

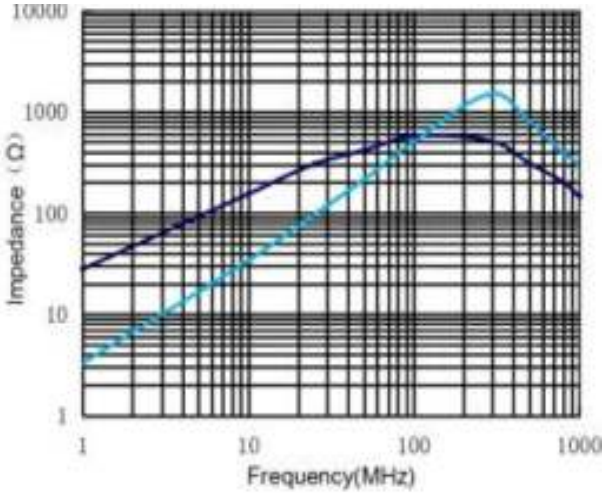
FCMC Series (Rev. 5.0)

CHARACTERISTICS(REFERENCE)

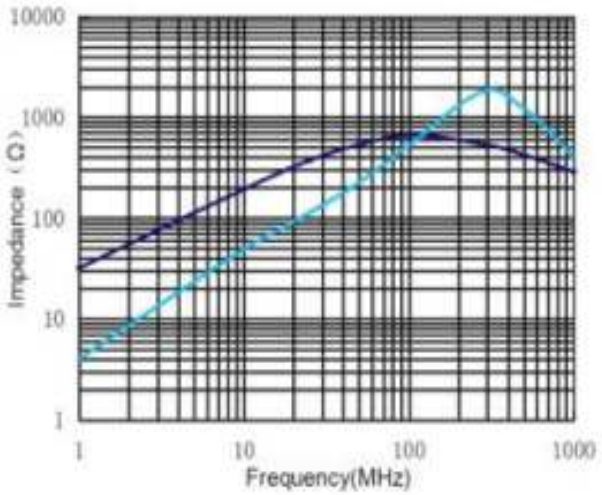
9070-301



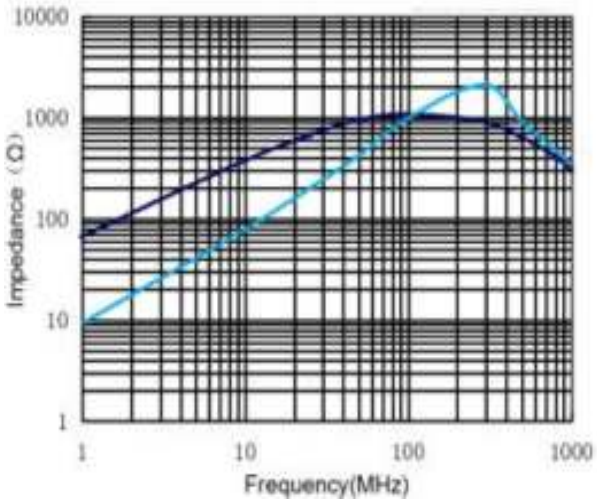
9070-501



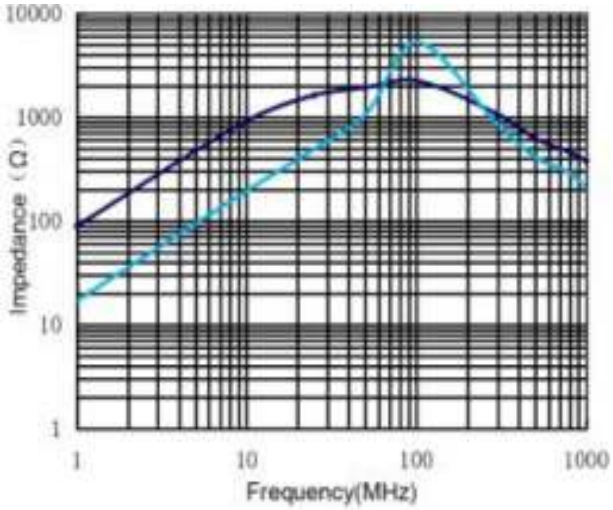
9070-701



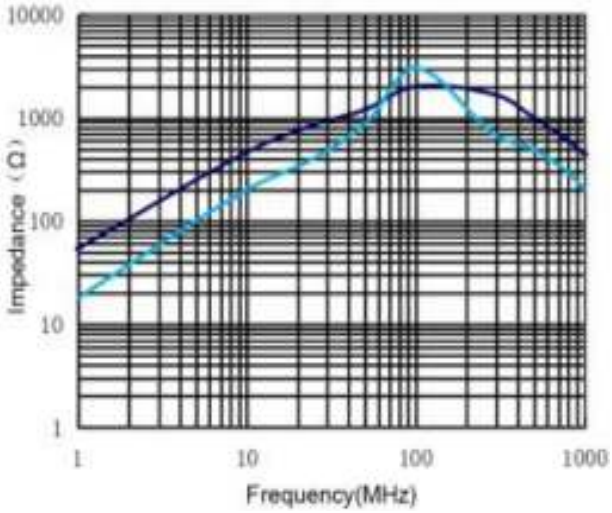
9070-102



9070-222



9070-272

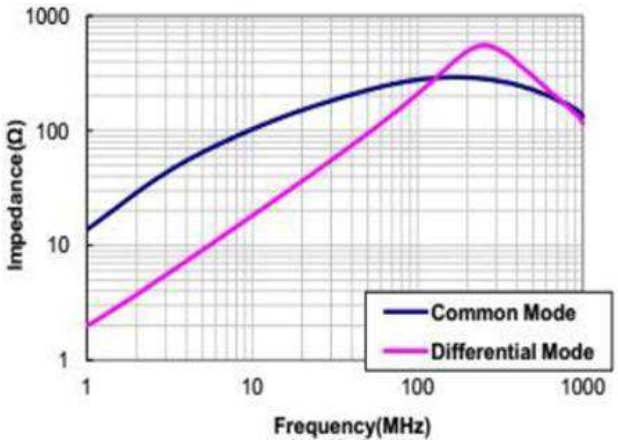


— Common Mode — Differential Mode

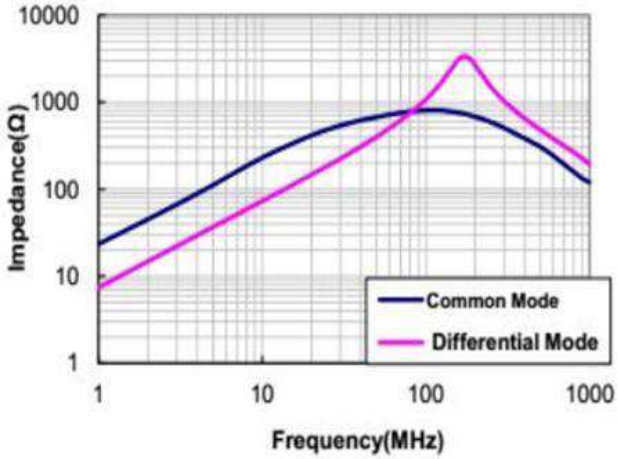
FCMC Series (Rev. 5.0)

CHARACTERISTICS(REFERENCE)

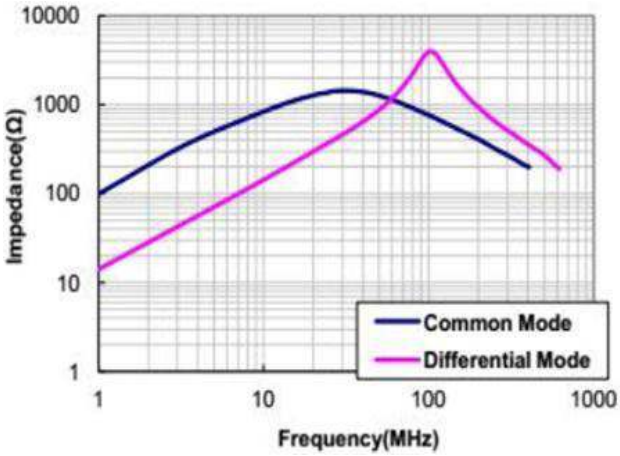
1211-800



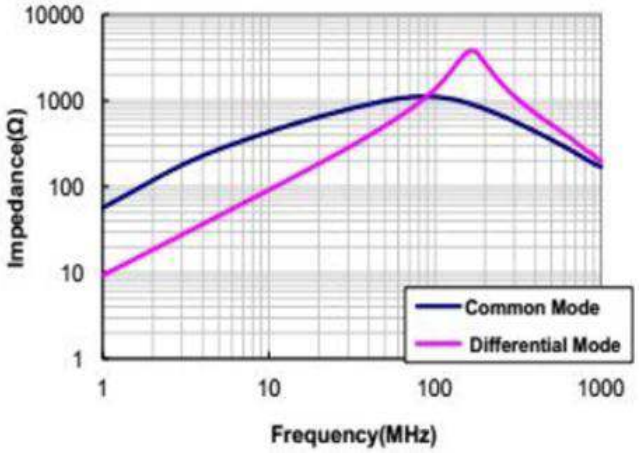
1211-701



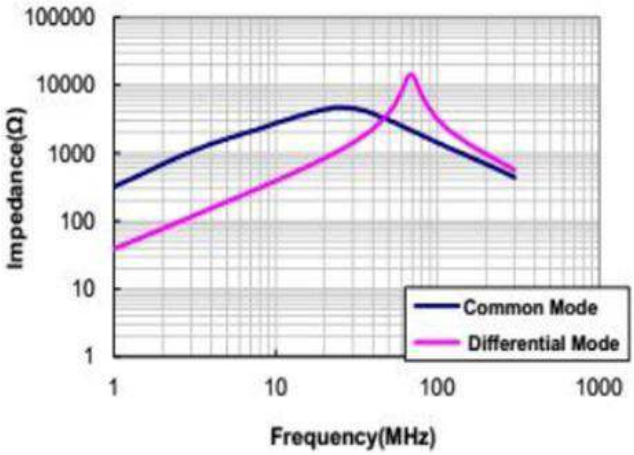
1211-801



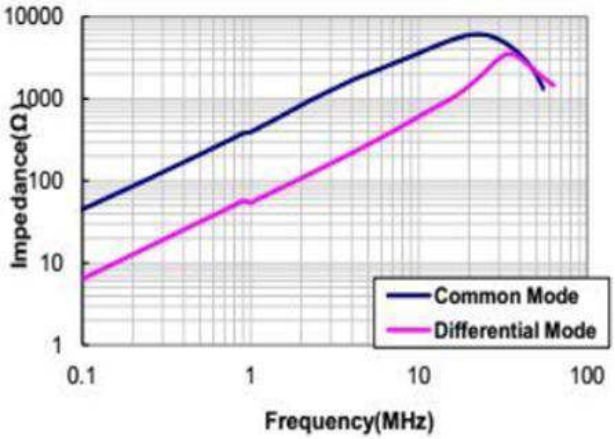
1211-102



1211-222



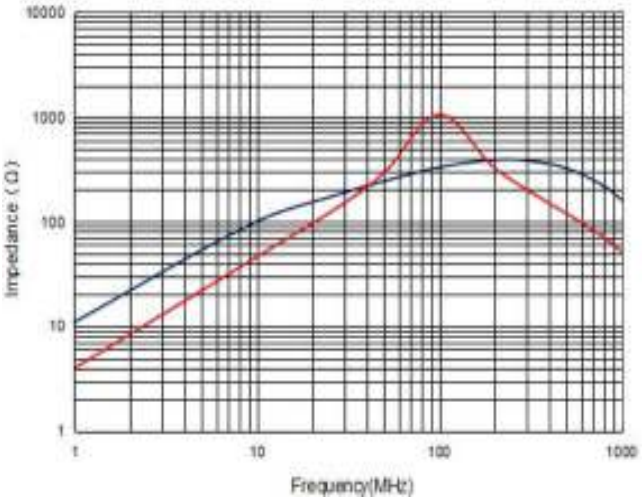
1211-272



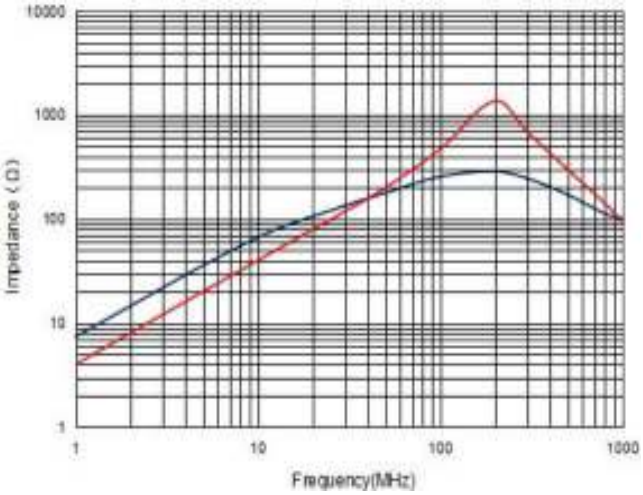
FCMC Series (Rev. 5.0)

CHARACTERISTICS(REFERENCE)

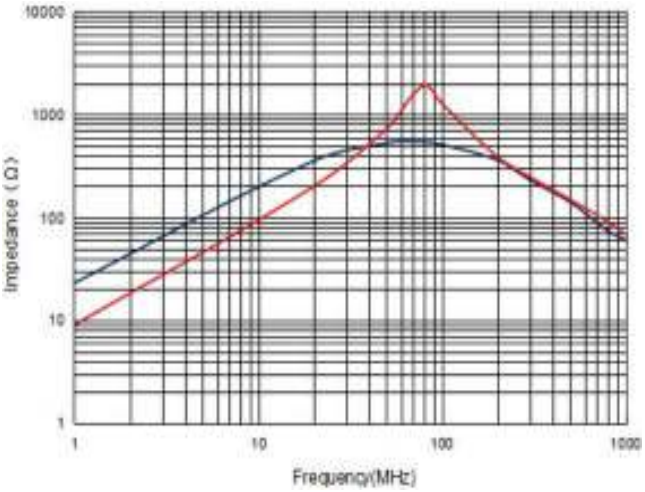
1513-301



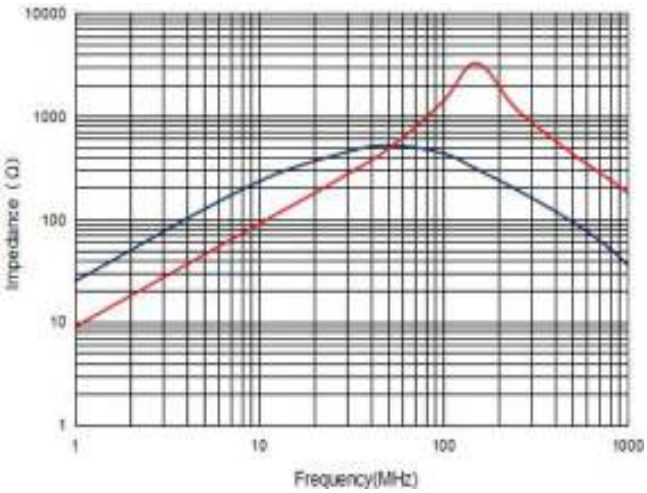
1513-301S



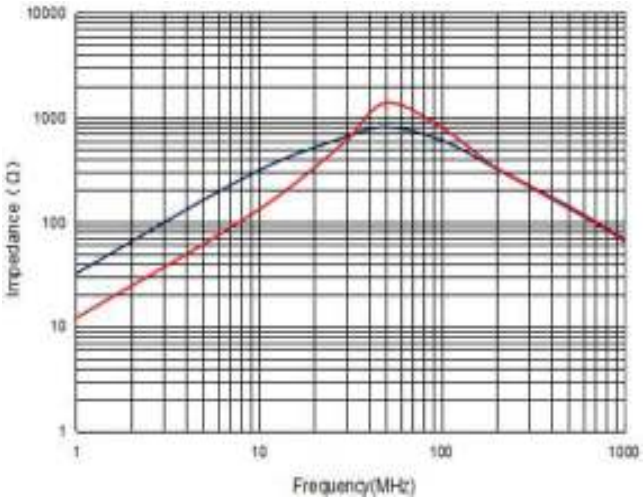
1513-501&551



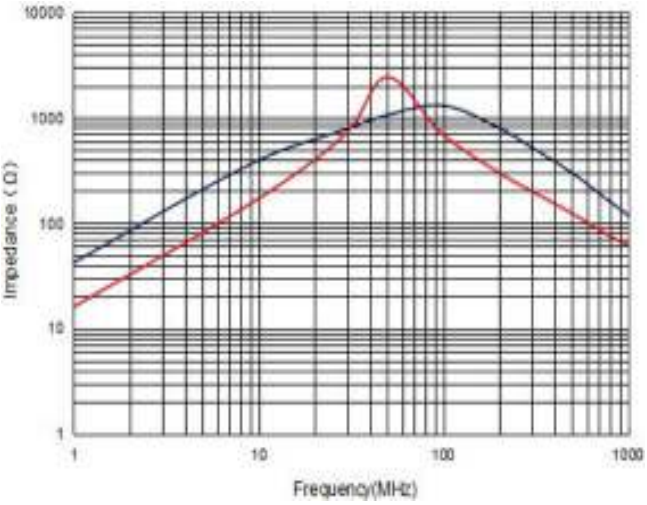
1513-551S



1513-601&701



1513-102

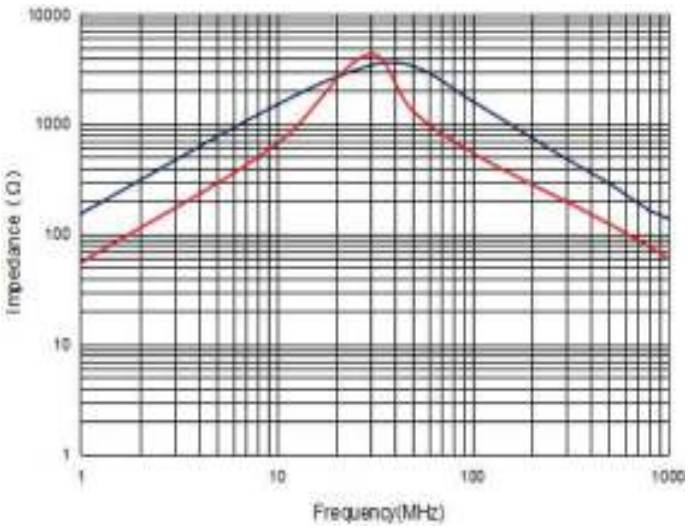


Common Mode Differential Mode

FCMC Series (Rev. 5.0)

CHARACTERISTICS(REFERENCE)

1513-152



Common Mode Differential Mode

FSCM Series (Rev. 5.0)

Common mode choke is designed for excellent noise attenuation with compact sizing for use in wide range of applications.

Features

* RoHS compliant
* Miniature SMD type common mode filter for fully automated assembly
* Wide impedance range (30 ~ 2200Ω) for noise suppression
* Excellent solderability

Applications

* USB line for personal computers and periphera
* IEEE 1394 line for personal computers, DVC, STB
* LVDS, panel line for liquid display panels, graph card,etc.

Product Identification

FSCM	2012	-	900	N
1	2		3	4

1. Product Code
2. Size Code
3. Impedance: 90 ohm @100MHz
4. Tolerance: N=±25%

Operating & Storage Condition

* Operating Temp : -40 to +85°C
* Storage Temp : -40 to +85°C
* Storage Life Time: 12 Months @25°C , RH 65%

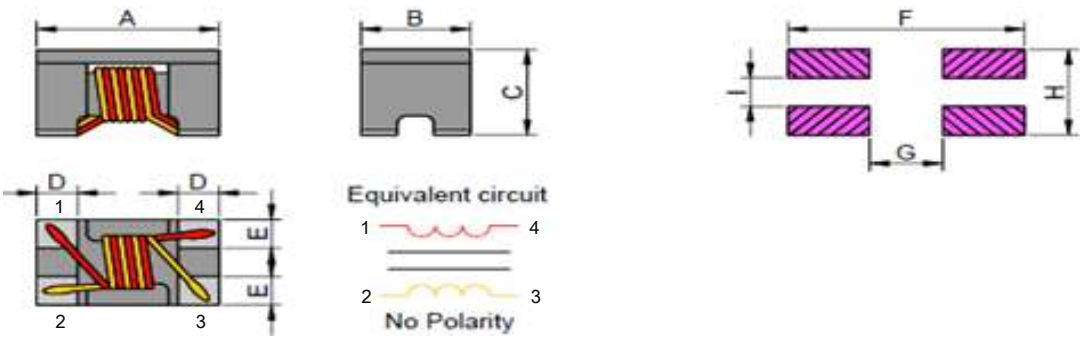
Test Equipment

* HP4291A-Z, HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer- SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]



Size Code	A(±0.2)	B(±0.2)	C(±0.2)	D(±0.2)	E(±0.2)	F(typ.)	G(typ.)	H(typ.)	I(typ.)	EIA Code
1210	1.2	1.0	0.8	0.3	0.4	1.8	0.5	1.2	0.2	0504
1608	1.6	0.8	1.1	0.3	0.3	2.2	0.6	1.0	0.2	0603
2012	2.0	1.2	1.2	0.4	0.4	2.6	0.8	1.4	0.4	0805
3216	3.2	1.6	1.8	0.6	0.6	3.8	1.6	1.8	0.4	1206
3225	3.2	2.5	2.2	0.8	0.9	4.4	1.6	3.5	0.6	1210
4532	4.5	3.2	2.8	1.0	1.2	4.8	2.5	3.8	0.7	1812

FSCM Series (Rev. 5.0)

Electrical Characteristics

P/N	Impedance @100MHz (Ω) ±25%	Rated Voltage (VDC) max.	DCR (Ω) max.	IDC (mA) max.	Insulation Resis. (MΩ) min.
FSCM1210-350N	35	20	0.18	430	10
FSCM1210-600N	60	20	0.30	400	10
FSCM1210-900N	90	20	0.30	400	10
FSCM1210-161N	160	20	0.60	260	10
FSCM1608-250N	25	20	0.10	500	10
FSCM1608-600N	60	20	0.20	350	10
FSCM1608-900N	90	20	0.25	300	10
FSCM1608-141N	140	20	0.25	300	10
FSCM1608-221N	220	20	0.25	300	10
FSCM2012-670N	67	50	0.25	400	10
FSCM2012-900N	90	50	0.30	400	10
FSCM2012-121N	120	50	0.30	370	10
FSCM2012-161N	160	50	0.35	330	10
FSCM2012-181N	180	50	0.35	330	10
FSCM2012-221N	220	50	0.40	330	10
FSCM2012-261N	260	50	0.40	330	10
FSCM2012-361N	360	50	0.40	280	10
FSCM2012-401N	400	50	0.40	50	10
FSCM3216-900N	90	50	0.30	370	10
FSCM3216-121N	120	50	0.30	370	10
FSCM3216-161N	160	50	0.40	340	10
FSCM3216-261N	260	50	0.50	310	10
FSCM3216-601N	600	50	0.80	260	10
FSCM3216-102N	1000	50	1.00	230	10
FSCM3216-222N	2200	50	1.20	200	10
FSCM3225-800N	80	50	0.12	640	10
FSCM3225-161N	160	50	0.15	480	10
FSCM3225-271N	270	50	0.25	450	10
FSCM3225-501N	500	50	0.30	1000	10
FSCM3225-601N	600	50	0.32	1000	10
FSCM3225-801N	800	50	0.35	350	10
FSCM3225-102N	1000	50	0.35	480	10
FSCM4532-800N	80	50	0.05	3000	10
FSCM4532-900N	90	50	0.09	3000	10
FSCM4532-121N	120	50	0.10	3000	10
FSCM4532-161N	160	50	0.09	1500	10
FSCM4532-201N	200	50	0.10	1500	10
FSCM4532-221N	220	50	0.10	1300	10
FSCM4532-331N	330	50	0.11	1100	10
FSCM4532-501N	500	50	0.12	1000	10
FSCM4532-601N	600	50	0.12	1000	10
FSCM4532-701N	700	50	0.12	1000	10
FSCM4532-801N	800	50	0.16	900	10
FSCM4532-102N	1000	50	0.18	500	10
FSCM4532-142N	1400	50	0.20	700	10

* IDC: Temp. rise 40°C typ.

FSCM3225B Series (Rev. 5.0)

A full series of common mode choke is designed for excellent noise attenuation with compact sizing for use in wide range of applications.
Both standard series and custom designs are available.

Features

* RoHS compliant
* Miniature SMD type common mode filter for fully automated assembly
* Wide impedance range (30 ~ 2200Ω) for noise suppression
* Excellent solderability

Applications

* USB line for personal computers and periphera
* IEEE 1394 line for personal computers, DVC, STB
* LVDS, panel line for liquid display panels, graph card,etc.

Operating & Storage Condition

* Operating Temp : -40 to +125°C
* Storage Temp : -20 to +40°C
* Storage Life Time: 12 Months @25°C , RH 65%

Test Equipment

* HP4291A-Z, HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer- SRF

Product Identification

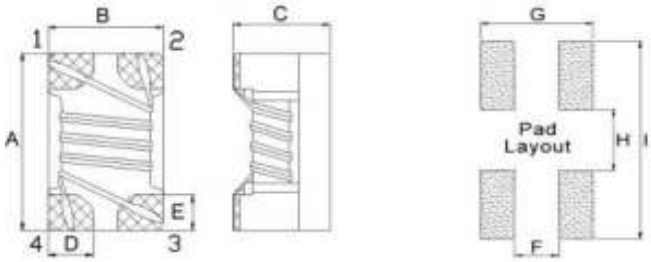
FSCM	3225B	-	220
1	2		3

1. Product Code
2. Size Code
3. Inductance: 22uH

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]



Size Code	A(±0.2)	B(±0.2)	C(max.)	D(typ.)	E(typ.)	F(typ.)	G(typ.)	H(typ.)	I(typ.)
3225B	3.2	2.5	2.5	0.75	0.55	0.6	3.5	1.6	4.4

Electrical Characteristics

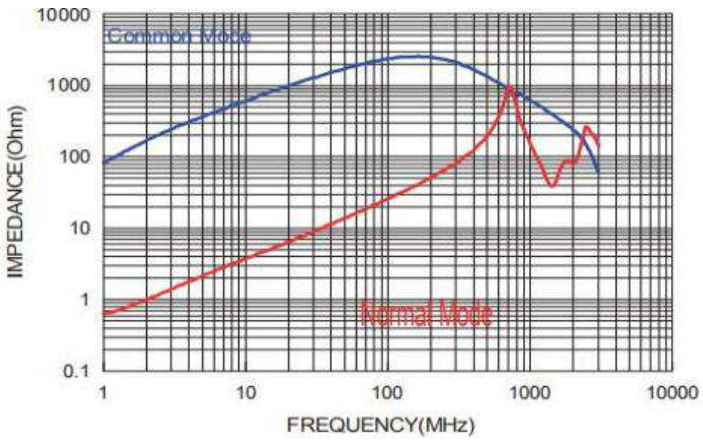
P/N	Impedance @10MHz (Ω) min.	Impedance @10MHz (Ω) typ.	Inductance @100KHz/0.1V (uH)	DCR (Ω) max.	IDC (mA) max.	Rated Voltage (VDC)	IR (MΩ) min.
FSCM3225B-110	300	550	11+50%/-30%	0.4	300	80	10
FSCM3225B-220	500	1100	22+50%/-30%	0.5	250	80	10
FSCM3225B-510	1000	2600	51+50%/-30%	0.7	200	80	10
FSCM3225B-101	2000	5100	100+50%/-30%	1.5	150	80	10

* IDC: Temp. rise 40°C typ.

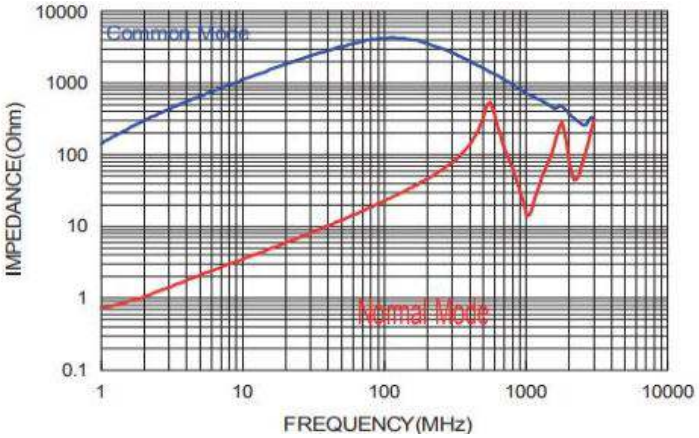
FSCM3225B Series (Rev. 5.0)

CHARACTERISTICS(REFERENCE)

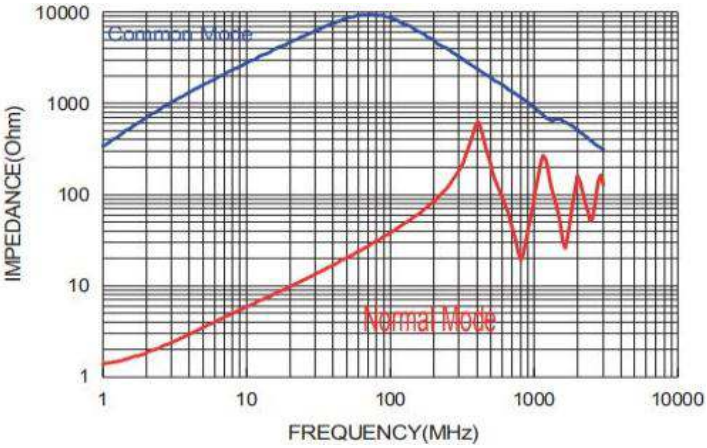
3225B-110



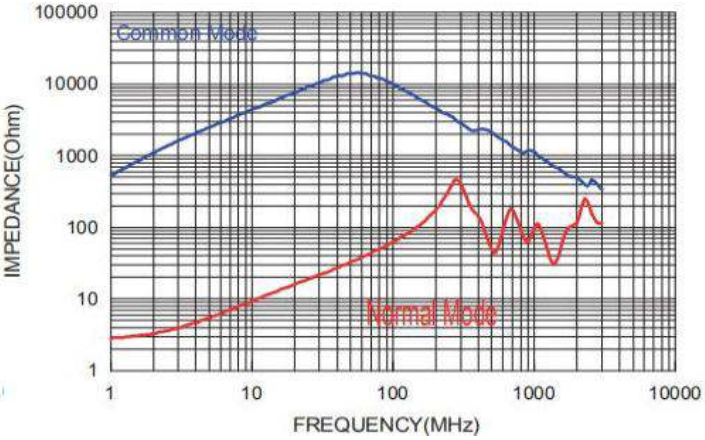
3225B-220



3225B-510



3225B-101



FSCM4532B Series (Rev. 5.0)

A full series of common mode choke is designed for excellent noise attenuation with compact sizing for use in wide range of applications.
Both standard series and custom designs are available.

Features

* RoHS compliant
* Miniature SMD type common mode filter for fully automated assembly
* Wide impedance range (30 ~ 2200Ω) for noise suppression
* Excellent solderability

Applications

* USB line for personal computers and periphera
* IEEE 1394 line for personal computers, DVC, STB
* LVDS, panel line for liquid display panels, etc.

Operating & Storage Condition

* Operating Temp : -40 to +125°C
* Storage Temp : -20 to +40°C
* Storage Life Time: 12 Months @25°C , RH 65%

Product Identification

FSCM	4532B	-	110
1	2		3

1. Product Code
2. Size Code
3. Inductance: 11uH

JIS Code	EIA Code
4532	1812

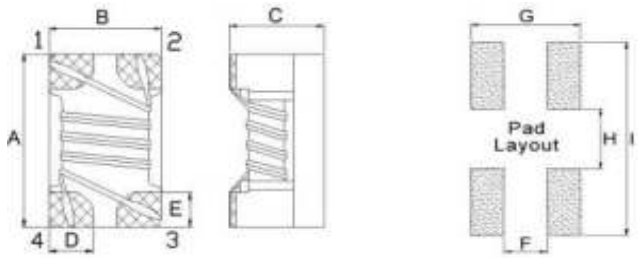
Test Equipment

* HP4291A-Z, HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer- SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]



Size Code	A(±0.2)	B(±0.2)	C(±0.2)	D(typ.)	E(typ.)	F(typ.)	G(typ.)	H(typ.)	I(typ.)
4532B	4.5	3.2	2.8	1.2	1.0	0.7	3.8	2.5	4.8

Electrical Characteristics

P/N	Impedance @10MHz (Ω) min.	Impedance @10MHz (Ω) typ.	Inductance @100KHz/0.1V (uH)	DCR (Ω) max.	IDC (mA) max.	Rated Voltage (VDC)	IR (MΩ) min.
FSCM4532B-110	300	600	11+50%/-30%	0.6	250	50	10
FSCM4532B-220	500	1200	22+50%/-30%	1.0	200	50	10
FSCM4532B-510	1000	2800	51+50%/-30%	1.0	200	50	10
FSCM4532B-101	2000	5800	100+50%/-30%	2.0	150	50	10
FSCM4532B-201	5000	9800	200+50%/-30%	4.5	100	50	10

* IDC : Temp. rise 40°C typ.

FSCM9583 Series (Rev. 5.0)

Applications

* USB line for personal computers and periphera
* IEEE 1394 line for personal computers, DVC, STB
* LVDS, panel line for liquid display panels, graph card,etc.

Features

* RoHS compliant
* Miniature SMD type common mode filter for fully automated assembly
* Wide impedance range (30 ~ 2200Ω) for noise suppression

Operating & Storage Condition

* Operating Temp. : -40 to +85°C
* Storage Temp. : -40 to +85°C
* Storage Life Time : 12 Months @25°C , RH 65%

Product Identification

FSCM	9583	-	801	N
1	2		3	4

1. Product Code
2. Size Code
3. Impedance: 800 ohm
4. Tolerance

Test Equipment

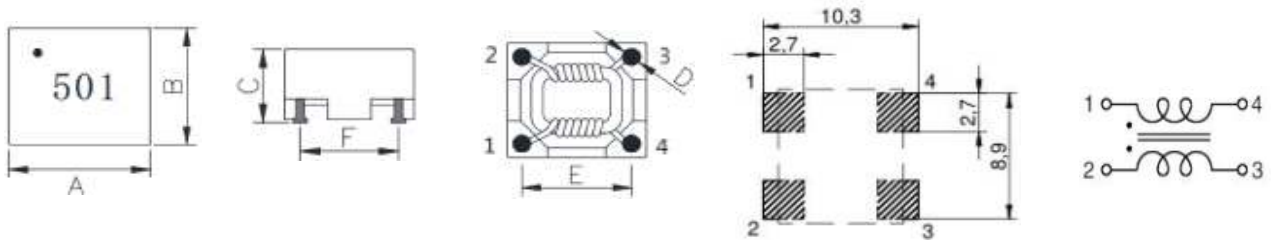
* HP4291A-Z, HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer- SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended Pad Layout: [mm]

Top View	Side View	Bottom View	Pad Layout	Schematic



Size Code	A(±0.3)	B(±0.3)	C(max.)	D(typ.)	E(typ.)	F(typ.)
9583	9.5	8.3	5.3	1.2	7.5	6.3

Electrical Characteristics

P/N	Impedance @100MHz (Ω)	Inductance (uH) typ.	DCR (mΩ) max.	IDC (A) max.	Insulation (VAC) max.
FSCM9583-501N	500 typ.	5.0	5.5	5.0	500
FSCM9583-801N	800 typ.	9.0	11	3.5	500
FSCM9583-102N	1000 typ.	11.0	30	2.5	500
FSCM9583-222N	2200 typ.	30.0	60	1.4	500

* Inductance Test Condition: @100KHz/0.1V
* IDC : D.C.current when at ΔT=40°C

FDLW Series (Rev. 5.0)

A full series of common mode choke is designed for excellent noise attenuation with compact sizing for use in wide range of applications.

Both standard series and custom designs are available.

Features

* RoHS compliant
* Miniature SMD type common mode filter for fully automated assembly
* Excellent solderability

Applications

* USB line for personal computers and periphera
* IEEE 1394 line for personal computers, DVC, STB
* LVDS, panel line for liquid display panels, graph card,etc.

Product Identification

FDLW	0502	-	501	T
1	2		3	4

1. Product Code
2. Size Code
3. Impedance: 500ohm @100MHz
4. Tolerance: T=Typical

Operating & Storage Condition

* Operating Temp : -55 to +125°C
* Storage Temp : -25 to +35°C
* Storage Life Time: 12 Months @25°C , RH 65%

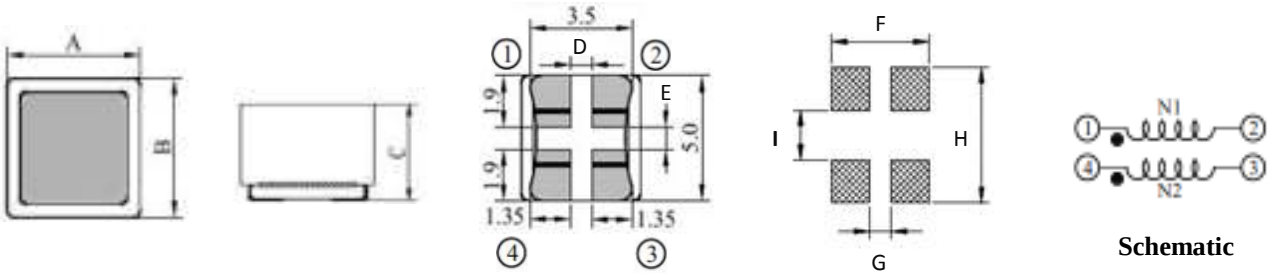
Test Equipment

* HP4284A,HP42841A-L,IDC,RDC
* HP4287A - Impedance
* HP8753E - HP8753D Network Analyzer

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]



Schematic

Size Code	A(±0.2)	B(±0.2)	C(max.)	D(typ.)	E(typ.)	F(ref.)	G(ref.)	H(ref.)	I(ref.)
0502	4.8	5.0	2.5	1.0	1.2	4.0	0.8	5.5	1.0
0504	4.8	5.0	4.5	1.0	1.2	4.0	0.8	5.5	1.0

FDLW Series (Rev. 5.0)

Electrical Characteristics

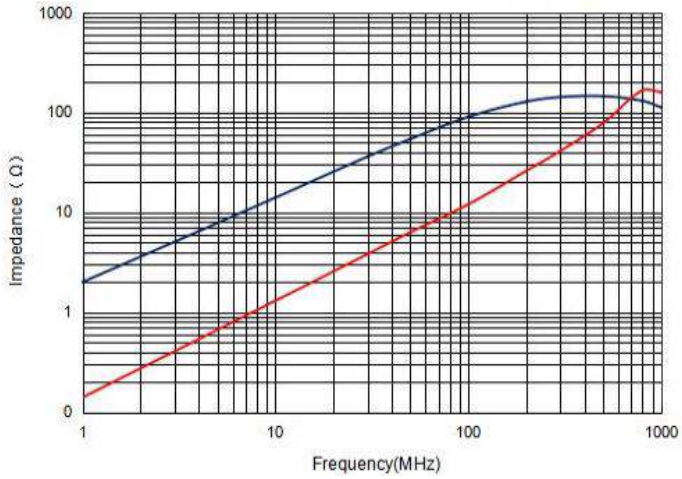
P/N	Impedance @100Mhz (Ω) typ.	Rated Voltage (VDC) max.	DCR (mΩ) max.	IDC (A) max.	IR (MΩ) min.
FDLW0502-101T	100	50	13	6.0	10
FDLW0502-251T	250	50	20	5.0	10
FDLW0502-501T	500	50	27	4.0	10
FDLW0502-102T	1000	50	34	2.0	10
FDLW0502-142T	1400	50	56	1.5	10
FDLW0502-152T	1500	50	56	1.5	10
FDLW0504-191T	190	50	20	5.0	10
FDLW0504-351T	350	50	40	2.0	10
FDLW0504-102T	1000	50	60	1.5	10
FDLW0504-152T	1500	50	100	1.0	10
FDLW0504-302T	3000	50	200	0.5	10
FDLW0504-402T	4000	50	300	0.2	10

* IDC: ΔT=40℃Typ.

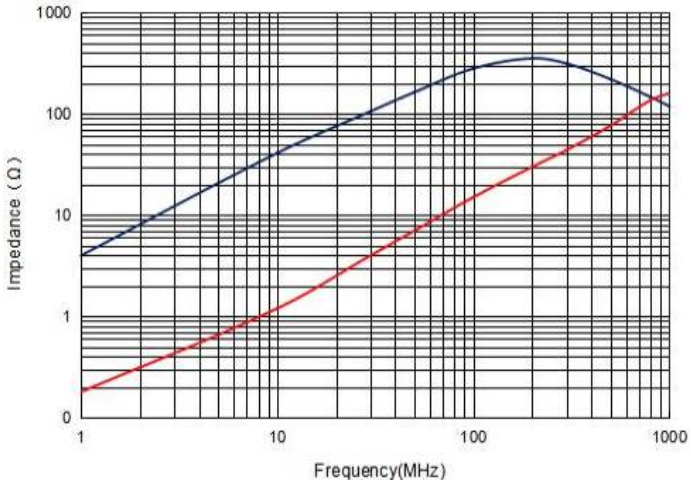
FDLW Series (Rev. 5.0)

CHARACTERISTICS(REFERENCE)

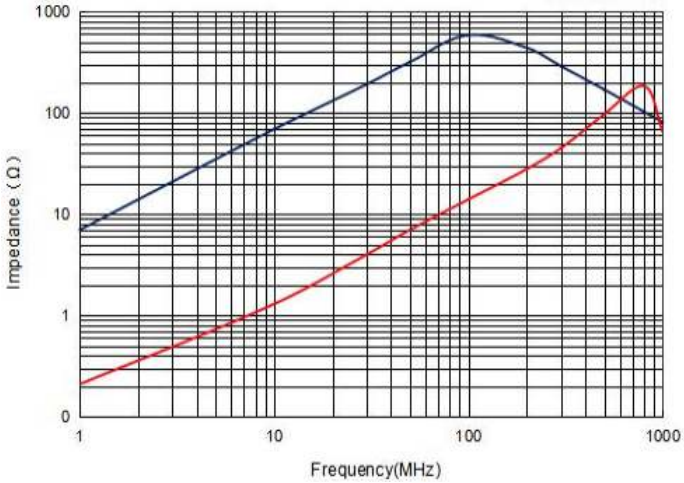
FDLW0502-101T



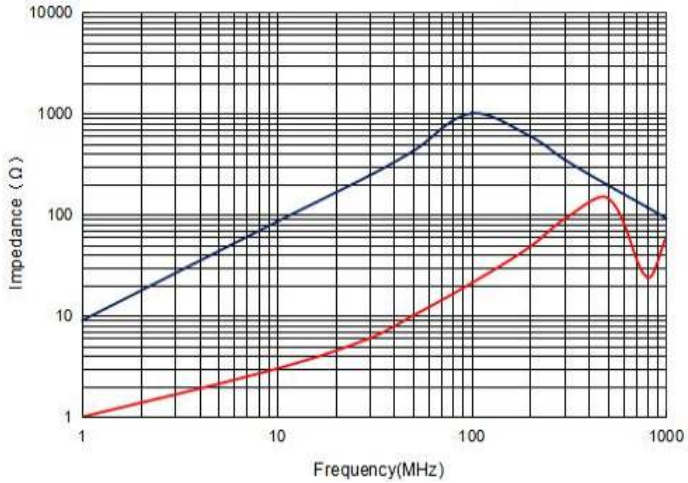
FDLW0502-251T



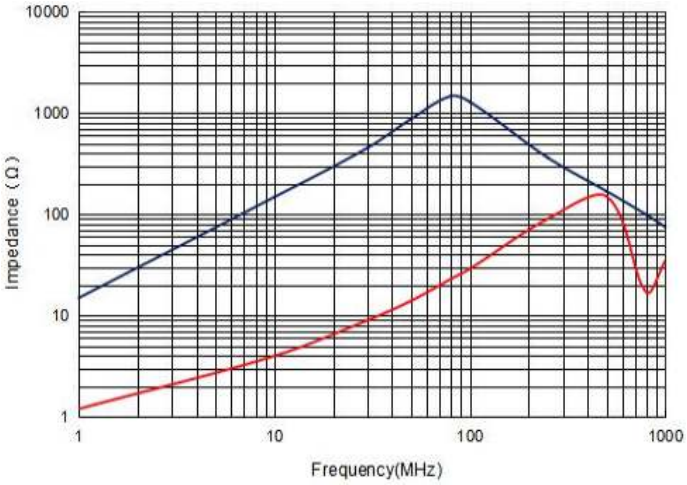
FDLW0502-501T



FDLW0502-102T



FDLW0502-142T&152T

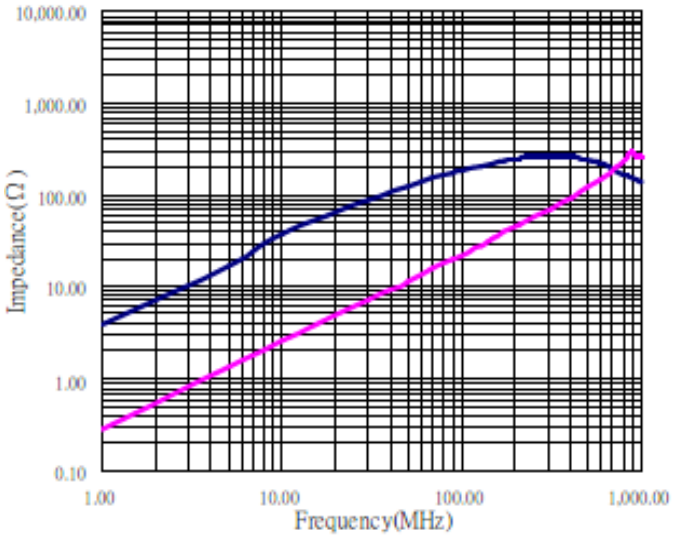


Common Mode Differential Mode

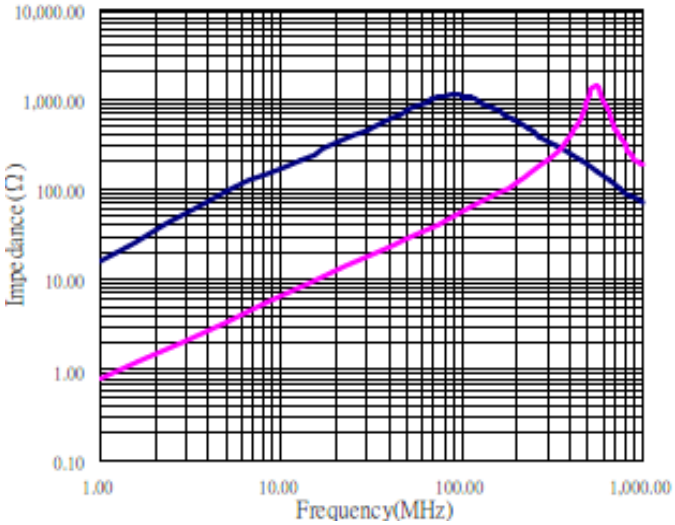
FDLW Series (Rev. 5.0)

CHARACTERISTICS(REFERENCE)

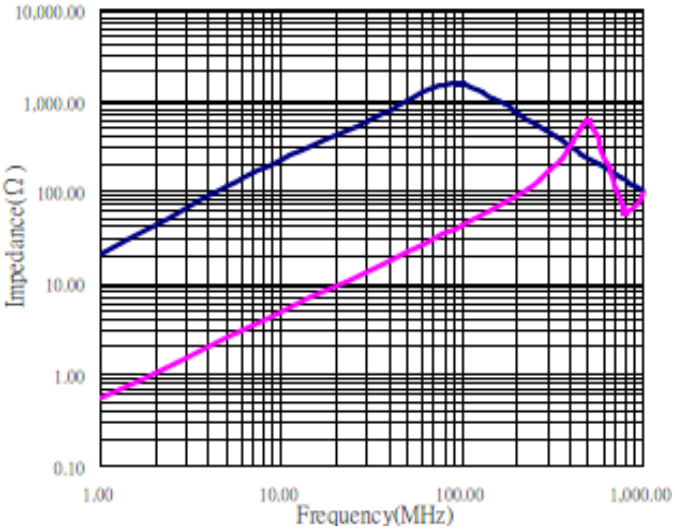
FDLW0504-191T



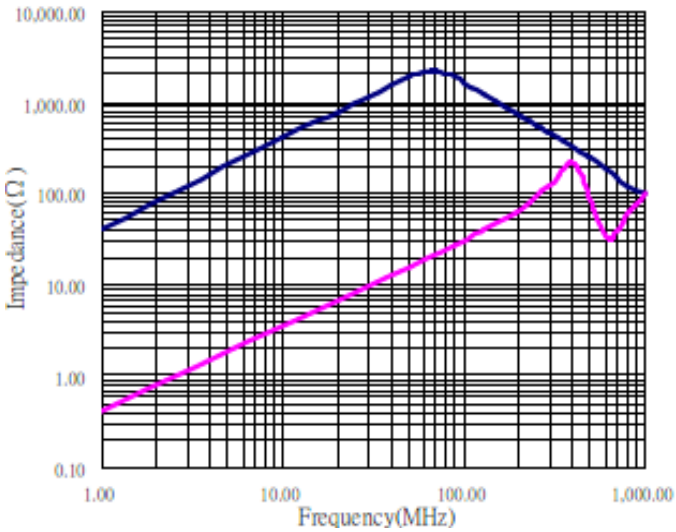
FDLW0504-102T



FDLW0504-152T



FDLW0504-302T



Common Mode Differential Mode

FCMC0906 Series (Rev. 5.0)

Applications

* Mobile Device
* Handheld Device
* LowProfile Device, LCD.

Features

* Common Mode Filter for high Current Capacity
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard
* Lower cost

Operating & Storage Condition

* Operating Temp: -40 to +125°C
* Storage Temp.: -40 to +125°C
* Storage Life Time: 12 months @25°C, RH 65%

Product Identification

FCMC	0906	-	271	I
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 270uH
4. Tolerance: I=minimum

Test Equipment

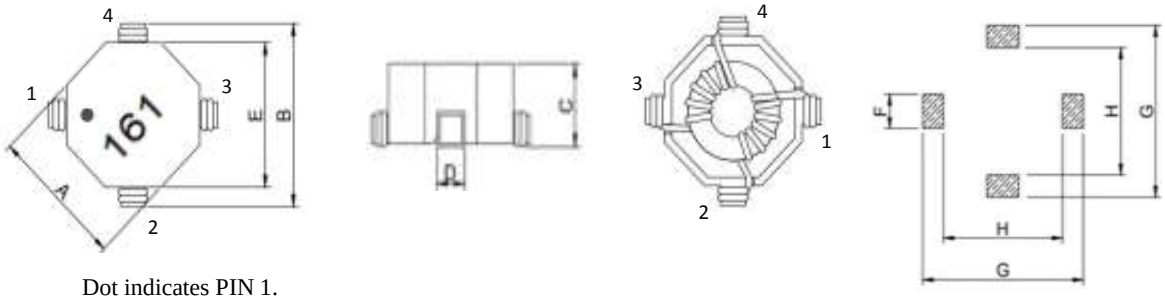
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended Pad Layout: [mm]

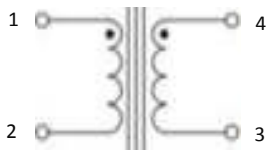
Top View	Side View	Bottom View	Pad Layout



Dot indicates PIN 1.

Size Code	A(±0.5)	B(±0.5)	C(max.)	D(max.)	E(±0.5)	F(typ.)	G(typ.)	H(ref.)
0906	9.0	11.4	6.0	3.2	8.9	3.6	12.6	8.0

Schematic:



FCMC0906 Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance Pin(1-2) & (4-3) (uH) min.	DCR Pin(1-2) & (4-3) (mΩ) typ.	Leakage Inductance (uH) typ.	IDC (A) max.
FCMC0906-140I	14	4	0.13	6.0
FCMC0906-250I	25	5	0.22	5.3
FCMC0906-400I	40	8	0.34	4.4
FCMC0906-570I	57	12	0.47	3.6
FCMC0906-101I	100	19	0.80	2.8
FCMC0906-161I	160	29	1.25	2.3
FCMC0906-231I	230	44	1.75	1.8
FCMC0906-271I	270	60	2.00	1.6
FCMC0906-361I	360	84	2.60	1.3
FCMC0906-461I	460	120	3.30	1.1
FCMC0906-571I	570	170	4.00	0.9
FCMC0906-701I	700	230	5.00	0.8
FCMC0906-901I	900	330	6.30	0.6
FCMC0906-102I	1000	440	7.30	0.5
FCMC0906-132I	1300	620	9.00	0.5

* Test Condition: @100KHz/0.1V (Ambient temperature: 25°C)
* IDC: The actual value of D.C. current when the temperature rise is △t＝40℃(Ta＝20℃).
* Tolerance: I=minimum

FCMC1006 Series (Rev. 5.0)

Applications

* Mobile Device
* Handheld Device
* LowProfile Device, LCD.

Features

* Common Mode Filter for high Current Capacity
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard
* Lower cost

Operating & Storage Condition

* OperatingTemp.: -40 to +125°C
* Storage Temp.: -40 to +125°C
* Storage Life Time: 12 months @25°C, RH 65%

Product Identification

FCMC	1006	-	471	Y
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 470uH
4. Tolerance: Y=±40%

Test Equipment

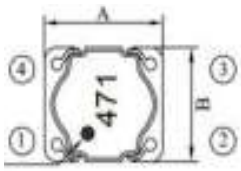
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

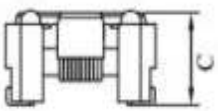
* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

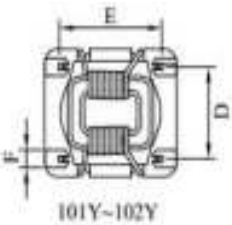
Dimension & Recommended Pad Layout: [mm]

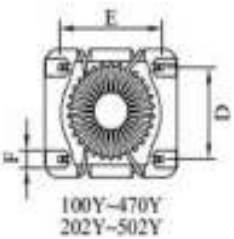
Top View	Side View	Bottom View



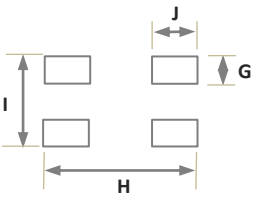
Dot indicates PIN 1.

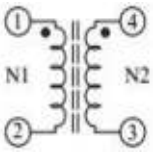






Pad Layout	Schematic:





Size Code	A(±0.5)	B(±0.3)	C(max.)	D(±0.2)	E(±0.2)	F(ref.)	G(ref.)	H(ref.)	I(ref.)	J(ref.)
1006	10.0	8.7	6.5	6.2	7.6	1.4	2.7	11.5	9.0	2.7

FCMC1006 Series (Rev. 5.0)

Electrical Characteristics

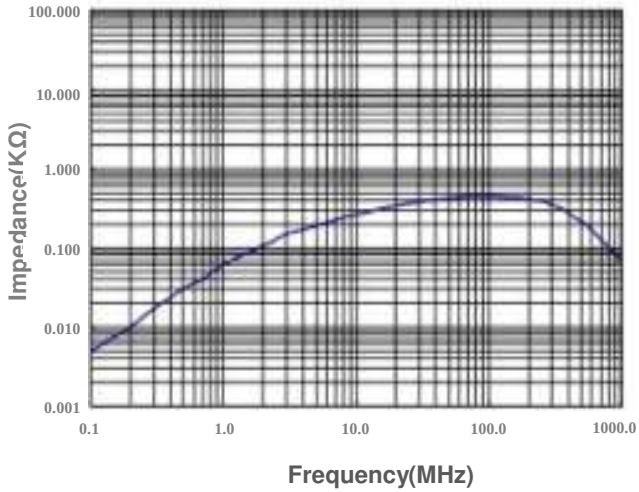
Part No.	Inductance Pin(1-2) & (4-3) (uH)	DCR Pin(1-2) & (4-3) (mΩ) max.	Hi-pot (VAC) 3mA/1S	Impedance (Ω) min.	IDC (A) max.	Freq. Range (MHz)
FCMC1006-100Y	10	30	600	100	4.0	10~300
FCMC1006-220Y	22	35	600	300	3.8	10~200
FCMC1006-470Y	47	40	600	800	3.2	10~100
FCMC1006-101Y	100	25	1000	100	3.0	10~300
FCMC1006-121Y	120	25	1000	200	2.5	10~200
FCMC1006-221Y	220	32	1000	350	2.2	7~150
FCMC1006-251Y	250	35	1000	400	2.0	5~100
FCMC1006-471Y	470	65	1000	900	1.6	2~40
FCMC1006-501Y	500	70	1000	800	1.5	2~50
FCMC1006-102Y	1000	180	1000	1400	1.0	1~40
FCMC1006-202Y	2000	270	300	2000	0.8	0.5~15
FCMC1006-222Y	2200	300	300	3400	0.8	1~11
FCMC1006-302Y	3000	330	300	3000	0.7	0.5~10
FCMC1006-332Y	3300	360	300	4400	0.7	0.9~7
FCMC1006-392Y	3900	540	300	5000	0.5	0.7~6
FCMC1006-402Y	4000	600	300	4000	0.5	0.5~5
FCMC1006-472Y	4700	720	300	6200	0.4	0.6~3
FCMC1006-502Y	5000	780	300	5000	0.3	0.5~3

* Test Condition: @100KHz/0.1V (Ambient temperature: 25°C)
* IDC: The actual value of D.C. current when the temperature rise is △t＝40℃(Ta＝20℃).
* Tolerance: Y=±40%

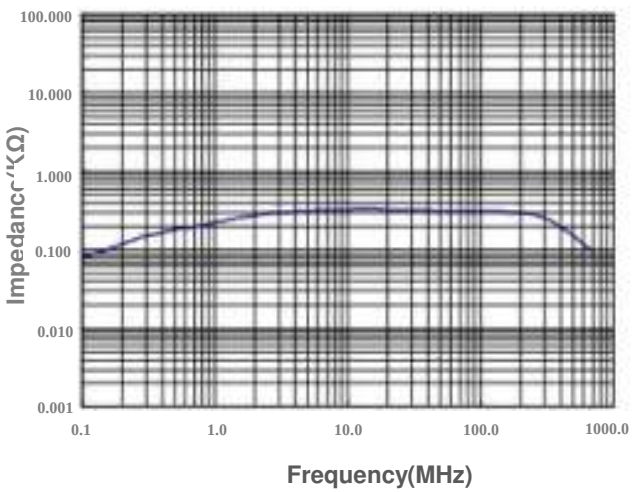
FCMC1006 Series (Rev. 5.0)

CHARACTERISTICS(REFERENCE)

1006-100Y



1006-101Y



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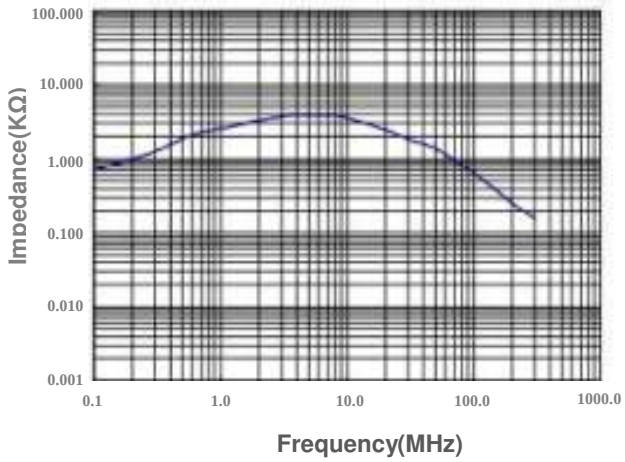
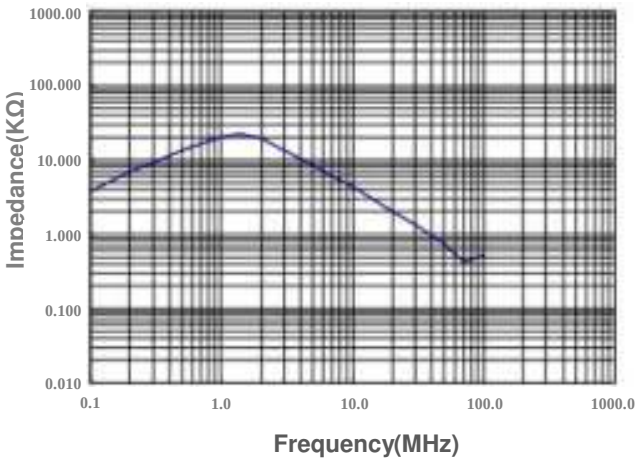


1006-502Y



FCMC1207 Series (Rev. 5.0)

Applications

* Mobile Device
* Handheld Device
* LowProfile Device, LCD.

Features

* Common Mode Filter for high Current Capacity
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard
* Lower cost

Operating & Storage Condition

* Operating Temp: -40 to +125°C
* Storage Temp.: -40 to +125°C
* Storage Life Time: 12 months @25°C, RH 65%

Product Identification

FCMC	1207	-	251	I
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 250uH
4. Tolerance: I=minimum

Test Equipment

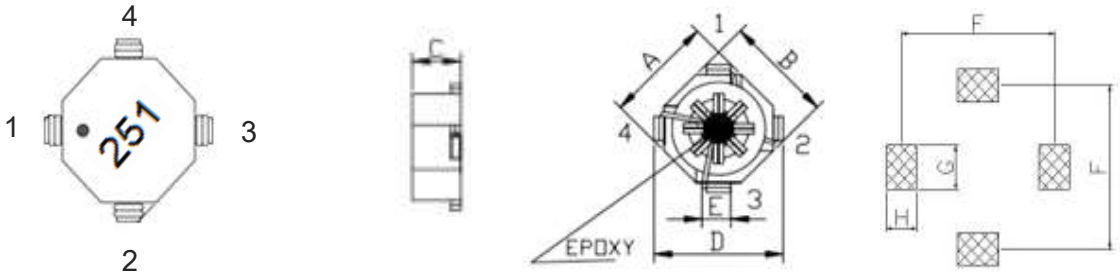
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended Pad Layout: [mm]

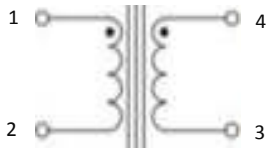
Top View	Side View	Bottom View	Pad Layout



Dot indicates PIN 1.

Size Code	A(±0.5)	B(±0.5)	C(max.)	D(±0.5)	E(typ.)	F(typ.)	G(typ.)	H(ref.)
1207	11.5	11.5	7.5	14.0	3.2	12.7	4.0	2.5

Schematic:



FCMC1207 Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance Pin(1-2) & (4-3) (uH) min.	DCR Pin(1-2) & (4-3) (mΩ) typ.	Leakage Inductance (uH) typ.	IDC (A) max.
FCMC1207-280I	28	5	0.31	5.7
FCMC1207-450I	45	6	0.46	5.1
FCMC1207-650I	65	7	0.64	4.7
FCMC1207-900I	90	10	0.85	3.9
FCMC1207-151I	150	17	1.30	3.1
FCMC1207-221I	220	20	1.90	2.8
FCMC1207-251I	250	27	2.20	2.4
FCMC1207-351I	350	40	3.00	2.0
FCMC1207-401I	400	53	3.30	1.7
FCMC1207-521I	520	76	4.20	1.4
FCMC1207-651I	650	107	5.10	1.2
FCMC1207-791I	790	145	6.10	1.0
FCMC1207-102I	1000	210	7.80	0.8
FCMC1207-132I	1300	300	9.60	0.7

* Test Condition: @100KHz/0.1V (Ambient temperature: 25°C)
* IDC: The actual value of D.C. current when the temperature rise is △t＝40℃(Ta＝20℃).
* Tolerance: I=minimum

FCMC1609 Series (Rev. 5.0)

Applications

* Mobile Device
* Handheld Device
* LowProfile Device, LCD.

Features

* Common Mode Filter for high Current Capacity
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard
* Lower cost

Operating & Storage Condition

* Operating Temp.: -40 to +125°C
* Storage Temp.: -40 to +125°C
* Storage Life Time: 12 months @25°C, RH 65%

Product Identification

FCMC	1609	-	602	S
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 6mH
4. Tolerance: S=±35%

Test Equipment

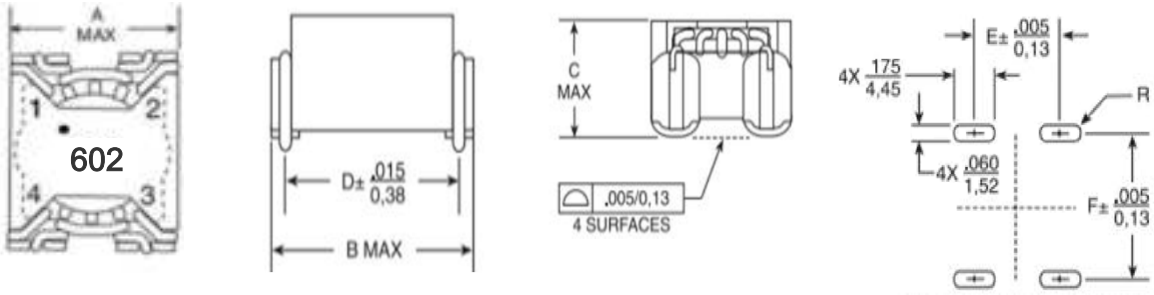
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

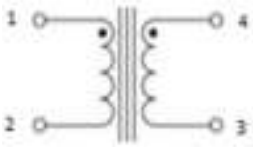
Dimension & Recommended Pad Layout: [in/mm]

Top View	Left View	Side View	Pad Layout



Size Code	A(max.)	B(max.)	C(max.)	D(±0.4)	E(±0.2)	F(±0.2)
1609	14.2	16.4	8.9	13.2	8.6	13.5

Schematic:



Electrical Characteristics

Part No.	Inductance Pin(1-2) & (4-3)	DCR Pin(1-2) & (4-3)	SRF	IDC
FCMC1609-901S	0.9mH ± 35%	60mΩ typ.	3.00MHz min.	1.5A max.
FCMC1609-602S	6.0mH ± 35%	450mΩ typ.	0.22MHz min.	1.0A max.
FCMC1609-133S	13.0mH ± 35%	850mΩ typ.	0.19MHz min.	0.5A max.

* Test Condition: @100KHz/0.1V (Ambient temperature: 25°C)
* IDC: The actual value of D.C. current when the temperature rise is △t=40℃(Ta=20℃).

FCMC9050 Series (Rev. 5.0)

Applications

* Mobile Device
* Handheld Device
* LowProfile Device, LCD.

Features

* Common Mode Filter for high Current Capacity
* Fit for power line & signal line circuit
* To help you go pass the CE/FCC standard
* Lower cost

Operating & Storage Condition

* Operating Temp: -40 to +125°C
* Storage Temp.: -40 to +125°C
* Storage Life Time: 12 months @25°C, RH 65%

Product Identification

FCMC	9050	-	652	N
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 6.5mH
4. Tolerance: N=±50%

Test Equipment

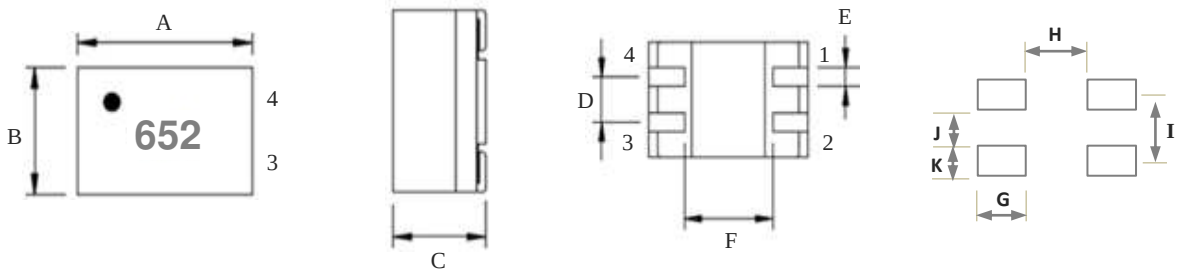
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

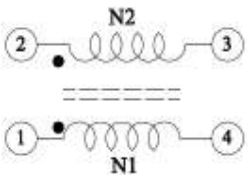
* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended Pad Layout: [mm]

Top View	Side View	Bottom View	Pad Layout



Schematic:



Size Code	A(±0.3)	B(±0.3)	C(±0.3)	D(±0.2)	E(ref.)	F(ref.)	G(ref.)	H(ref.)	I(ref.)	J(ref.)	K(ref.)
9050	9.2	6.0	5.0	2.5	1.0	5.7	2.0	5.3	2.3	1.1	1.2

FCMC9050 Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance Pin(1-4) & (2-3)		DCR (mΩ) max.	IDC (A) max.	Impedance (Ω) min.	Freq. Range (MHz)	Insulation Resistance (MΩ) min.	Rated Voltage (V) max.
	(uH)	Test Freq.						
FCMC9050-100	10+50%/-30%	1KHz/0.1V	80	1.6	200	20 ~ 300	10	50
FCMC9050-250	25+50%/-30%	1KHz/0.1V	160	1.0	600	20 ~ 150	10	50
FCMC9050-400	40+50%/-30%	1KHz/0.1V	250	0.9	800	20 ~ 100	10	50
FCMC9050-500N	50	1KHz/0.1V	320	0.8	800	20 ~ 100	10	50
FCMC9050-510N	51	1KHz/0.1V	320	0.8	800	20 ~ 100	10	50
FCMC9050-251N	250	100KHz/0.05V	130	1.2	600	3 ~ 20	10	50
FCMC9050-471N	470	100KHz/0.05V	140	1.1	1000	2 ~ 20	10	50
FCMC9050-501N	500	100KHz/0.05V	150	1.0	1000	1 ~ 20	10	50
FCMC9050-102N	1000	100KHz/0.05V	310	0.8	1500	1 ~ 15	10	50
FCMC9050-202N	2000	100KHz/0.05V	420	0.6	3000	1 ~ 5	10	50
FCMC9050-472N	4700	100KHz/0.05V	900	0.4	4000	0.3 ~ 3	10	50
FCMC9050-652N	6500	100KHz/0.05V	1050	0.3	5000	0.3 ~ 2	10	50

* IDC: The actual value of D.C. current when the temperature rise is △t＝40℃(Ta＝20℃).

FSCM0503 Series (Rev. 5.0)

Applications

* Low current switching power supplies
* Telecom applications

Features

* ROHS compliant
* Compact size
* Surface mount

Operating & Storage Condition

* Operating Temp. : -40 to +125°C
* Storage Temp. : -40 to +80°C
* Storage Life Time : 12 Months @25°C , RH 70%

Product Identification

FSCM	0503	-	510	S
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 51uH
4. Control Code

Test Equipment

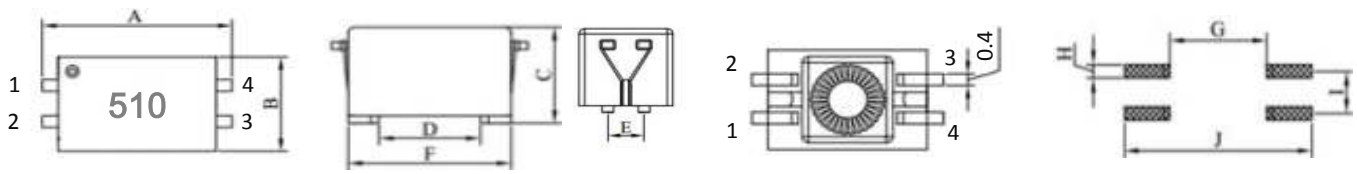
* Chroma Analyzer Model 3302

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

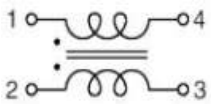
Dimension & Recommended Pad Layout: [mm]

Top View	Side View	Bottom View	Layout



Size Code	A(±0.3)	B(±0.3)	C(±0.3)	D(typ.)	E(typ.)	F(typ.)	G(typ.)	H(typ.)	I(typ.)	J(typ.)
0503	6.0	3.3	3.3	3.1	1.3	5.0	2.7	0.6	1.3	6.4

Schematic



Electrical Characteristics

P/N	Inductance Pin(1-4) & (2-3) (uH)	DCR (Ω) max.	IDC (A) max.	Hipot @3mA/1S (VDC)	Rated Voltage (V)	Impedance (Ω)
FSCM0503-110S	11 +50%/-30%	0.18	0.30	250	80	800
FSCM0503-220S	22 +50%/-30%	0.23	0.30	250	80	1500
FSCM0503-330S	33 +50%/-30%	0.27	0.30	250	80	2000
FSCM0503-510S	51 +50%/-30%	0.32	0.30	250	80	2500
FSCM0503-101S	100 +50%/-30%	0.58	0.30	250	80	4000
FSCM0503-471S	470 +50%/-30%	0.95	0.30	250	80	2200

* Test Condition: @10KHz /0.1V (Ambient temperature: 25°C)
* IDC：ΔT=40℃Typ.

FSCM0602S Series (Rev. 5.0)

Applications

* Low current switching power supplies
* Telecom applications

Features

* ROHS compliant
* Compact size
* Excellent solderability
* Surface mount

Operating & Storage Condition

* Operating Temp. : -40 to +125°C
* Storage Temp. : -40 to +80°C
* Storage Life Time : 12 Months @25°C , RH 65%

Product Identification

FSCM	0602S	-	470	F
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 47uH
4. Tolerance: F=±50%

Test Equipment

* Wayne kerr 3260B/G LCR Meter
* Wayne kerr 3265B Bias Current Source * CH9053

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Top View	Side View	Bottom View	Pad Layout

Size Code	A(max.)	B(±0.15)	C(±0.15)	D(±0.15)	E(±0.1)	F(typ.)	H(typ.)	I(typ.)	J(typ.)	K(typ.)
0602S	6.50	3.60	1.65	2.50	0.55	6.00	5.10	2.50	1.50	0.85

Schematic:

Electrical Characteristics

P/N	Inductance Pin(1-2)&(3-4) (uH) min.	Impedance (Ω) typ.	DCR (mΩ) max.	IDC (mA) max.	Hipot @3mA/1S (VDC)
FSCM0602S-100F	10	200	240	300	250
FSCM0602S-470F	47	300	160	300	250
FSCM0602S-510F	51	300	160	300	250
FSCM0602S-820F	82	440	200	300	250
FSCM0602S-101F	100	500	220	300	250
FSCM0602S-181F	180	1000	250	300	250
FSCM0602S-221F	220	1200	280	300	250
FSCM0602S-331F	330	2000	300	300	250

* Test Condition: @100KHz /0.1V (Ambient temperature: 25°C)
* IDC：ΔT=40℃Typ.

FSCM0805T Series (Rev. 5.0)

Applications

* Low current switching power supplies
* Telecom applications

Features

* ROHS compliant
* Compact size
* Excellent solderability
* Surface mount

Operating & Storage Condition

* Operating Temp. : -40 to +125°C
* Storage Temp. : -40 to +80°C
* Storage Life Time : 12 Months @25°C , RH 65%

Product Identification

FSCM	0805T	-	472	Y
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 4.7mH
4. Tolerance: Y=±40%

Test Equipment

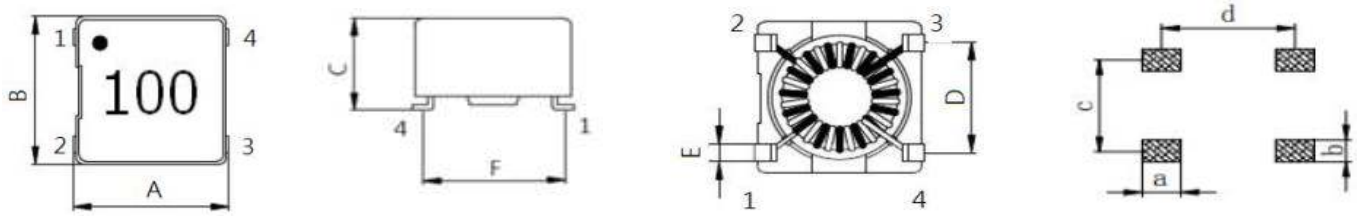
* Wayne kerr 3260B/G LCR Meter
* Wayne kerr 3265B Bias Current Source * CH9053

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

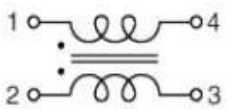
Dimension & Recommended Pad Layout: [mm]

Top View	Side View	Bottom View	Pad Layout



Size Code	A(±0.5)	B(±0.5)	C(±0.5)	D(±0.5)	E(typ.)	F(typ.)	a(typ.)	b(typ.)	c(typ.)	d(typ.)
0805T	8.8	8.5	5.5	6.2	1.0	7.6	1.85	1.50	6.20	7.65

Schematic:



FCMC0805T Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance Pin(1-4) & (2-3) (uH)	DCR Pin(1-4) & (2-3) (mΩ) max.	IDC (A) max.	Hipot @3mA/1S (VDC)	Impedance (Ω) min.	Freq. Range (MHz)
FSCM0805T-100Y	10	30	4.00	600	100	10~300
FSCM0805T-220Y	22	35	3.80	600	300	10~200
FSCM0805T-470Y	47	40	3.20	600	800	10~100
FSCM0805T-101Y	100	25	3.00	500	100	10~300
FSCM0805T-121Y	120	25	2.50	500	200	10~200
FSCM0805T-201Y	200	15	3.00	500	300	7~150
FSCM0805T-221Y	220	32	2.20	500	350	7~150
FSCM0805T-251Y	250	35	2.00	500	400	5~100
FSCM0805T-471Y	470	65	1.60	500	900	2~40
FSCM0805T-501Y	500	70	1.50	500	800	2~50
FSCM0805T-102Y	1000	180	0.95	500	1400	1~40
FSCM0805T-202Y	2000	270	0.80	300	2000	0.5~15
FSCM0805T-222Y	2200	300	0.75	300	3400	1~11
FSCM0805T-302Y	3000	330	0.70	300	3000	0.5~10
FSCM0805T-332Y	3300	360	0.65	300	4400	0.9~7
FSCM0805T-392Y	3900	540	0.52	300	5000	0.7~6
FSCM0805T-402Y	4000	600	0.45	300	4000	0.5~5
FSCM0805T-472Y	4700	720	0.35	300	6200	0.6~3
FSCM0805T-502Y	5000	780	0.30	300	5000	0.5~3
FSCM0805T-902Y	9000	900	0.25	300	6000	0.5~3

* Test Condition: @100KHz/0.1V (Ambient temperature: 25°C)
* IDC: The actual value of D.C. current when the temperature rise is △t＝40℃(Ta＝20℃).
* Tolerance: Y= ±40%

FSCM0903B Series (Rev. 5.0)

Applications

* Low current switching power supplies
* Telecom applications

Features

* ROHS compliant
* Compact size
* Excellent solderability
* Surface mount

Operating & Storage Condition

* Operating Temp. : -40 to +125°C
* Storage Temp. : -40 to +80°C
* Storage Life Time : 12 Months @25°C , RH 65%

Product Identification

FSCM	0903B	-	700	I
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 70uH
4. Tolerance: I=minimum

Test Equipment

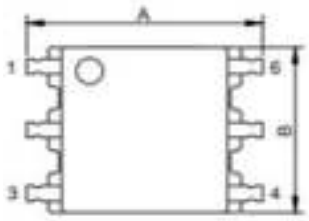
* Wayne kerr 3260B/G LCR Meter
* Wayne kerr 3265B Bias Current Source * CH9053

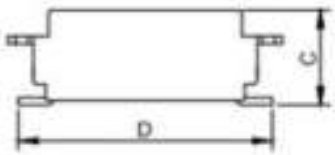
Standard Atmospheric Conditions

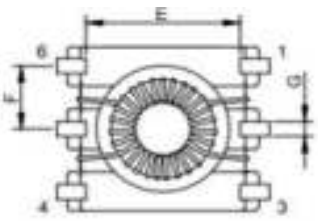
* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension: [mm]

Top View	Side View	Bottom View

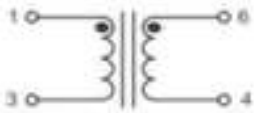






Size Code	A(max.)	B(max.)	C(max.)	D(±0.3)	E(±0.5)	F(±0.3)	G(typ.)
0903B	9.0	7.0	3.5	8.0	6.0	2.5	0.6

Schematic:



Electrical Characteristics

P/N	Inductance Pin(1-3)&(6-4) (uH) min.	Leakage Inductance (uH) max.	DCR (mΩ) max.	IDC (A) max.	Hipot @2mA/5S (VDC)
FSCM0903B-680I	68	-	58	1.2	300
FSCM0903B-700I	70	1.0	60	1.1	300
FSCM0903B-451I	450	-	260	0.5	200

* Test Condition: @100KHz /0.1V (Ambient temperature: 25°C)
* IDC：ΔT=40℃Typ.

FSCM0903C Series (Rev. 5.0)

Applications

* Low current switching power supplies
* Telecom applications

Features

* ROHS compliant
* Compact size
* Excellent solderability
* Surface mount

Operating & Storage Condition

* Operating Temp. : -40 to +125°C
* Storage Temp. : -40 to +80°C
* Storage Life Time : 12 Months @25°C , RH 65%

Product Identification

FSCM	0903C	-	180	I
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 18uH
4. Tolerance: I=minimum

Test Equipment

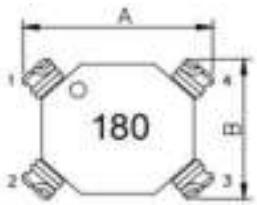
* Wayne kerr 3260B/G LCR Meter
* Wayne kerr 3265B Bias Current Source * CH9053

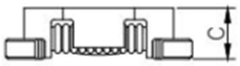
Standard Atmospheric Conditions

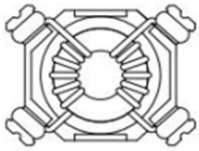
* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

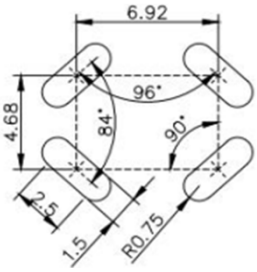
Dimension & Recommended Pad Layout: [mm]

Top View	Side View	Bottom View	Pad Layout









Size Code	A(max.)	B(max.)	C(max.)
0903C	9.4	7.2	3.0

Schematic:

Electrical Characteristics

P/N	Inductance Pin(1-2)&(4-3) (uH) min.	Leakage Inductance (uH) typ.	DCR (mΩ) max.	IDC (A) max.	Hipot @3mA/1S (VDC)
FSCM0903C-4R5I	4.5	0.05	2.7	7.0	500
FSCM0903C-8R0I	8.0	0.09	4.0	5.7	500
FSCM0903C-120I	12.0	0.14	7.7	4.1	500
FSCM0903C-180I	18.0	0.20	8.9	3.8	500
FSCM0903C-200I	20.0	0.25	9.3	3.8	500
FSCM0903C-250I	25.0	0.28	10.0	3.6	500
FSCM0903C-330I	33.0	0.36	13.8	3.1	500

* Test Condition: @100KHz /0.1V (Ambient temperature: 25°C)
* IDC：ΔT=40℃Typ.

FSCM0904 Series (Rev. 5.0)

Applications

* Low current switching power supplies
* Telecom applications

Features

* ROHS compliant
* Compact size
* Excellent solderability
* Surface mount

Operating & Storage Condition

* Operating Temp. : -40 to +125°C
* Storage Temp. : -40 to +80°C
* Storage Life Time : 12 Months @25°C , RH 65%

Product Identification

FSCM	0904	-	101
1	2		3

1. Product Code
2. Size Code
3. Inductance: 100uH

Test Equipment

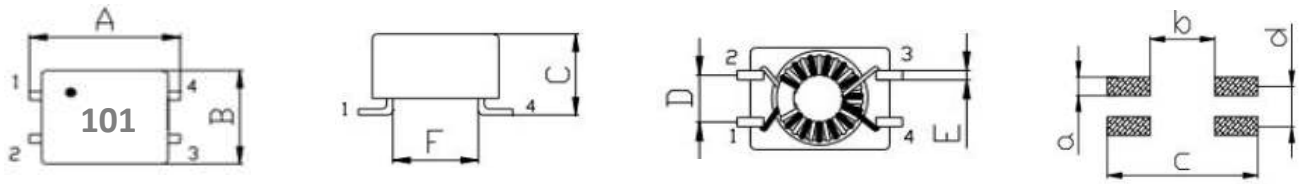
* Wayne kerr 3260B/G LCR Meter
* Wayne kerr 3265B Bias Current Source * CH9053

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

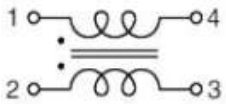
Dimension & Recommended Pad Layout: [mm]

Top View	Side View	Bottom View	Pad Layout



Size Code	A(max.)	B(max.)	C(max.)	D(typ.)	E(typ.)	F(typ.)	a(typ.)	b(typ.)	c(typ.)	d(typ.)
0904	9.50	5.60	5.20	2.54	0.50	5.50	1.00	4.50	10.50	2.54

Schematic:



Electrical Characteristics

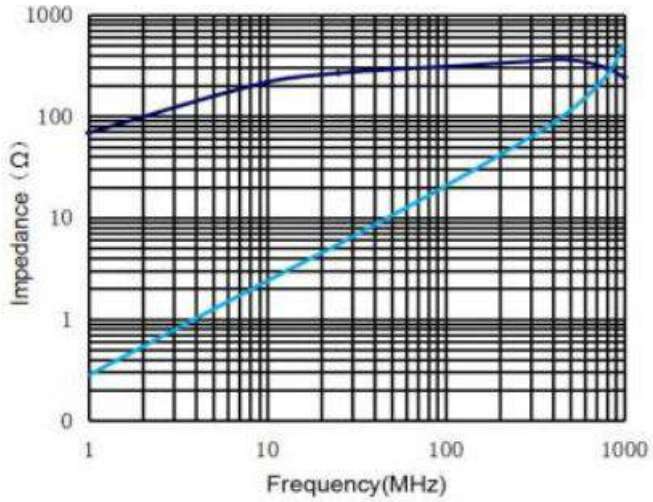
P/N	L (+50%/-30%)	LK Pin(1-4) short (2-3)	Impedance (Ω) min	DCR (mΩ) max.	IDC (mA) max.
FSCM0904-110	11 uH	0.08 uH typ.	160	120	500
FSCM0904-250	25 uH	0.15 uH typ.	450	200	500
FSCM0904-510	51 uH	0.20 uH typ.	800	300	500
FSCM0904-101	100 uH	0.25 uH typ.	600	100	500
FSCM0904-471	470 uH	0.28 uH typ.	1200	280	500
FSCM0904-102	1.0 mH	0.28 uH typ.	1800	300	500
FSCM0904-222	2.2 mH	0.29 uH typ.	3000	400	500
FSCM0904-472	4.7 mH	0.30 uH typ.	5000	700	200

* Test Condition @100KHz / 0.1V, 25°C Ambient
* IDC : This indicates the value of current when the inductance is 10% lower than it's initial value at D.C. superimposition or D.C.current when at ΔT=40°C,whichever is lower. (Ta=20°C)

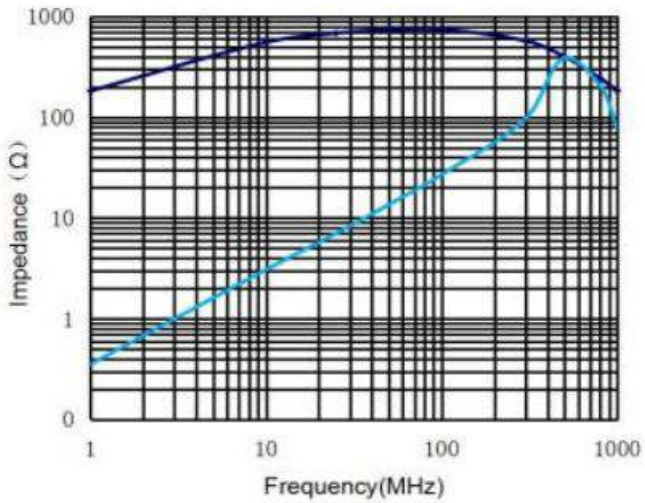
FSCM0904 Series (Rev. 5.0)

CHARACTERISTICS(REFERENCE)

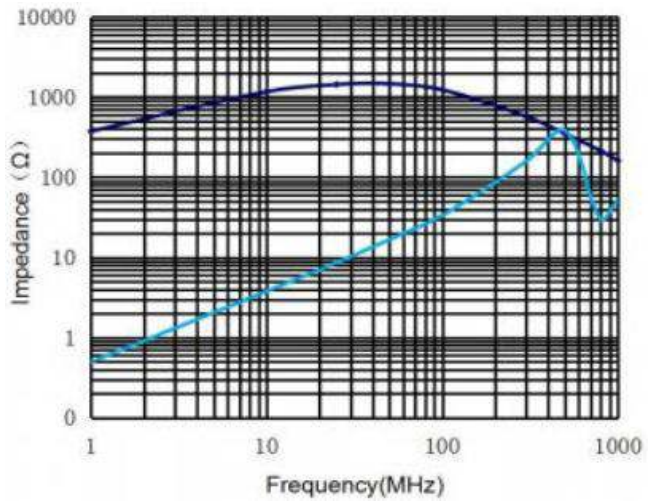
0904-110



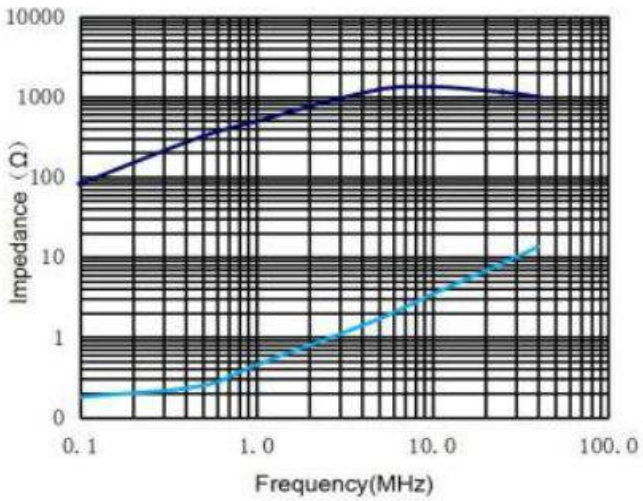
0904-250



0904-510



0904-101

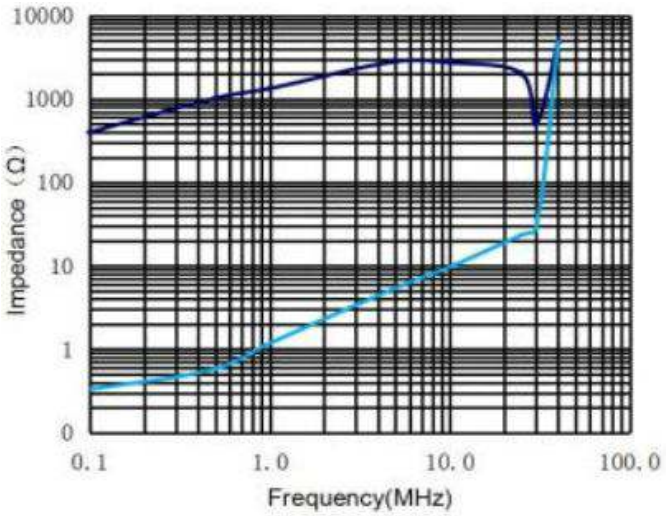


Common Mode
Differential Mode

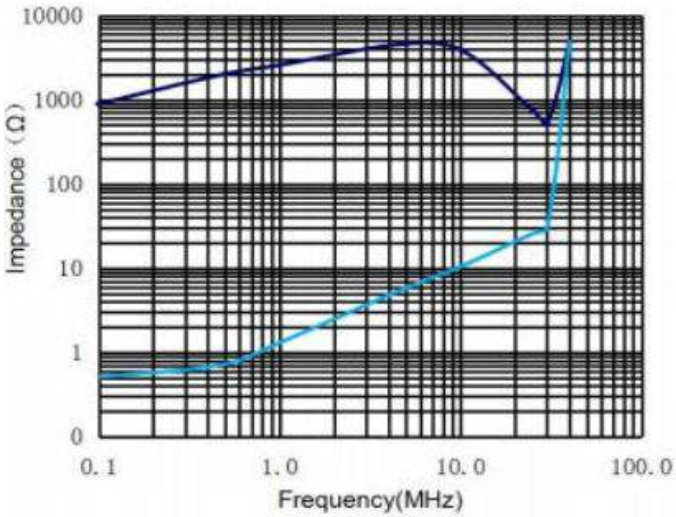
FSCM0904 Series (Rev. 5.0)

CHARACTERISTICS(REFERENCE)

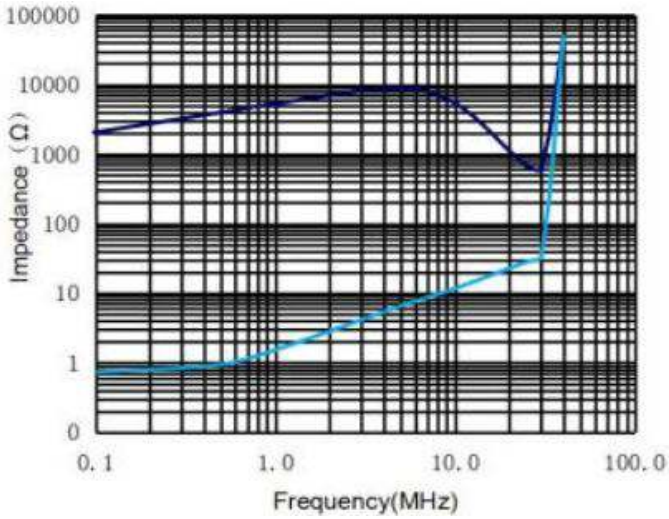
0904-471



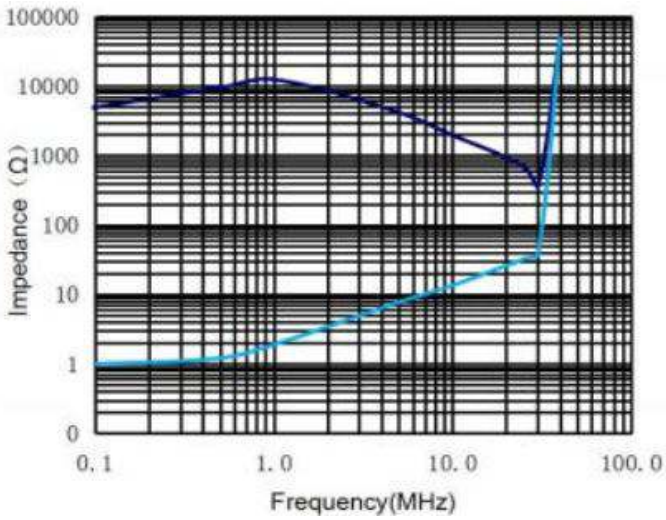
0904-102



0904-222



0904-472



Common Mode
Differential Mode

FSQ Series (Rev. 5.0)

(Dip-type)

Features

* RoHS compliant
* With four lines for voice and data line

Product Identification

FSQ	1515	-	103	I	V
1	2		3	4	5

1. Product Code
2. Core Size Code
3. Inductance: 10mH
4. I: Minimum
5. Type: V-vertical; H-horizontal

Applications

* Attenuating noise of analog and digital signals for telecommunication devices.
* Prevention of interference from ambient radios, CB stations, or high frequency welders, etc.

Operating & Storage Condition

* Operating Temp.: -40 to +125°C
* Storage Temp.: -40 to +85°C
* Storage Life Time : 12 months @25°C, RH 65%

Test Equipment

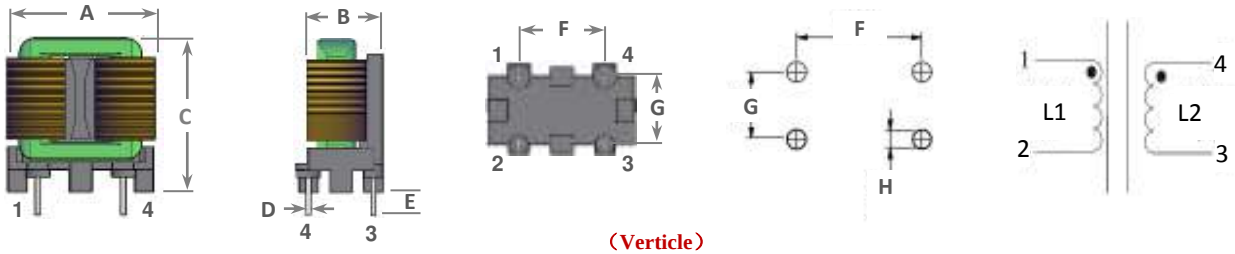
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

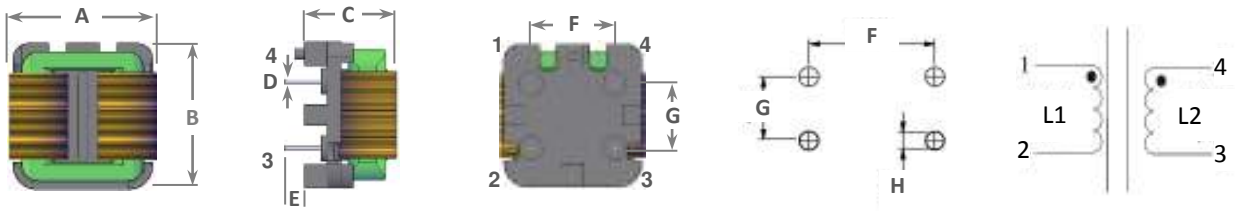
* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended Pad Layout: [mm]

Front View	Side View	Bottom View	Pad Layout	Schematic



(Verticle)



(Horizontal)

Type	Size Code	A(ref.)	B(ref.)	C(max.)	D(±0.1)	E(±0.5)	F(±0.5)	G(±0.5)	H(ref.)
Vertical	0810	16.0	9.5	12.0	0.6	3.5	7.0	4.5	1.0
	1212	19.5	12.5	17.0	0.8	3.5	11.0	8.0	1.2
	1515	20.5	11.5	18.5	0.7	3.5	10.0	7.5	1.2
	1515B	21.0	14.5	19.0	0.8	3.5	12.8	10.0	1.2
	1515C	21.0	14.5	19.0	0.6	3.5	10.5	9.0	1.0
	1918	23.0	17.0	25.0	0.7	3.5	13.0	10.0	1.2
	1918B	22.5	14.0	26.0	0.7	3.5	12.5	10.0	1.2
	2418	23.0	17.0	32.0	0.8	3.5	13.0	10.0	1.2
	2820	25.0	14.5	35.0	0.8	3.5	13.0	10.0	1.2
	3324	33.0	24.0	40.0	0.8	3.5	18.0	15.8	1.2
Horizontal	1212	18.0	15.0	12.0	0.7	3.5	13.0	10.0	1.2
	1515	22.0	18.0	14.0	0.6	3.5	17.0	12.9	1.0
	1918	23.0	23.5	14.0	0.6	3.5	13.0	10.0	1.0
	1918B	22.5	20.5	13.0	0.6	3.5	17.0	15.0	1.0
	2418	23.0	26.0	14.5	0.8	3.5	16.5	21.0	1.2
	2820	27.0	30.0	18.0	0.8	3.5	17.0	21.5	1.2

FSQ Series (Rev. 5.0)

Electrical Characteristics

Part No.	Wire Diameter (mm)	Inductance (mH) min.	DCR (mΩ) typ.	IDC (A) max.
FSQ0810	0.15 * 1.00	1.20	41.0	1.5
FSQ1212	0.10 * 1.00	18.0	180.0	1.0
	0.13 * 1.00	13.0	132.0	1.3
	0.40 * 1.25	0.80	12.6	5.0
FSQ1515	0.13 * 1.0	20.0	167.0	1.3
	0.18 * 1.0	10.0	95.0	1.8
	0.15 * 1.0	13.0	145.0	1.5
	0.15 * 1.5	13.0	89.0	2.2
	0.20 * 1.5	7.0	53.0	3.0
	0.25 * 1.5	4.5	40.0	3.8
	0.30 * 1.2	4.0	48.0	3.5
	0.4 * 1.25	0.8	12.5	5.0
FSQ1918	0.13 * 1.0	28.0	221.0	1.2
	0.15 * 1.5	20.0	118.0	2.2
	0.20 * 1.5	13.0	78.0	3.0
	0.25 * 1.5	8.0	58.0	3.7
	0.20 * 1.2	13.0	92.0	2.4
	0.25 * 1.2	8.0	60.0	3.0
	0.30 * 1.2	7.0	45.0	3.6
	0.30 * 1.5	7.0	36.0	4.5
FSQ2418	0.20 * 1.5	20.0	124.0	3.0
	0.25 * 1.5	16.0	72.0	3.7
	0.30 * 1.5	12.0	56.0	4.5
	0.35 * 1.5	10.0	42.0	5.2
	0.50 * 1.5	5.0	21.0	7.5
	0.55 * 1.5	4.0	18.0	8.2
	0.70 * 1.5	2.0	11.0	10.5
FSQ2820	0.55 * 1.5	4.0	22.0	8.2
	0.20 * 1.5	28.0	136.0	3.0
FSQ3324	0.80 * 1.8	4.0	50.0	14.0

* Test Condition: @1KHz / 0.25V ; Ambient temperature: 25°C .

FSQ Series (Rev. 5.0)

（SMD-type）

Applications

* Attenuating noise of analog and digital signals for telecommunication devices.
* Prevention of interference from ambient radios, CB stations, or high frequency welders, etc.

Features

* RoHS compliant
* With four lines for voice and data line

Operating & Storage Condition

* Operating Temp.: -40 to +125°C
* Storage Temp.: -40 to +85°C
* Storage Life Time : 12 months @25°C, RH 65%

Product Identification

FSQ	1212	-	502	I
1	2		3	4

1. Product Code
2. Core Size Code
3. Inductance: 5.0mH
4. I: Minimum

Test Equipment

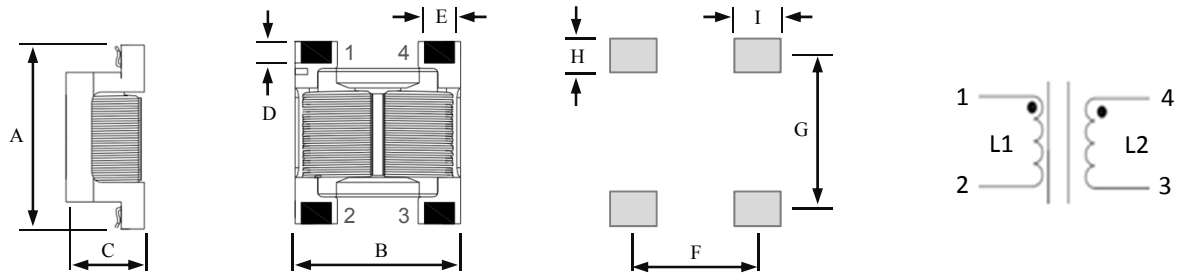
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended Pad Layout: [mm]

Side View | Bottom View | Pad Layout | Schematic



Size Code	A(max.)	B(max.)	C(max.)	D(±0.1)	E(±0.5)	F(±0.3)	G(±0.3)	H(ref.)	I(ref.)
1212	20.0	17.0	9.0	2.2	2.8	12.3	16.5	2.6	3.2
1515	23.0	20.5	10.5	2.7	2.8	16.2	19.0	3.1	3.2

Electrical Characteristics

P/N	L (mH) min.	L Difference | L1-L2 | (uH) max	DCR (mΩ) max.	IDC (A) max.	Wire (mm)
FSQ1212-502I	5.0	300	100	3.0	0.20*1.0
FSQ1212-253I	25.0	300	300	1.5	0.10*1.0
FSQ1515-702I	7.0	300	200	3.5	0.20*1.5
FSQ1515-203I	20	300	250	1.5	0.10*1.0

* Test Condition: Inductance @1KHz/ 0.25V.

FUCM Series (Rev. 5.0)

（V-type）

Features

* RoHS compliant
* Small size and inexpensive type.

Product Identification

FUCM	1712	-	253	I	V
1	2		3	4	5

1. Product Code
2. Product size
3. Inductance: 25mH
4. Tolerance: I=Minimum
5. Type：V-vertical; H-horizontal

Applications

* Multi-function telephone. AC adapter,FAX, Small size fluorescent light, VCR, TV

Operating & Storage Condition

* Operating Temp.: -40 to +85°C
* Storage Temp.: -40 to +85°C
* Storage Life Time: 12 months @25°C, RH 65%

Test Equipment

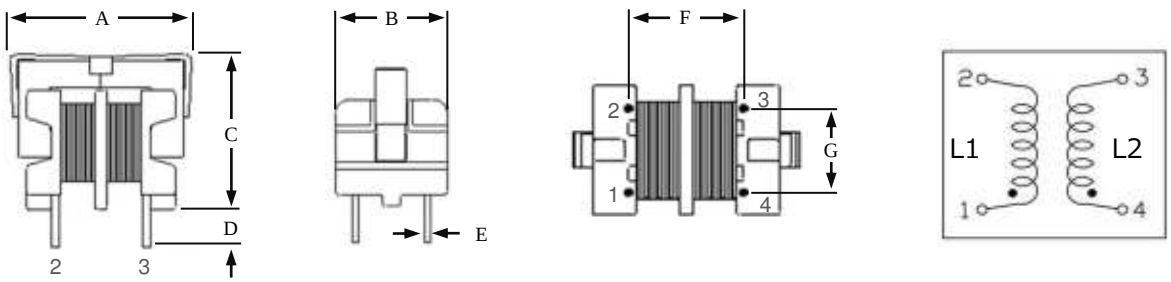
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF
* Zentech 9053 or Equivalent

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension: [mm]

Front View	Side View	Bottom View	Schematic



Size Code	A(max.)	B(max.)	C(max.)	D(±0.5)	E(±0.1)	F(±0.5)	G(±0.5)	TYPE
1712	17.0	12.5	17.0	3.5	0.6	8.0	7.0	V-type
2117	18.5	17.5	22.5	3.5	0.7	13.0	10.0	

Electrical Characteristics

P/N	L (mH) min.	Test Pins	DCR (Ω) max.	Turns (ref.)	Wire (mm)
FUCM1712-203IV	20	(1-2) & (4-3)	2.00	102	0.20
FUCM1712-253IV	25	(1-2) & (4-3)	2.50	93	0.25
FUCM1712-403IV	40	(1-2) & (4-3)	2.40	140	0.20
FUCM2117-502IV	5	(1-2) & (4-3)	0.20	45	0.45
FUCM2117-103IV	10	(1-2) & (4-3)	0.32	59	0.40
FUCM2117-303IV	30	(1-2) & (4-3)	0.85	85	0.29

* Test Condition: Inductance @1KHz/ 0.1V

FUCM Series (Rev. 5.0)

（H-type）

Applications

* Multi-function telephone. AC adapter,FAX, Small size fluorescent light, VCR, TV

Features

* RoHS compliant
* Small size and inexpensive type.

Operating & Storage Condition

* Operating Temp.: -40 to +85°C
* Storage Temp.: -40 to +85°C
* Storage Life Time: 12 months @25°C, RH 65%

Product Identification

FUCM	2422	-	203	I	H
1	2		3	4	5

1. Product Code
2. Product size
3. Inductance: 20mH
4. Tolerance: I=Minimum
5. Type：V-vertical; H-horizontal

Test Equipment

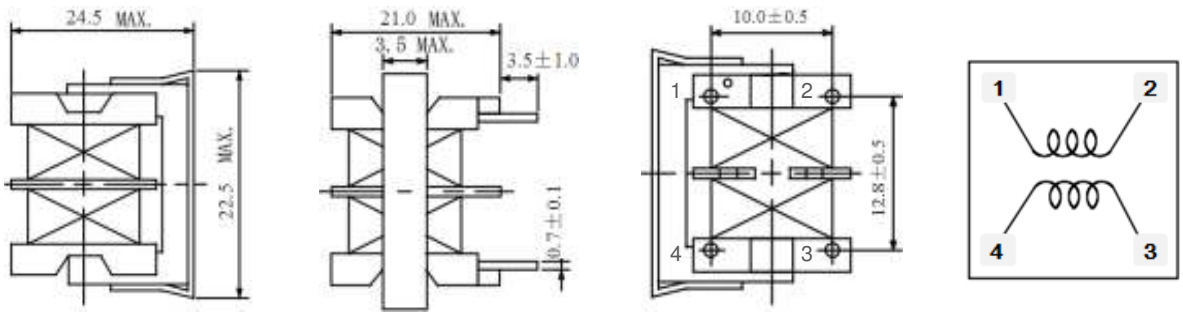
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF
* Zentech 9053 or Equivalent

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension: [mm]

Front View	Side View	Bottom View	Schematic



Electrical Characteristics

P/N	L (mH) min.	Test Pins	DCR (Ω) max.	IDC (A) max.
FUCM2422-203IH	20	(1-2) & (4-3)	0.32	2.0

* Test Condition: Inductance @1KHz/ 0.1V
* DC current at which the temperature rise is △t＝40℃.(Ta＝20℃).

FDCM Series (Rev. 5.0)

Applications

* Attenuating noise of analog and digital signals for telecommunication devices.
* Prevention of interference from ambient radios, CB stations, or high frequency welders, etc.

Features

* RoHS compliant
* With four lines for voice and data line
* Custom design available

Operating & Storage Condition

* Operating Temp : -40 to +85°C
* Storage Temp : -40 to +85°C
* Storage Life Time :12 Months @25°C,RH 65%

Product Identification

FDCM	1105	-	601	I	V
1	2		3	4	5

1. Product Code
2. Size Code
3. Inductance: 600uH
4. Tolerance: I=Minimum
5. V: vertical

Test Equipment

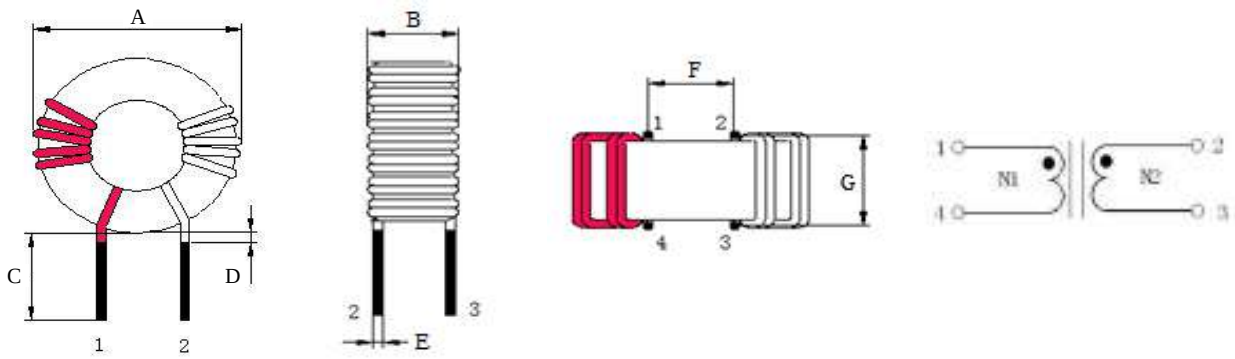
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension : [mm]

Front View	Side View	Top View	Schematic



Size Code	A(max.)	B(max.)	C(±1.0)	D(ref.)	E(ref.)	F(ref.)	G(ref.)
1105	11.0	5.2	7.0	0.8	0.5	3.5	4.0

Electrical Characteristics

P/N	Test Pins	L (uH) min.	DCR (mΩ) max.	Turns (ref.)	Wire (mm)	IDC (A) max.
FDCM1105-601IV	1-4	600	16.5	10.0	0.5	2.0
	2-3	600	16.5	10.0		

* Test condition: @1KHz, 0.25V
* IDC : DC current (A) that will cause an approximate ΔT of 40°C

FDC Series (Rev. 5.0)

Features

* Low cost
* Wide range of inductance
* High reliability

Product Identification

FDC	1012	-	100	K
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: K=10% (J=5%, L=15%, M=20%, N=30%)

Operating & Storage Condition

* Operating Temp. : -40 to +85℃
* Storage Temp. : -20 to +35℃
* Storage Life Time : 12 Months @25℃ , RH 65%

Test Equipment

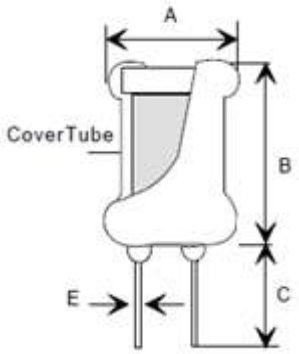
* HP484A,HP42841A-L,IDC.Q.RDC
* HP8753D Network Analyzer-SRF

Standard Atmospheric Conditions

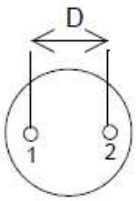
* Ambient Temp : 20+/-15℃
* Relative Humidity : 65+/-20%

Dimension: [mm]

Front View



Bottom View



Size Code	A(max.)	B(max.)	C(±1.5)	D(±0.5)	E(±0.1)
0406	6.0	7.5	15.0	2.0	0.5
0608	8.0	10.0	15.0	3.0	0.6
0810	10.0	11.5	15.0	5.0	0.6
0912	11.0	13.5	15.0	5.0	0.8
1012	12.0	13.5	15.0	6.0	0.8
1016	12.5	18.0	15.0	6.0	0.8

FDC Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	DCR (Ω) max.	IDC (A) max.
FDC0406-1R0	1.0	0.035	2.00
FDC0406-1R5	1.5	0.075	1.90
FDC0406-1R8	1.8	0.080	1.80
FDC0406-2R2	2.2	0.090	1.75
FDC0406-2R7	2.7	0.095	1.68
FDC0406-3R3	3.3	0.100	1.60
FDC0406-3R9	3.9	0.110	1.55
FDC0406-4R7	4.7	0.120	1.50
FDC0406-5R6	5.6	0.120	1.20
FDC0406-6R8	6.8	0.130	1.00
FDC0406-8R2	8.2	0.140	0.80
FDC0406-100	10.0	0.150	0.70
FDC0406-120	12.0	0.180	0.06
FDC0406-150	15.0	0.200	0.65
FDC0406-180	18.0	0.240	0.63
FDC0406-220	22.0	0.260	0.60
FDC0406-270	27.0	0.300	0.56
FDC0406-330	33.0	0.400	0.55
FDC0406-390	39.0	0.500	0.52
FDC0406-470	47.0	0.600	0.50
FDC0406-560	56.0	0.700	0.50
FDC0406-680	68.0	1.000	0.48
FDC0406-820	82.0	1.200	0.47
FDC0406-101	100.0	1.400	0.45
FDC0406-121	120.0	1.500	0.40
FDC0406-151	150.0	1.600	0.35
FDC0406-181	180.0	1.800	0.30
FDC0406-221	220.0	2.000	0.24
FDC0406-271	270.0	2.500	0.22
FDC0406-331	330.0	3.000	0.20
FDC0406-391	390.0	3.300	0.18
FDC0406-471	470.0	3.500	0.18
FDC0406-561	560.0	4.000	0.16
FDC0406-681	680.0	6.000	0.15
FDC0406-821	820.0	7.000	0.12
FDC0406-102	1000.0	9.000	0.10

* Test Freq.: @1KHz / 0.25V
* Inductance Drop: 20% typ. at IDC.
* Tolerance: J=5%,K= ±10%, M= ±20%, N= ±30%.
* GYF has UL tube on FDC Series to avoid damage when wave soldering.

FDC Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	DCR (Ω) max.	IDC (A) max.
FDC0608-1R0	1.0	0.015	3.00
FDC0608-2R2	2.2	0.030	2.50
FDC0608-3R3	3.3	0.040	2.00
FDC0608-4R7	4.7	0.060	1.80
FDC0608-6R8	6.8	0.070	1.50
FDC0608-100	10.0	0.090	1.30
FDC0608-120	12.0	0.100	1.10
FDC0608-150	15.0	0.110	1.05
FDC0608-180	18.0	0.120	1.00
FDC0608-220	22.0	0.120	0.96
FDC0608-270	27.0	0.170	0.92
FDC0608-330	33.0	0.190	0.88
FDC0608-390	39.0	0.220	0.86
FDC0608-470	47.0	0.230	0.83
FDC0608-560	56.0	0.290	0.81
FDC0608-680	68.0	0.370	0.75
FDC0608-820	82.0	0.390	0.74
FDC0608-101	100.0	0.440	0.70
FDC0608-121	120.0	0.640	0.65
FDC0608-151	150.0	0.730	0.60
FDC0608-181	180.0	0.820	0.55
FDC0608-221	220.0	0.920	0.50
FDC0608-271	270.0	1.300	0.45
FDC0608-331	330.0	1.500	0.40
FDC0608-391	390.0	1.800	0.35
FDC0608-471	470.0	2.300	0.30
FDC0608-561	560.0	3.000	0.28
FDC0608-681	680.0	3.250	0.25
FDC0608-821	820.0	4.160	0.23
FDC0608-102	1000.0	5.000	0.21
FDC0608-122	1200.0	6.500	0.20
FDC0608-152	1500.0	8.000	0.17
FDC0608-182	1800.0	9.000	0.16
FDC0608-222	2200.0	9.500	0.14

* Test Freq.: @1KHz / 0.25V
* Inductance Drop: 20% typ. at IDC.
* Tolerance: J=5%,K= ±10%, M= ±20%, N= ±30%.
* GYF has UL tube on FDC Series to avoid damage when wave soldering.

FDC Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	DCR (Ω) max.	IDC (A) max.
FDC0810-1R0	1.0	0.015	4.50
FDC0810-1R5	1.5	0.020	4.50
FDC0810-2R2	2.2	0.030	4.20
FDC0810-2R7	2.7	0.030	4.20
FDC0810-3R3	3.3	0.040	4.00
FDC0810-3R9	3.9	0.050	4.00
FDC0810-4R7	4.7	0.060	4.00
FDC0810-5R6	5.6	0.060	3.80
FDC0810-6R8	6.8	0.060	3.80
FDC0810-8R2	8.2	0.060	3.60
FDC0810-100	10.0	0.070	3.50
FDC0810-120	12.0	0.080	3.20
FDC0810-150	15.0	0.090	3.00
FDC0810-180	18.0	0.100	2.80
FDC0810-220	22.0	0.120	2.50
FDC0810-270	27.0	0.140	2.20
FDC0810-330	33.0	0.160	2.00
FDC0810-390	39.0	0.160	1.80
FDC0810-470	47.0	0.180	1.50
FDC0810-560	56.0	0.180	1.40
FDC0810-680	68.0	0.230	1.30
FDC0810-820	82.0	0.270	1.20
FDC0810-101	100.0	0.300	1.20
FDC0810-121	120.0	0.330	1.00
FDC0810-151	150.0	0.460	0.80
FDC0810-181	180.0	0.510	0.60
FDC0810-221	220.0	0.620	0.55
FDC0810-271	270.0	0.650	0.45
FDC0810-331	330.0	0.790	0.40
FDC0810-391	390.0	0.910	0.40
FDC0810-471	470.0	1.100	0.35
FDC0810-561	560.0	1.200	0.30
FDC0810-681	680.0	1.500	0.28
FDC0810-821	820.0	1.700	0.25
FDC0810-102	1000.0	2.000	0.22
FDC0810-222	2200.0	4.200	0.14

* Test Freq.: @1KHz / 0.25V
* Inductance Drop: 20% typ. at IDC.
* Tolerance: J=5%,K= ±10%, M= ±20%, N= ±30%.
* GYF has UL tube on FDC Series to avoid damage when wave soldering.

FDC Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	DCR (Ω) max.	IDC (A) max.
FDC0912-1R0	1.0	0.015	5.00
FDC0912-2R2	2.2	0.015	4.50
FDC0912-3R3	3.3	0.020	4.40
FDC0912-4R7	4.7	0.025	4.20
FDC0912-6R8	6.8	0.030	3.90
FDC0912-100	10.0	0.040	3.80
FDC0912-120	12.0	0.045	3.80
FDC0912-150	15.0	0.050	3.50
FDC0912-180	18.0	0.060	3.20
FDC0912-220	22.0	0.070	3.00
FDC0912-270	27.0	0.100	2.80
FDC0912-330	33.0	0.120	2.50
FDC0912-390	39.0	0.120	2.00
FDC0912-470	47.0	0.130	1.90
FDC0912-560	56.0	0.140	1.80
FDC0912-680	68.0	0.150	1.70
FDC0912-820	82.0	0.160	1.60
FDC0912-101	100.0	0.250	1.50
FDC0912-121	120.0	0.280	1.20
FDC0912-151	150.0	0.300	1.00
FDC0912-181	180.0	0.450	0.70
FDC0912-221	220.0	0.500	0.60
FDC0912-271	270.0	0.650	0.50
FDC0912-331	330.0	0.850	0.45
FDC0912-391	390.0	0.950	0.40
FDC0912-471	470.0	1.100	0.35
FDC0912-561	560.0	1.200	0.30
FDC0912-681	680.0	1.300	0.25
FDC0912-821	820.0	1.500	0.20
FDC0912-102	1000.0	2.000	0.20
FDC0912-122	1200.0	2.300	0.18
FDC0912-152	1500.0	2.900	0.17
FDC0912-182	1800.0	3.300	0.16
FDC0912-222	2200.0	4.500	0.15
FDC0912-332	3300.0	5.700	0.13

* Test Freq.: @1KHz / 0.25V
* Inductance Drop: 20% typ. at IDC.
* Tolerance: J=5%,K= ±10%, M= ±20%, N= ±30%.
* GYF has UL tube on FDC Series to avoid damage when wave soldering.

FDC Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	DCR (Ω) max.	IDC (A) max.
FDC1012-1R0	1.0	0.010	6.00
FDC1012-2R2	2.2	0.020	5.80
FDC1012-3R3	3.3	0.025	5.50
FDC1012-3R9	3.9	0.030	5.00
FDC1012-4R7	4.7	0.030	5.00
FDC1012-5R6	5.6	0.040	4.80
FDC1012-6R8	6.8	0.040	4.80
FDC1012-8R2	8.2	0.045	4.50
FDC1012-100	10.0	0.050	4.20
FDC1012-120	12.0	0.050	4.00
FDC1012-150	15.0	0.060	3.80
FDC1012-180	18.0	0.070	3.80
FDC1012-220	22.0	0.080	3.50
FDC1012-270	27.0	0.090	3.20
FDC1012-330	33.0	0.100	3.00
FDC1012-390	39.0	0.120	2.50
FDC1012-470	47.0	0.120	2.00
FDC1012-560	56.0	0.140	1.80
FDC1012-680	68.0	0.150	1.70
FDC1012-820	82.0	0.160	1.60
FDC1012-101	100.0	0.180	1.50
FDC1012-121	120.0	0.200	1.40
FDC1012-151	150.0	0.250	1.20
FDC1012-181	180.0	0.280	1.00
FDC1012-221	220.0	0.300	0.90
FDC1012-271	270.0	0.420	0.80
FDC1012-331	330.0	0.550	0.70
FDC1012-391	390.0	0.600	0.60
FDC1012-471	470.0	0.650	0.55
FDC1012-561	560.0	0.750	0.50
FDC1012-681	680.0	0.850	0.50
FDC1012-821	820.0	1.100	0.40
FDC1012-102	1000.0	1.400	0.30

* Test Freq.: @1KHz / 0.25V
* Inductance Drop: 20% typ. at IDC.
* Tolerance: J=5%,K= ±10%, M= ±20%, N= ±30%.
* GYF has UL tube on FDC Series to avoid damage when wave soldering.

FDC Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	DCR (Ω) max.	IDC (A) max.
FDC1016-4R7	4.7	0.020	5.80
FDC1016-5R6	5.6	0.025	5.50
FDC1016-6R8	6.8	0.025	5.40
FDC1016-8R2	8.2	0.028	5.20
FDC1016-100	10.0	0.035	5.00
FDC1016-120	12.0	0.035	4.50
FDC1016-150	15.0	0.040	4.00
FDC1016-180	18.0	0.060	4.00
FDC1016-220	22.0	0.080	3.80
FDC1016-270	27.0	0.100	3.50
FDC1016-330	33.0	0.100	3.50
FDC1016-390	39.0	0.120	3.20
FDC1016-470	47.0	0.120	3.00
FDC1016-560	56.0	0.130	2.80
FDC1016-680	68.0	0.140	2.50
FDC1016-820	82.0	0.150	2.20
FDC1016-101	100.0	0.180	2.00
FDC1016-121	120.0	0.200	1.80
FDC1016-151	150.0	0.220	1.60
FDC1016-181	180.0	0.250	1.50
FDC1016-221	220.0	0.300	1.50
FDC1016-271	270.0	0.350	1.40
FDC1016-331	330.0	0.600	1.30
FDC1016-391	390.0	0.700	1.20
FDC1016-471	470.0	0.800	1.00
FDC1016-561	560.0	0.900	1.00
FDC1016-681	680.0	1.000	0.90
FDC1016-821	820.0	1.200	0.80
FDC1016-102	1000.0	1.500	0.70

* Test Freq.: @1KHz / 0.25V
* Inductance Drop: 20% typ. at IDC.
* Tolerance: J=5%,K= ±10%, M= ±20%, N= ±30%.
* GYF has UL tube on FDC Series to avoid damage when wave soldering.

FDCS Series (Rev. 5.0)

Application

* PC Device
* Handheld Device
* LCD
* IA

Features

* Drum Choke with Shielding for good effect in EMI.
* To help you go pass the CE/FCC standard

Operating & Storage Condition

* Operating Temp. : -40 to +85°C
* Storage Temp. : -40 to +35°C
* Storage Life Time: 12 Months @25°C , RH 65%

Product Identification

FDCS	0810	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%

Test Equipment

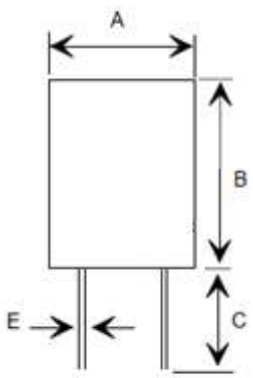
* HP484A,HP42841A-L,IDC.Q.RDC
* HP8753D Network Analyzer-SRF

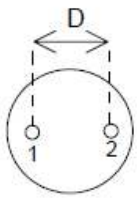
Standard Atmospheric Conditions

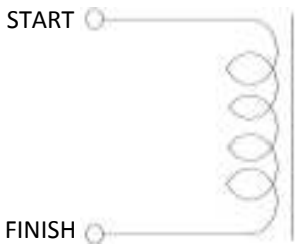
* Ambient Temp : 20+/-15℃
* Relative Humidity : 65+/-20%

Dimension: [mm]

Front View	Bottom View	Schematic







Size Code	A(max.)	B(max.)	C(max.)	D(±0.5)	E(±0.1)
0810	9.0	11.5	15.0	3.0	0.6
1012	11.0	13.0	15.0	5.0	0.6
1014	11.0	15.0	15.0	5.0	0.6
1214	13.0	15.0	15.0	5.5	0.8
1518	16.0	19.5	15.0	7.5	0.8

FDCS Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	DCR (mΩ) max.	IDC (A) max.
FDCS0810-3R3M	3.3	20	3.5
FDCS0810-4R7M	4.7	30	3.5
FDCS0810-100M	10	40	2.5
FDCS0810-150M	15	50	2.0
FDCS0810-220M	22	60	1.5
FDCS0810-330M	33	70	1.5
FDCS0810-470M	47	100	1.0
FDCS0810-560M	56	180	1.0
FDCS0810-680M	68	200	0.9
FDCS0810-820M	82	250	0.9
FDCS0810-101M	100	300	0.8
FDCS0810-151M	150	500	0.7
FDCS0810-221M	220	700	0.6
FDCS0810-331M	330	900	0.5
FDCS0810-471M	470	1000	0.4
FDCS0810-561M	560	1200	0.3
FDCS0810-681M	680	1400	0.3
FDCS0810-821M	820	1700	0.2
FDCS0810-102M	1000	2000	0.2
FDCS0810-112M	1100	2300	0.2
FDCS0810-122M	1200	2500	0.1
FDCS0810-152M	1500	3000	0.1
FDCS1012-3R3M	3.3	20	6.0
FDCS1012-4R7M	4.7	30	5.5
FDCS1012-100M	10	40	5.0
FDCS1012-150M	15	40	3.5
FDCS1012-220M	22	50	3.0
FDCS1012-330M	33	60	2.0
FDCS1012-470M	47	70	1.5
FDCS1012-560M	56	100	1.5
FDCS1012-680M	68	120	1.5
FDCS1012-820M	82	180	1.2
FDCS1012-101M	100	210	1.2
FDCS1012-151M	150	250	1.1
FDCS1012-221M	220	300	0.9
FDCS1012-331M	330	800	0.7
FDCS1012-471M	470	1000	0.5
FDCS1012-561M	560	1100	0.5
FDCS1012-681M	680	1200	0.4
FDCS1012-821M	820	1300	0.4
FDCS1012-102M	1000	1700	0.3
FDCS1012-112M	1100	1800	0.3
FDCS1012-122M	1200	2500	0.2
FDCS1012-152M	1500	3000	0.2

* Test Freq.: @1KHz / 0.25V
* Inductance Drop: 20% typ. At IDC.
* Tolerance: M= ±20%

FDCS Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	DCR (mΩ) max.	IDC (A) max.
FDCS1014-3R3M	3.3	20	6.0
FDCS1014-4R7M	4.7	30	5.5
FDCS1014-100M	10	40	5.0
FDCS1014-150M	15	40	4.0
FDCS1014-220M	22	50	3.8
FDCS1014-330M	33	60	3.2
FDCS1014-470M	47	70	2.0
FDCS1014-560M	56	100	2.0
FDCS1014-680M	68	120	2.0
FDCS1014-820M	82	180	1.5
FDCS1014-101M	100	210	1.5
FDCS1014-151M	150	250	1.2
FDCS1014-221M	220	300	0.9
FDCS1014-331M	330	800	0.7
FDCS1014-471M	470	1000	0.5
FDCS1014-561M	560	1100	0.5
FDCS1014-681M	680	1200	0.4
FDCS1014-821M	820	1300	0.4
FDCS1014-102M	1000	1700	0.3
FDCS1014-112M	1100	1800	0.3
FDCS1014-122M	1200	2500	0.2
FDCS1014-152M	1500	3000	0.2
FDCS1214-3R3M	3.3	20	9.0
FDCS1214-4R7M	4.7	30	8.5
FDCS1214-100M	10	40	6.0
FDCS1214-150M	15	40	5.5
FDCS1214-220M	22	50	4.5
FDCS1214-330M	33	60	3.5
FDCS1214-470M	47	70	3.0
FDCS1214-560M	56	100	3.0
FDCS1214-680M	68	120	2.5
FDCS1214-820M	82	180	2.5
FDCS1214-101M	100	210	2.0
FDCS1214-151M	150	250	1.5
FDCS1214-221M	220	300	1.2
FDCS1214-331M	330	800	0.9
FDCS1214-471M	470	1000	0.8
FDCS1214-561M	560	1100	0.7
FDCS1214-681M	680	1200	0.6
FDCS1214-821M	820	1300	0.5
FDCS1214-102M	1000	1700	0.4
FDCS1214-112M	1100	1800	0.4
FDCS1214-122M	1200	2500	0.3
FDCS1214-152M	1500	3000	0.3

* Test Freq.: @1KHz / 0.25V
* Inductance Drop: 20% typ. At IDC.
* Tolerance: M= ±20%

FDCS Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	DCR (mΩ) max.	IDC (A) max.
FDCS1518-3R3M	3.3	20	12.0
FDCS1518-4R7M	4.7	30	11.0
FDCS1518-100M	10	40	9.0
FDCS1518-150M	15	40	7.5
FDCS1518-220M	22	50	7.0
FDCS1518-330M	33	60	6.5
FDCS1518-470M	47	70	6.0
FDCS1518-560M	56	100	5.5
FDCS1518-680M	68	120	5.0
FDCS1518-820M	82	180	4.0
FDCS1518-101M	100	210	3.5
FDCS1518-151M	150	250	3.0
FDCS1518-221M	220	300	2.0
FDCS1518-331M	330	800	2.0
FDCS1518-471M	470	1000	1.5
FDCS1518-561M	560	1100	1.5
FDCS1518-681M	680	1200	1.0
FDCS1518-821M	820	1300	0.9
FDCS1518-102M	1000	1700	0.8
FDCS1518-112M	1100	1800	0.7
FDCS1518-122M	1200	2500	0.6
FDCS1518-152M	1500	3000	0.5

* Test Freq.: @1KHz / 0.25V
* Inductance Drop: 20% typ. At IDC.
* Tolerance: M= ±20%

FRC Series (Rev. 5.0)

Applications

* Fit for power line input / output application
* MainBoard / NB / IPC / Server / VRM moudle...etc.

Features

* RoHS compliant
* Good in EMI effect and various custom design
* To help you go pass the CE/FCC standard.
* Custom design available

Operating & Storage Condition

* Operating Temp.: -40 to +85°C
* Storage Temp.: -40 to +85°C
* Storage Life Time : 12 Months @25°C,RH 65%

Product Identification

FRC	2110	-	800	M	V
1	2		3	4	5

1. Product Code
2. Size Code
3. Inductance: 80uH
4. Tolerance: M=±20%
5. V: verticle

Test Equipment

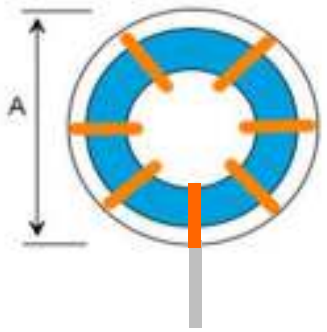
* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF

Standard Atmospheric Conditions

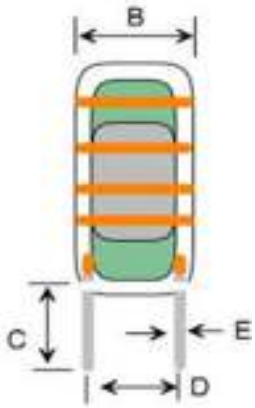
* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimensions : [mm]

Front View



Side View



Turns and shape are just for reference. Real spec. should follow the sample approved.

Size Code	A(max.)	B(max.)	C(±1.0)	D(ref.)	E(ref.)
2110	21.5	10.0	7.0	8.5	1.0

Electrical Characteristics

P/N	L (uH)	Tolerance (± %)	DCR (mΩ) max.	Turns (ref.)	Wire (mm)	IDC (A) max.
FRC2110-800MV	80.0	20	22.5	30	1.0	7.5

* Test condition: @1KHz, 0.25V
* IDC means the maximum current that copper wire can withstand.

FMCC Series (Rev. 5.0)

FMCC series made of advanced ceramics and low resistance silver conductors provides excellent Q and SRF characteristics.

Features

* RoHS compliant
* High frequency SRF up to 10GHz
* Fit for 2.4GHz/ 5GHz…etc. RF circuit
* Monolithic structure for high reliability
* To help you go pass the CE/ FCC standard.

Applications

* RF circuit and module
* Tablet, notebook, desktop computer and peripheral equipment
* DSC/ DVC/ LCD television/ set top box
* Mobile device/ handheld device/ low profile device/ panel…
* Various electronic equipment

Product Identification

FMCC	1005	_	1N2	S
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 1.2nH
4. Tolerance: S=±0.3nH, J=±5%, K=±10%

Operating & Storage Condition

* Operating Temp. : -40 to +85°C
* Storage Temp. : -40 to +85°C
* Storage Life Time : 12 Months @25°C , RH 65%

Test Equipment

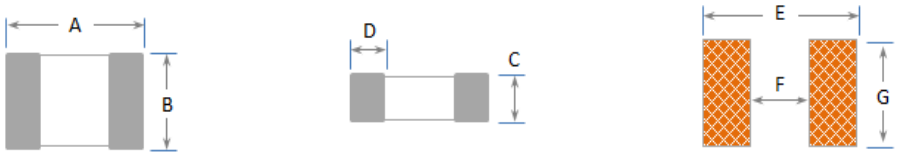
* HP4284A, HP42841A, HP4287A, HP433B- L, IDC, Q, RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Front View	Side View	Pad Layout



Size Code	A	B	C	D	E(ref.)	F(ref.)	G(ref.)
0603	0.6±0.03	0.3±0.03	0.3±0.03	0.15±0.05	0.7	0.3	0.4
1005	1.0±0.15	0.5±0.20	0.5±0.15	0.25±0.10	1.1	0.4	0.6
1608	1.6±0.15	0.8±0.15	0.8±0.15	0.40±0.20	1.8	0.6	1.0
2012	2.0±0.20	1.2±0.20	0.9±0.20	0.50±0.30	2.4	0.8	1.5

FMCC Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (nH)	Q @500MHz		Q @800MHz	SRF (MHz) ref.	DCR (Ω) max.	IDC (mA) max.
		min.	typ.	typ.			
FMCC0603-0N6S	0.6	13	23	31	10000	0.06	600
FMCC0603-1N0S	1.0	13	23	31	10000	0.08	520
FMCC0603-1N2S	1.2	13	18	24	10000	0.12	440
FMCC0603-1N5S	1.5	13	18	23	10000	0.12	420
FMCC0603-2N0S	2.0	13	16	23	10000	0.20	360
FMCC0603-2N2S	2.2	13	16	23	10000	0.20	350
FMCC0603-2N4S	2.4	13	16	22	10000	0.22	330
FMCC0603-3N0S	3.0	13	16	21	5600	0.26	280
FMCC0603-3N3S	3.3	13	17	22	8100	0.30	270
FMCC0603-3N6S	3.6	13	15	22	7700	0.38	240
FMCC0603-3N9S	3.9	13	15	21	7400	0.42	230
FMCC0603-4N3S	4.3	13	15	20	6800	0.44	220
FMCC0603-4N7S	4.7	13	15	21	6200	0.45	220
FMCC0603-5N6S	5.6	13	15	20	5500	0.46	210
FMCC0603-6N8J	6.8	13	16	21	4900	0.50	200
FMCC0603-7N5J	7.5	13	15	20	4700	0.50	200
FMCC0603-8N2J	8.2	13	15	20	4300	0.56	190
FMCC0603-10NJ	10.0	13	15	19	3800	0.80	160
FMCC0603-12NJ	12.0	13	15	19	3400	0.80	160
FMCC0603-15NJ	15.0	13	14	18	2600	0.85	160
FMCC0603-18NJ	18.0	13	14	18	2300	1.00	140
FMCC0603-22NJ	22.0	13	14	18	1900	1.20	130
FMCC0603-27NJ	27.0	13	14	18	1800	1.60	120
FMCC0603-33NJ	33.0	13	13	14	1800	2.20	110
FMCC0603-39NJ	39.0	11	13	14	1600	2.30	100
FMCC0603-47NJ	47.0	11	13	14	1500	2.60	100
FMCC0603-68NJ	68.0	11	12	10	1200	3.20	80
FMCC0603-R10J	100.0	10	11	9	1000	4.00	60
FMCC0603-R12J	120.0	9	11	7	1000	5.00	50

* Test Condition: L-value @100MHz, 25°C Ambient
* Inductance tolerance：S=±0.3nH, J=±5%, K=±10%

FMCC Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (nH)	Q @100MHz		Q @800MHz	SRF (MHz) ref.	DCR (Ω) max.	IDC (mA) max.
		min.	typ.	typ.			
FMCC1005-1N0S	1.0	8	11	34	10000	0.10	400
FMCC1005-1N2S	1.2	8	11	34	10000	0.10	400
FMCC1005-1N5S	1.5	8	11	34	6000	0.10	300
FMCC1005-1N8S	1.8	8	11	30	6000	0.10	300
FMCC1005-2N0S	2.0	8	10	29	6000	0.20	300
FMCC1005-2N2S	2.2	8	10	29	6000	0.20	300
FMCC1005-2N7S	2.7	8	10	30	6000	0.20	300
FMCC1005-3N3S / K	3.3	8	10	30	6000	0.20	300
FMCC1005-3N9S / K	3.9	8	10	28	4000	0.20	300
FMCC1005-4N3S / K	4.3	8	10	28	4000	0.20	300
FMCC1005-4N7S / K	4.7	8	10	28	4000	0.20	300
FMCC1005-5N6S / K	5.6	8	10	28	4000	0.20	300
FMCC1005-6N8J / K	6.8	8	10	27	3900	0.30	300
FMCC1005-7N5J / K	7.5	8	10	27	3700	0.40	300
FMCC1005-8N2J / K	8.2	8	10	27	3600	0.40	300
FMCC1005-10NJ / K	10.0	8	10	27	3200	0.40	300
FMCC1005-12NJ / K	12.0	8	10	26	2700	0.50	300
FMCC1005-15NJ / K	15.0	8	10	26	2300	0.50	300
FMCC1005-18NJ / K	18.0	8	10	25	2100	0.60	300
FMCC1005-22NJ / K	22.0	8	10	25	1900	0.60	300
FMCC1005-27NJ / K	27.0	8	10	25	1600	0.70	300
FMCC1005-33NJ / K	33.0	8	10	22	1300	0.80	200
FMCC1005-39NJ / K	39.0	8	10	22	1200	1.00	200
FMCC1005-47NJ / K	47.0	8	10	21	1000	1.10	200
FMCC1005-56NJ / K	56.0	8	10	18	750	1.20	200
FMCC1005-68NJ / K	68.0	8	10	18	750	1.40	180
FMCC1005-82NJ / K	82.0	8	10	13	150	2.40	150
FMCC1005-R10J / K	100.0	8	10	12	700	2.60	150
FMCC1005-R12J / K	120.0	8	10	12	600	2.80	150

* Test Condition: L-value @100MHz, 25°C Ambient
* Inductance tolerance：S=±0.3nH, J=±5%, K=±10%

FMCC Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (nH)	Q @100MHz		Q @800MHz	SRF (MHz) ref.	DCR (Ω) max.	IDC (mA) max.
		min.	typ.	typ.			
FMCC1608-1N0S	1.0	8	14	35	10000	0.05	500
FMCC1608-1N2S	1.2	8	14	35	10000	0.10	500
FMCC1608-1N5S	1.5	8	14	38	10000	0.10	400
FMCC1608-1N8S	1.8	8	14	35	9800	0.12	400
FMCC1608-2N2S	2.2	8	14	39	7600	0.20	400
FMCC1608-2N7S	2.7	8	12	37	7000	0.20	400
FMCC1608-3N3S / K	3.3	8	12	36	6200	0.20	400
FMCC1608-3N9S / K	3.9	8	12	38	5600	0.25	400
FMCC1608-4N7S / K	4.7	8	12	38	4800	0.30	400
FMCC1608-5N6S / K	5.6	8	12	35	4600	0.30	400
FMCC1608-6N8J / K	6.8	8	12	35	4200	0.35	400
FMCC1608-8N2J / K	8.2	8	12	33	3600	0.35	400
FMCC1608-10NJ / K	10.0	8	13	38	3200	0.40	300
FMCC1608-12NJ / K	12.0	8	13	35	2800	0.40	300
FMCC1608-15NJ / K	15.0	8	13	34	2600	0.45	300
FMCC1608-18NJ / K	18.0	8	13	35	2400	0.60	300
FMCC1608-22NJ / K	22.0	8	15	38	2000	0.60	300
FMCC1608-27NJ / K	27.0	8	14	36	1900	0.80	300
FMCC1608-33NJ / K	33.0	8	14	35	1600	0.80	300
FMCC1608-39NJ / K	39.0	8	14	28	1400	1.00	300
FMCC1608-47NJ / K	47.0	8	15	30	1200	1.00	200
FMCC1608-56NJ / K	56.0	8	17	31	1000	1.00	200
FMCC1608-68NJ / K	68.0	8	17	25	900	1.00	200
FMCC1608-82NJ / K	82.0	8	17	22	800	1.00	200
FMCC1608-R10J / K	100.0	8	17	24	700	1.40	200
FMCC1608-R12J / K	120.0	8	15	-	600	1.60	150
FMCC1608-R15J / K	150.0	8	13	-	500	1.80	150
FMCC1608-R18J / K	180.0	8	13	-	500	1.80	150
FMCC1608-R22J / K	220.0	8@50MHz	15	-	350	2.40	150
FMCC1608-R33J / K	330.0	8@50MHz	15	-	350	2.80	150
FMCC1608-R47J / K	470.0	8@50MHz	15	-	250	3.60	150

* Test Condition: L-value @100MHz, 25°C Ambient
* Inductance tolerance：S=±0.3nH, J=±5%, K=±10%

FMCC Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (nH)	Q @100MHz		Q @800MHz	SRF (MHz) ref.	DCR (Ω) max.	IDC (mA) max.
		min.	typ.	typ.			
FMCC2012-1N5S	1.5	8	10	54	6000	0.10	600
FMCC2012-1N8S	1.8	8	13	55	6000	0.10	600
FMCC2012-2N2S	2.2	8	13	53	6000	0.10	600
FMCC2012-2N7S	2.7	8	13	45	6000	0.12	600
FMCC2012-3N3S / K	3.3	8	15	52	6000	0.13	600
FMCC2012-3N9S / K	3.9	8	15	55	5400	0.15	600
FMCC2012-4N7S / K	4.7	8	15	53	4500	0.20	400
FMCC2012-5N6S / K	5.6	8	16	45	4000	0.23	400
FMCC2012-6N8J / K	6.8	8	16	45	3650	0.25	400
FMCC2012-8N2J / K	8.2	8	16	45	3000	0.28	400
FMCC2012-10NJ / K	10.0	8	16	45	2500	0.30	300
FMCC2012-12NJ / K	12.0	8	16	45	2450	0.35	300
FMCC2012-15NJ / K	15.0	8	18	43	2000	0.40	300
FMCC2012-18NJ / K	18.0	8	18	42	1750	0.45	300
FMCC2012-22NJ / K	22.0	8	17	45	1700	0.50	300
FMCC2012-27NJ / K	27.0	8	17	45	1550	0.55	300
FMCC2012-33NJ / K	33.0	8	18	40	1350	0.60	300
FMCC2012-39NJ / K	39.0	8	19	31	1300	0.70	300
FMCC2012-47NJ / K	47.0	8	20	31	1200	0.80	300
FMCC2012-56NJ / K	56.0	8	21	35	1150	0.80	300
FMCC2012-68NJ / K	68.0	8	19	29	1000	0.85	300
FMCC2012-82NJ / K	82.0	8	19	27	850	0.90	300
FMCC2012-R10J / K	100.0	8	13	-	600	1.00	300
FMCC2012-R12J / K	120.0	8	19	-	500	1.20	300
FMCC2012-R15J / K	150.0	8	19	-	500	1.50	300
FMCC2012-R18J / K	180.0	8	19	-	400	1.80	300
FMCC2012-R22J / K	220.0	8	19	-	350	1.80	300
FMCC2012-R27J / K	270.0	8 @50MHz	20	-	350	1.80	300
FMCC2012-R33J / K	330.0	8 @50MHz	18	-	300	2.00	300
FMCC2012-R39J / K	390.0	8 @50MHz	17	-	250	2.00	300
FMCC2012-R47J / K	470.0	8 @50MHz	17	-	200	2.00	300

* Test Condition: L-value @100MHz, 25°C Ambient
* Inductance tolerance：S=±0.3nH, J=±5%, K=±10%

FMBL Series (Rev. 5.0)

Applications

* Tablet, notebook, PC and peripheral equipment
* DSC/ DVC/ LCD television/ set top box
* Mobile / handheld device/ low profile device/ panel…
* Various electronic equipment

Features

* RoHS compliant
* Bead inductor for power energy storage or noise suppressor
* Fit for power line & signal line circuit.
* To help you go pass the CE/ FCC standard.

Operating & Storage Condition

* Operating Temp. : -40 to +85°C
* Storage Temp. : -40 to +85°C
* Storage Life Time : 12 Months @25°C , RH 65%

Product Identification

FMBL	201209	_	4R7	K	H
1	2		3	4	5

1. Product Code
2. Size Code
3. Inductance: 4.7uH
4. Tolerance: K=±10%, M=±20%
5. H: High current

Test Equipment

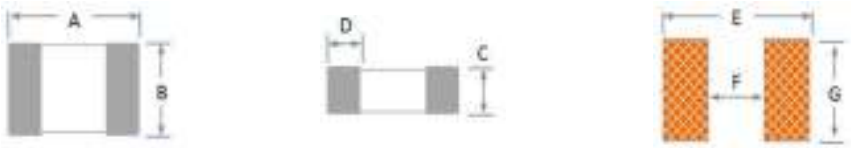
* HP4284A, HP42841A- L, IDC, Q, RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Front View	Side View	Pad Layout



Size Code	A(±0.20)	B(±0.20)	C(±0.20)	D(±0.30)	E(ref.)	F(ref.)	G(ref.)	Type
100505	1.00±0.15	0.50±0.15	0.50±0.15	0.25±0.15	1.10	0.40	0.60	Normal
160808	1.60	0.80	0.80	0.40	1.80	0.60	1.00	
201209	2.00	1.25	0.90	0.50	2.40	0.80	1.45	
201212	2.00	1.25	1.25	0.50	2.40	0.80	1.45	
321609	3.20	1.60	0.90	0.50	3.40	2.00	1.80	
321611	3.20	1.60	1.10	0.50	3.40	2.00	1.80	
322513	3.20	2.50	1.30	0.50	3.40	2.00	2.80	
453215	4.50	3.20	1.50	0.50	4.80	3.00	3.60	
160808	1.60±0.15	0.80±0.15	0.80±0.15	0.30±0.20	1.70	0.60	1.00	High
201209	2.00	1.25	0.90	0.50	2.40	0.80	1.45	
201610	2.00	1.60	1.00	0.50	2.40	0.80	1.45	
252010	2.50	2.00	1.00	0.50	2.80	1.00	2.20	
321609	3.20	1.60	0.90	0.50	3.40	2.00	1.80	

FMBL Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Q min.	L&Q Test Freq. (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
FMBL100505-47NK	0.047	10	50	220	0.45	25
FMBL100505-56NK	0.056	10	50	210	0.45	25
FMBL100505-68NK	0.068	10	50	210	0.45	25
FMBL100505-82NK	0.082	10	50	200	0.45	25
FMBL100505-R10K	0.100	15	25	200	0.70	25
FMBL100505-R12K	0.120	15	25	165	0.70	25
FMBL100505-R15K	0.150	15	25	140	0.80	25
FMBL100505-R18K	0.180	15	25	120	0.80	25
FMBL100505-R22K	0.220	15	25	110	1.00	25
FMBL100505-R27K	0.270	15	25	95	1.20	25
FMBL100505-R33K	0.330	15	25	85	1.20	25
FMBL100505-R39K	0.390	15	10	70	1.30	20
FMBL100505-R47K	0.470	15	10	68	1.50	20
FMBL100505-R56K	0.560	15	10	55	2.00	20
FMBL100505-R68K	0.680	15	10	50	2.30	20
FMBL100505-R82K	0.820	15	10	45	3.00	18
FMBL100505-1R0K	1.000	20	10	40	3.50	25
FMBL100505-1R2K	1.200	20	10	35	4.00	25
FMBL160808-47NK	0.047	15	50	260	0.20	50
FMBL160808-56NK	0.056	15	50	260	0.20	50
FMBL160808-68NK	0.068	15	50	250	0.20	50
FMBL160808-82NK	0.082	15	50	245	0.20	50
FMBL160808-R10K	0.100	20	25	240	0.25	50
FMBL160808-R12K	0.120	20	25	205	0.30	50
FMBL160808-R15K	0.150	20	25	180	0.30	50
FMBL160808-R18K	0.180	20	25	165	0.30	50
FMBL160808-R22K	0.220	20	25	150	0.40	50
FMBL160808-R27K	0.270	20	25	136	0.45	50
FMBL160808-R33K	0.330	20	25	125	0.50	50
FMBL160808-R39K	0.390	20	25	110	0.60	50
FMBL160808-R47K	0.470	20	25	105	0.70	50
FMBL160808-R56K	0.560	20	25	95	0.70	50
FMBL160808-R68K	0.680	20	25	90	0.90	50
FMBL160808-R82K	0.820	20	25	85	1.00	50
FMBL160808-1R0K	1.000	25	10	75	0.50	25
FMBL160808-1R2K	1.200	25	10	65	0.55	25
FMBL160808-1R5K	1.500	25	10	60	0.70	25
FMBL160808-1R8K	1.800	25	10	55	0.75	25
FMBL160808-2R2K	2.200	25	10	50	0.80	25
FMBL160808-2R7K	2.700	25	10	45	0.90	15
FMBL160808-3R3K	3.300	25	10	40	1.00	15
FMBL160808-3R9K	3.900	25	10	35	1.30	15
FMBL160808-4R7K	4.700	25	10	33	1.50	15
FMBL160808-5R6K	5.600	12	4	22	1.55	5
FMBL160808-6R8K	6.800	12	4	20	1.55	5
FMBL160808-8R2K	8.200	12	4	18	1.65	5
FMBL160808-100K	10.000	20	2	17	1.75	3
FMBL160808-120K	12.000	20	2	15	1.85	3
FMBL160808-150M	15.000	20	1	14	2.50	1
FMBL160808-180M	18.000	20	1	13	2.70	1
FMBL160808-220M	22.000	20	1	12	3.00	1

* Inductance tolerance： K=±10%, M=±20%

FMBL Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Q min.	L&Q Test Freq. (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
FMBL201209-47NK	0.047	25	50	320	0.15	300
FMBL201209-56NK	0.056	25	50	320	0.15	300
FMBL201209-68NK	0.068	25	50	280	0.20	300
FMBL201209-82NK	0.082	25	50	280	0.20	300
FMBL201209-R10K	0.100	20	25	235	0.20	250
FMBL201209-R12K	0.120	20	25	220	0.25	250
FMBL201209-R15K	0.150	20	25	200	0.25	250
FMBL201209-R18K	0.180	20	25	185	0.30	250
FMBL201209-R22K	0.220	20	25	170	0.30	250
FMBL201209-R27K	0.270	20	25	150	0.40	250
FMBL201209-R33K	0.330	20	25	145	0.40	250
FMBL201209-R39K	0.390	25	25	135	0.50	200
FMBL201209-R47K	0.470	25	25	125	0.50	200
FMBL201209-R56K	0.560	25	25	115	0.60	150
FMBL201209-R68K	0.680	25	25	105	0.65	150
FMBL201209-R82K	0.820	25	25	100	0.70	150
FMBL201209-1R0K	1.000	35	10	75	0.40	50
FMBL201209-1R2K	1.200	35	10	65	0.40	50
FMBL201209-1R5K	1.500	35	10	60	0.40	50
FMBL201209-1R8K	1.800	35	10	55	0.40	50
FMBL201209-2R2K	2.200	35	10	50	0.60	50
FMBL201209-2R7K	2.700	35	10	45	0.60	50
FMBL201209-3R3K	3.300	35	10	41	0.60	50
FMBL201209-3R9K	3.900	35	10	38	0.80	50
FMBL201209-4R7K	4.700	35	10	35	0.90	30
FMBL201209-5R6K	5.600	30	4	32	1.00	15
FMBL201209-6R8K	6.800	30	4	29	1.05	15
FMBL201209-8R2K	8.200	30	4	26	1.05	15
FMBL201209-100K	10.000	30	2	24	1.15	15
FMBL201209-120K	12.000	30	2	22	1.15	15
FMBL201209-150K	15.000	25	1	19	1.15	5
FMBL201209-180K	18.000	25	1	18	1.20	5
FMBL201209-220K	22.000	25	1	16	1.20	5
FMBL201209-270K	27.000	25	1	16	1.50	5
FMBL201209-330M	33.000	25	1	16	1.50	5
FMBL201212-390M	39.000	25	1	16	1.50	5
FMBL201212-470M	47.000	25	1	15	1.70	5

* Inductance tolerance： K=±10%, M=±20%

FMBL Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Q min.	L&Q Test Freq. (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
FMBL321609-47NK	0.047	30	50	320	0.15	300
FMBL321609-56NK	0.056	30	50	320	0.20	300
FMBL321609-68NK	0.068	30	50	280	0.25	300
FMBL321609-82NK	0.082	30	50	280	0.25	300
FMBL321609-R10K	0.100	25	25	235	0.25	250
FMBL321609-R12K	0.120	25	25	220	0.25	250
FMBL321609-R15K	0.150	25	25	200	0.25	250
FMBL321609-R18K	0.180	25	25	185	0.30	250
FMBL321609-R22K	0.220	25	25	170	0.30	250
FMBL321609-R27K	0.270	25	25	150	0.30	250
FMBL321609-R33K	0.330	25	25	145	0.30	250
FMBL321609-R39K	0.390	30	25	135	0.50	200
FMBL321609-R47K	0.470	30	25	125	0.50	200
FMBL321609-R56K	0.560	30	25	115	0.50	150
FMBL321609-R68K	0.680	30	25	105	0.50	150
FMBL321609-R82K	0.820	30	25	100	0.60	150
FMBL321609-1R0K	1.000	35	10	75	0.30	100
FMBL321609-1R2K	1.200	35	10	65	0.40	100
FMBL321609-1R5K	1.500	35	10	60	0.40	50
FMBL321609-1R8K	1.800	35	10	55	0.40	50
FMBL321609-2R2K	2.200	35	10	50	0.50	50
FMBL321609-2R7K	2.700	35	10	45	0.50	50
FMBL321609-3R3K	3.300	35	10	41	0.50	50
FMBL321609-3R9K	3.900	35	10	38	0.60	50
FMBL321609-4R7K	4.700	35	10	35	0.65	25
FMBL321609-5R6K	5.600	35	4	32	0.80	25
FMBL321609-6R8K	6.800	35	4	29	0.80	25
FMBL321609-8R2K	8.200	35	4	26	0.80	25
FMBL321609-100K	10.000	35	2	24	0.80	25
FMBL321609-120K	12.000	35	2	22	0.90	15
FMBL321609-150K	15.000	30	1	19	1.00	5
FMBL321609-180K	18.000	30	1	18	1.00	5
FMBL321609-220K	22.000	30	1	16	1.20	5
FMBL321609-270K	27.000	30	1	14	1.20	5
FMBL321609-330K	33.000	30	1	13	1.30	5
FMBL321609-390K	39.000	30	1	13	1.30	5
FMBL321611-470K	47.000	30	1	12	1.60	5
FMBL321611-560M	56.000	30	1	12	1.80	5
FMBL321611-680M	68.000	30	1	11	2.00	5
FMBL321611-820M	82.000	30	1	11	2.40	5
FMBL321611-101M	100.000	30	1	8	3.00	5

* Inductance tolerance： K=±10%, M=±20%

FMBL Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Q min.	L&Q Test Freq. (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
FMBL322513-1R0K	1.0	40	10	70	0.20	500
FMBL322513-1R2K	1.2	40	10	70	0.20	500
FMBL322513-1R5K	1.5	40	10	70	0.30	500
FMBL322513-1R8K	1.8	40	10	70	0.30	500
FMBL322513-2R2K	2.2	40	10	50	0.30	500
FMBL322513-2R7K	2.7	40	10	50	0.30	500
FMBL322513-3R3K	3.3	40	10	50	0.40	500
FMBL322513-3R9K	3.9	40	10	30	0.40	500
FMBL322513-4R7K	4.7	40	10	30	0.50	500
FMBL322513-5R6K	5.6	35	4	30	0.60	450
FMBL322513-6R8K	6.8	35	4	20	0.60	450
FMBL322513-8R2K	8.2	35	4	20	0.70	400
FMBL322513-100K	10.0	35	2	20	0.70	300
FMBL322513-120K	12.0	35	2	20	0.70	300
FMBL322513-150K	15.0	35	1	20	0.70	200
FMBL322513-180K	18.0	35	1	10	0.70	200
FMBL322513-220K	22.0	35	1	10	0.70	150
FMBL322513-270K	27.0	35	1	10	0.80	150
FMBL322513-330K	33.0	35	1	10	1.10	100
FMBL322513-390K	39.0	35	1	10	1.30	100
FMBL322513-470K	47.0	35	1	10	1.50	50
FMBL322513-560M	56.0	35	1	5	1.60	50
FMBL322513-680M	68.0	35	1	5	1.80	30
FMBL322513-820M	82.0	35	1	5	2.00	30
FMBL322513-101M	100.0	35	1	5	2.00	20
FMBL322513-121M	120.0	35	1	5	2.20	20

* Inductance tolerance： K=±10%, M=±20%

FMBL Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Q min.	L&Q Test Freq. (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
FMBL453215-1R0K	1.0	35	10	50	0.55	650
FMBL453215-1R2K	1.2	35	10	50	0.55	650
FMBL453215-1R5K	1.5	35	10	45	0.55	600
FMBL453215-1R8K	1.8	35	10	45	0.65	600
FMBL453215-2R2K	2.2	35	10	40	0.65	500
FMBL453215-2R7K	2.7	35	10	40	0.70	500
FMBL453215-3R3K	3.3	35	10	35	0.75	500
FMBL453215-3R9K	3.9	35	10	35	0.80	500
FMBL453215-4R7K	4.7	30	10	25	0.90	500
FMBL453215-5R6K	5.6	30	4	20	0.90	500
FMBL453215-6R8K	6.8	30	4	18	1.00	500
FMBL453215-8R2K	8.2	30	4	17	1.00	450
FMBL453215-100K	10.0	30	2	16	1.00	450
FMBL453215-120K	12.0	35	2	15	1.00	450
FMBL453215-150K	15.0	35	1	14	1.00	400
FMBL453215-180K	18.0	35	1	13	1.00	400
FMBL453215-220K	22.0	35	1	12	1.30	300
FMBL453215-270K	27.0	35	1	10	1.30	300
FMBL453215-330K	33.0	40	1	10	1.50	250
FMBL453215-390K	39.0	40	1	10	1.50	250
FMBL453215-470K	47.0	40	1	8	1.65	250
FMBL453215-560K	56.0	40	1	8	1.80	250
FMBL453215-680M	68.0	40	1	6	2.00	200
FMBL453215-820M	82.0	40	1	6	2.30	200
FMBL453215-101M	100.0	40	1	6	2.30	150
FMBL453215-121M	120.0	40	1	6	2.50	150

* Inductance tolerance： K=±10%, M=±20%

FMBL Series (Rev. 5.0)

Electrical Characteristics

Part Number	Inductance (uH)	Test Freq. (MHz)	SRF (MHz) min.	DCR (Ω) ±30%	IDC (mA) max.
FMBL160808-1R0MH	1.0	1	125	0.12	900
FMBL160808-1R5MH	1.5	1	109	0.25	650
FMBL160808-2R2MH	2.2	1	90	0.35	650
FMBL160808-3R3MH	3.3	1	70	0.38	520
FMBL160808-4R7MH	4.7	1	50	0.55	320
FMBL160808-6R8MH	6.8	1	40	0.55	250
FMBL160808-100MH	10.0	1	33	0.85	150
FMBL160808-150MH	15.0	1	20	1.00	100
FMBL160808-220MH	22.0	1	15	1.20	80
FMBL201209-1R0MH	1.0	1	75	0.12	1000
FMBL201209-1R5MH	1.5	1	60	0.16	900
FMBL201209-2R2MH	2.2	1	50	0.25	700
FMBL201209-3R3MH	3.3	1	41	0.30	650
FMBL201209-4R7MH	4.7	1	35	0.40	550
FMBL201209-6R8MH	6.8	1	29	0.45	550
FMBL201209-100MH	10.0	1	24	0.45	350
FMBL201209-150MH	15.0	1	19	0.60	300
FMBL201209-220MH	22.0	1	18	0.70	280
FMBL201610-1R0MH	1.0	1	60	0.11	1400
FMBL201610-1R5MH	1.5	1	50	0.15	1200
FMBL201610-2R2MH	2.2	1	40	0.20	1200
FMBL201610-3R3MH	3.3	1	30	0.30	1200
FMBL201610-4R7MH	4.7	1	25	0.35	1100
FMBL252010-1R0MH	1.0	1	60	0.15	1600
FMBL252010-1R5MH	1.5	1	50	0.15	1500
FMBL252010-2R2MH	2.2	1	40	0.25	1300
FMBL252010-3R3MH	3.3	1	30	0.30	1200
FMBL252010-4R7MH	4.7	1	25	0.32	1100
FMBL321609-1R0MH	1.0	1	90	0.10	1300
FMBL321609-1R5MH	1.5	1	75	0.12	1200
FMBL321609-2R2MH	2.2	1	58	0.15	1200
FMBL321609-3R3MH	3.3	1	49	0.20	1100
FMBL321609-4R7MH	4.7	1	41	0.38	1000
FMBL321609-6R8MH	6.8	1	34	0.41	830
FMBL321609-100MH	10.0	1	28	0.50	670

* Inductance tolerance： M=±20%

FMBD Series (Rev. 5.0)

FMBD covers a wide impedance characteristic. Their impedance mainly comprises resistive part. Therefore, when this component is inserted in series with a noise conduction path, the noise content can be attenuated.

Features

* RoHS compliant
* EMI suppressor for wide band/ narrow band/ high current
* Fit for power line & signal line circuit
* Monolithic structure for high reliability
* To help you go pass the CE/ FCC standard.
* Small size chips generate high impedance

Applications

* RF circuit and module
* Tablet, notebook, computer and peripheral equipment
* DSC/ DVC/ LCD television/ set top box
* Mobile/ handheld device/ low profile device/ panel…
* Various electronic equipment

Product Identification

FMBD	201209	_	601	N	□
1	2		3	4	5

1. Product Code
2. Size Code
3. Impedance: 600ohm
4. Tolerance: N=±25%
5. A- normal; H- high current; S- Super current; U- Ultra current

Operating & Storage Condition

* Operating Temp. : -40 to +85°C
* Storage Temp. : -40 to +85°C
* Storage Life Time : 12 Months @25°C , RH 65%

Test Equipment

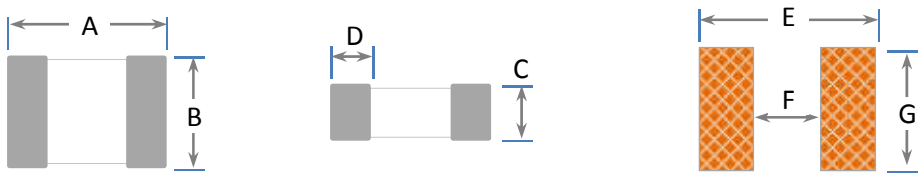
* HP4284A, HP4287A, HP433B- L, IDC, Q, RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension & Recommended PAD Layout: [mm]

Front View	Side View	Pad Layout



Size Code	A(±0.20)	B(±0.20)	C(±0.20)	D(±0.20)	E(ref.)	F(ref.)	G(ref.)
060303	0.60±0.03	0.30±0.03	0.30±0.03	0.15±0.05	0.70	0.30	0.40
100505	1.00±0.15	0.50±0.15	0.50±0.15	0.25±0.15	1.10	0.40	0.60
160808	1.60±0.15	0.80±0.15	0.80±0.15	0.40	1.80	0.60	1.00
201209	2.00	1.25	0.90	0.50	2.40	0.80	1.45
321609	3.20	1.60	0.90	0.50	3.60	1.00	1.85
321611	3.20	1.60	1.10	0.70	3.60	1.00	1.85
322513	3.20	2.50	1.30	0.80	3.60	1.10	2.80
451616	4.50	1.60	1.60	0.80	4.80	2.20	1.85
453215	4.50	3.20	1.50	0.80	4.80	2.20	3.60

FMBD Series (Rev. 5.0)

Electrical Characteristics- Normal

Part Number	Z - value (ohm) @100MHz	DCR (ohm)		Rated Current (mA) max.
		max.	typ.	
FMBD060303-121NA	120	0.450	0.360	200
FMBD060303-151NA	150	0.500	0.400	200
FMBD100505-070A	7 (tolerance: 0~11Ω)	0.100	0.080	300
FMBD100505-190A	19 (tolerance: 12~25Ω)	0.100	0.080	300
FMBD100505-260NA	26	0.150	0.120	300
FMBD100505-310NA	31	0.200	0.160	300
FMBD100505-360NA	36	0.200	0.160	300
FMBD100505-600NA	60	0.350	0.280	200
FMBD100505-101NA	100	0.500	0.400	150
FMBD100505-121NA	120	0.500	0.400	150
FMBD100505-151NA	150	0.550	0.440	150
FMBD100505-201NA	200	0.700	0.560	100
FMBD100505-301NA	300	0.800	0.640	100
FMBD100505-501NA	500	1.100	0.880	100
FMBD100505-601NA	600	1.300	1.040	100
FMBD100505-801NA	800	1.400	1.120	50
FMBD100505-102NA	1000	1.600	1.280	25
FMBD100505-122NA	1200	1.800	1.440	25
FMBD160808-070A	7 (tolerance: 0~11Ω)	0.100	0.080	800
FMBD160808-150A	15(tolerance: 9~21Ω)	0.100	0.080	800
FMBD160808-310NA	31	0.100	0.080	500
FMBD160808-700NA	70	0.200	0.160	300
FMBD160808-800NA	80	0.200	0.160	300
FMBD160808-101NA	100	0.200	0.160	300
FMBD160808-121NA	120	0.200	0.160	300
FMBD160808-151NA	150	0.300	0.240	300
FMBD160808-181NA	180	0.300	0.240	300
FMBD160808-221NA	220	0.300	0.240	300
FMBD160808-301NA	300	0.350	0.280	200
FMBD160808-501NA	500	0.500	0.400	200
FMBD160808-601NA	600	0.500	0.400	200
FMBD160808-801NA	800	0.600	0.480	200
FMBD160808-102NA	1000	0.600	0.480	200
FMBD160808-122NA	1200	0.850	0.680	100
FMBD160808-152NA	1500	0.850	0.680	50
FMBD160808-182NA	1800	1.100	0.880	50
FMBD160808-202NA	2000	1.100	0.880	50
FMBD160808-222NA	2200	1.200	0.960	50
FMBD160808-252NA	2500	1.300	1.040	50

* Z-value tolerance： N=±25%

FMBD Series (Rev. 5.0)

Electrical Characteristics- Normal

Part Number	Z - value (ohm) @100MHz	DCR (ohm)		Rated Current (mA) max.
		max.	typ.	
FMBD201209-050A	5 (tolerance: 0~15Ω)	0.080	0.064	900
FMBD201209-110A	11(tolerance: 7~15Ω)	0.100	0.080	900
FMBD201209-260NA	26	0.100	0.080	900
FMBD201209-310NA	31	0.100	0.080	900
FMBD201209-500NA	50	0.150	0.120	900
FMBD201209-600NA	60	0.150	0.120	900
FMBD201209-800NA	80	0.180	0.144	500
FMBD201209-101NA	100	0.180	0.144	500
FMBD201209-121NA	120	0.200	0.160	500
FMBD201209-151NA	150	0.200	0.160	400
FMBD201209-181NA	180	0.200	0.160	400
FMBD201209-221NA	220	0.200	0.160	400
FMBD201209-301NA	300	0.250	0.200	400
FMBD201209-501NA	500	0.350	0.280	300
FMBD201209-601NA	600	0.350	0.280	300
FMBD201209-801NA	800	0.400	0.320	300
FMBD201209-102NA	1000	0.400	0.320	300
FMBD201209-122NA	1200	0.600	0.480	100
FMBD201209-152NA	1500	0.700	0.560	100
FMBD201209-202NA	2000	0.900	0.720	50
FMBD201209-222NA	2200	1.000	0.800	50
FMBD201209-252NA	2500 @50MHz	1.200	0.960	50
FMBD201209-272NA	2700 @50MHz	1.400	1.120	50
FMBD321609-050NA	7 (tolerance: 0~11Ω)	0.100	0.080	1000
FMBD321609-110NA	9 (tolerance: 5~13Ω)	0.100	0.080	1000
FMBD321609-260NA	11 (tolerance: 7~15Ω)	0.100	0.080	1000
FMBD321609-150A	15 (tolerance: 9~21Ω)	0.100	0.080	1000
FMBD321609-190A	19 (tolerance: 12~25Ω)	0.100	0.080	1000
FMBD321609-260NA	26	0.100	0.080	1000
FMBD321609-310NA	31	0.100	0.080	1000
FMBD321609-600NA	60	0.150	0.120	1000
FMBD321609-700NA	70	0.150	0.120	1000
FMBD321609-800NA	80	0.150	0.120	1000
FMBD321609-101NA	100	0.150	0.120	1000
FMBD321609-121NA	120	0.150	0.120	1000
FMBD321609-151NA	150	0.200	0.160	800

* Z-value tolerance： N=±25%

FMBD Series (Rev. 5.0)

Electrical Characteristics- Normal

Part Number	Z - value (ohm) @100MHz	DCR (ohm)		Rated Current (mA) max.
		max.	typ.	
FMBD321609-181NA	180	0.200	0.160	800
FMBD321609-221NA	220	0.200	0.160	800
FMBD321609-301NA	300	0.200	0.160	800
FMBD321609-501NA	500	0.300	0.240	600
FMBD321609-601NA	600	0.300	0.240	600
FMBD321609-801NA	800	0.350	0.280	400
FMBD321609-102NA	1000	0.350	0.280	400
FMBD321609-122NA	1200	0.600	0.480	100
FMBD321609-152NA	1500 @50MHz	0.800	0.640	100
FMBD321609-182NA	1800 @50MHz	0.900	0.720	80
FMBD321609-202NA	2000 @50MHz	1.000	0.800	50
FMBD321609-252NA	2500 @50MHz	1.200	0.960	50
FMBD321609-302NA	3000 @50MHz	1.500	1.200	30
FMBD321611-110A	11 (tolerance: 7~15Ω)	0.050	0.040	600
FMBD321611-190A	19 (tolerance: 12~25Ω)	0.050	0.040	600
FMBD321611-260NA	26	0.050	0.040	600
FMBD321611-300NA	30	0.050	0.040	600
FMBD321611-310NA	31	0.050	0.040	600
FMBD321611-320NA	32	0.050	0.040	600
FMBD321611-470NA	47	0.100	0.080	500
FMBD321611-500NA	50	0.100	0.080	500
FMBD321611-600NA	60	0.100	0.080	500
FMBD321611-700NA	70	0.100	0.080	500
FMBD321611-800NA	80	0.150	0.120	500
FMBD321611-900NA	90	0.150	0.120	500
FMBD321611-101NA	100	0.150	0.120	500
FMBD321611-121NA	120	0.150	0.120	500
FMBD321611-151NA	150	0.150	0.120	500
FMBD321611-201NA	200	0.200	0.160	400
FMBD321611-221NA	220	0.200	0.160	400
FMBD321611-301NA	300	0.200	0.160	400
FMBD321611-401NA	400	0.200	0.160	400
FMBD321611-471NA	470	0.200	0.160	400
FMBD321611-501NA	500	0.200	0.160	400
FMBD321611-601NA	600	0.300	0.240	400
FMBD321611-102NA	1000 @50MHz	0.400	0.320	200
FMBD321611-122NA	1200 @50MHz	0.400	0.320	200
FMBD321611-152NA	1500 @50MHz	0.450	0.360	200
FMBD321611-202NA	2000 @50MHz	0.600	0.480	200
FMBD321611-272NA	2700 @50MHz	0.600	0.480	200

* Z-value tolerance： N=±25%

FMBD Series (Rev. 5.0)

Electrical Characteristics- Normal

Part Number	Z - value (ohm) @100MHz	DCR (ohm)		Rated Current (mA) max.
		max.	typ.	
FMBD322513-100A	10 (tolerance: 7~15Ω)	0.100	0.080	1000
FMBD322513-110A	11 (tolerance: 7~15Ω)	0.100	0.080	1000
FMBD322513-190A	19 (tolerance: 12~25Ω)	0.100	0.080	1000
FMBD322513-260NA	26	0.100	0.080	1000
FMBD322513-310NA	31	0.100	0.080	1000
FMBD322513-600NA	60	0.150	0.120	1000
FMBD322513-700NA	70	0.200	0.160	1000
FMBD322513-800NA	80	0.200	0.160	400
FMBD322513-900NA	90	0.200	0.160	400
FMBD322513-101NA	100	0.200	0.160	400
FMBD322513-121NA	120	0.200	0.160	400
FMBD322513-151NA	150	0.300	0.240	400
FMBD322513-221NA	220	0.400	0.320	400
FMBD322513-301NA	300	0.400	0.320	400
FMBD322513-501NA	500	0.400	0.320	300
FMBD322513-601NA	600	0.400	0.320	300
FMBD322513-801NA	800	0.400	0.320	300
FMBD322513-102NA	1000	0.400	0.320	300
FMBD451616-190A	19 (tolerance: 12~25Ω)	0.100	0.080	1000
FMBD451616-260NA	26	0.100	0.080	1000
FMBD451616-310NA	31	0.150	0.120	1000
FMBD451616-600NA	60	0.200	0.160	1000
FMBD451616-750NA	75	0.300	0.240	1000
FMBD451616-800NA	80	0.300	0.240	1000
FMBD451616-900NA	90	0.350	0.280	1000
FMBD451616-101NA	100	0.400	0.320	500
FMBD451616-121NA	120	0.400	0.320	500
FMBD451616-151NA	150	0.400	0.320	500
FMBD451616-221NA	220	0.450	0.360	500
FMBD451616-301NA	300	0.450	0.360	500
FMBD451616-501NA	500	0.500	0.400	200
FMBD451616-601NA	600	0.500	0.400	200
FMBD451616-801NA	800	0.550	0.440	200
FMBD453215-300NA	30	0.150	0.120	1000
FMBD453215-310NA	31	0.150	0.120	1000
FMBD453215-380NA	38	0.150	0.120	1000
FMBD453215-600NA	60	0.200	0.160	1000
FMBD453215-700NA	70	0.200	0.160	1000
FMBD453215-800NA	80	0.200	0.160	1000
FMBD453215-900NA	90	0.200	0.160	500
FMBD453215-101NA	100	0.200	0.160	500
FMBD453215-121NA	120	0.250	0.200	500
FMBD453215-151NA	150	0.250	0.200	500
FMBD453215-221NA	220	0.300	0.240	300
FMBD453215-301NA	300	0.300	0.240	300
FMBD453215-501NA	500	0.400	0.320	200
FMBD453215-601NA	600	0.400	0.320	200

* Z-value tolerance： N=±25%

FMBD Series (Rev. 5.0)

Electrical Characteristics- High Current

Part Number	Z - value (ohm) @100MHz	DCR (ohm)		Rated Current (mA) max.
		max.	typ.	
FMBD100505-050H	5 (tolerance: 0~15Ω)	0.040	0.032	800
FMBD100505-070H	7 (tolerance: 0~11Ω)	0.040	0.032	800
FMBD100505-090H	9 (tolerance: 5~13Ω)	0.040	0.032	800
FMBD100505-110H	11 (tolerance: 7~15Ω)	0.040	0.032	800
FMBD100505-150H	15 (tolerance: 9~21Ω)	0.040	0.032	800
FMBD100505-190H	19 (tolerance: 12~25Ω)	0.060	0.048	700
FMBD100505-260NH	26	0.060	0.048	700
FMBD100505-310NH	31	0.080	0.064	700
FMBD100505-360NH	36	0.150	0.120	600
FMBD100505-500NH	50	0.150	0.120	600
FMBD100505-600NH	60	0.150	0.120	600
FMBD100505-700NH	70	0.200	0.160	450
FMBD100505-750NH	75	0.200	0.160	450
FMBD100505-800NH	80	0.200	0.160	450
FMBD100505-101NH	100	0.200	0.160	450
FMBD100505-121NH	120	0.250	0.200	450
FMBD100505-151NH	150	0.250	0.200	450
FMBD100505-181NH	180	0.400	0.320	300
FMBD100505-221NH	220	0.400	0.320	300
FMBD100505-301NH	300	0.500	0.400	300
FMBD100505-501NH	500	0.650	0.520	200
FMBD100505-601NH	600	0.700	0.560	200
FMBD100505-801NH	800	0.900	0.720	200
FMBD100505-102NH	1000	1.000	0.800	200
FMBD100505-122NH	1200	1.000	0.800	200
FMBD160808-050H	5 (tolerance: 0~15Ω)	0.080	0.064	1000
FMBD160808-070H	7 (tolerance: 0~11Ω)	0.080	0.064	1000
FMBD160808-090H	9 (tolerance: 5~13Ω)	0.080	0.064	1000
FMBD160808-110H	11 (tolerance: 7~15Ω)	0.080	0.064	1000
FMBD160808-150H	15 (tolerance: 9~21Ω)	0.080	0.064	1000
FMBD160808-190H	19 (tolerance: 12~25Ω)	0.080	0.064	1000
FMBD160808-260NH	26	0.080	0.064	1000
FMBD160808-300NH	30	0.080	0.064	1000
FMBD160808-310NH	31	0.080	0.064	1000
FMBD160808-500NH	50	0.120	0.096	1000
FMBD160808-600NH	60	0.120	0.096	1000
FMBD160808-700NH	70	0.150	0.120	1000
FMBD160808-800NH	80	0.150	0.120	1000
FMBD160808-101NH	100	0.150	0.120	1000
FMBD160808-121NH	120	0.150	0.120	1000
FMBD160808-151NH	150	0.200	0.160	1000
FMBD160808-181NH	180	0.200	0.160	1000
FMBD160808-221NH	220	0.200	0.160	1000
FMBD160808-301NH	300	0.250	0.200	1000
FMBD160808-501NH	500	0.300	0.240	1000
FMBD160808-601NH	600	0.300	0.240	1000
FMBD160808-801NH	800	0.550	0.440	500
FMBD160808-102NH	1000	0.550	0.440	500
FMBD160808-122NH	1200	0.650	0.520	500
FMBD160808-152NH	1500	0.750	0.600	400
FMBD160808-182NH	1800	0.750	0.600	400
FMBD160808-202NH	2000	0.900	0.720	400
FMBD160808-252NH	2500	0.900	0.720	400

* Z-value tolerance： N=±25%

FMBD Series (Rev. 5.0)

Electrical Characteristics- High Current

Part Number	Z - value (ohm) @100MHz	DCR (ohm)		Rated Current (mA) max.
		max.	typ.	
FMBD201209-050H	5 (tolerance: 0~15Ω)	0.030	0.024	3000
FMBD201209-070H	7 (tolerance: 0~11Ω)	0.030	0.024	3000
FMBD201209-090H	9 (tolerance: 5~13Ω)	0.030	0.024	3000
FMBD201209-110H	11 (tolerance: 7~15Ω)	0.030	0.024	3000
FMBD201209-150H	15 (tolerance: 9~21Ω)	0.030	0.024	3000
FMBD201209-190H	19 (tolerance: 12~25Ω)	0.030	0.024	3000
FMBD201209-300NH	30	0.050	0.040	3000
FMBD201209-310NH	31	0.050	0.040	3000
FMBD201209-360NH	36	0.060	0.048	3000
FMBD201209-600NH	60	0.060	0.048	3000
FMBD201209-700NH	70	0.080	0.064	2500
FMBD201209-800NH	80	0.080	0.064	2500
FMBD201209-101NH	100	0.100	0.080	2500
FMBD201209-121NH	120	0.100	0.080	2000
FMBD201209-151NH	150	0.100	0.080	2000
FMBD201209-181NH	180	0.150	0.120	2000
FMBD201209-201NH	200	0.150	0.120	2000
FMBD201209-221NH	220	0.150	0.120	2000
FMBD201209-301NH	300	0.200	0.160	2000
FMBD201209-501NH	500	0.250	0.200	1500
FMBD201209-601NH	600	0.250	0.200	1500
FMBD201209-801NH	800	0.300	0.240	800
FMBD201209-102NH	1000	0.300	0.240	800
FMBD201209-122NH	1200	0.450	0.360	500
FMBD201209-152NH	1500	0.500	0.400	300
FMBD201209-202NH	2000	0.500	0.400	300
FMBD201209-222NH	2200	0.600	0.480	100
FMBD201209-252NH	2500 @50MHz	0.600	0.480	100
FMBD321609-050H	5 (tolerance: 0~15Ω)	0.040	0.032	4000
FMBD321609-070H	7 (tolerance: 0~11Ω)	0.040	0.032	4000
FMBD321609-090H	9 (tolerance: 5~13Ω)	0.050	0.040	4000
FMBD321609-110H	11 (tolerance: 7~15Ω)	0.050	0.040	4000
FMBD321609-150H	15 (tolerance: 9~21Ω)	0.050	0.040	3000
FMBD321609-190H	19 (tolerance: 12~25Ω)	0.050	0.040	3000
FMBD321609-260NH	26	0.050	0.040	3000
FMBD321609-280NH	28	0.070	0.056	3000
FMBD321609-300NH	30	0.070	0.056	3000
FMBD321609-310NH	31	0.070	0.056	3000
FMBD321609-500NH	50	0.070	0.056	3000
FMBD321609-600NH	60	0.070	0.056	3000
FMBD321609-700NH	70	0.070	0.056	3000
FMBD321609-800NH	80	0.070	0.056	3000
FMBD321609-101NH	100	0.070	0.056	3000
FMBD321609-121NH	120	0.070	0.056	3000
FMBD321609-151NH	150	0.120	0.096	2500
FMBD321609-181NH	180	0.120	0.096	2500
FMBD321609-221NH	220	0.120	0.096	2500
FMBD321609-301NH	300	0.150	0.120	2000
FMBD321609-501NH	500	0.200	0.160	2000
FMBD321609-601NH	600	0.200	0.160	2000
FMBD321609-801NH	800	0.250	0.200	2000
FMBD321609-102NH	1000	0.250	0.200	2000
FMBD321609-122NH	1200	0.350	0.280	1000
FMBD321609-152NH	1500 @50MHz	0.450	0.360	500
FMBD321609-182NH	1800 @50MHz	0.600	0.480	500
FMBD321609-202NH	2000 @50MHz	0.700	0.560	300
FMBD321609-252NH	2500 @50MHz	0.900	0.720	200
FMBD321609-302NH	3000 @50MHz	0.900	0.720	200

* Z-value tolerance： N=±25%

FMBD Series (Rev. 5.0)

Electrical Characteristics- High Current

Part Number	Z - value (ohm) @100MHz	DCR (ohm)		Rated Current (mA) max.
		max.	typ.	
FMBD321611-190NH	19	0.030	0.024	3000
FMBD321611-310NH	31	0.030	0.024	3000
FMBD321611-520NH	52	0.030	0.024	3000
FMBD321611-700NH	70	0.040	0.032	3000
FMBD321611-101NH	100	0.040	0.032	3000
FMBD321611-151NH	150	0.050	0.040	3000
FMBD321611-301NH	300	0.060	0.048	3000
FMBD321611-501NH	500	0.070	0.056	2500
FMBD321611-601NH	600	0.080	0.064	2000
FMBD321611-102NH	1000	0.300	0.240	1000
FMBD322513-110H	11 (tolerance: 7~15Ω)	0.050	0.040	5000
FMBD322513-190H	19 (tolerance: 12~25Ω)	0.050	0.040	5000
FMBD322513-260NH	26	0.050	0.040	5000
FMBD322513-310NH	31	0.050	0.040	5000
FMBD322513-600NH	60	0.060	0.048	4000
FMBD322513-700NH	70	0.080	0.064	4000
FMBD322513-800NH	80	0.080	0.064	3000
FMBD322513-900NH	90	0.080	0.064	3000
FMBD322513-121NH	120	0.100	0.080	3000
FMBD322513-151NH	150	0.100	0.080	3000
FMBD322513-221NH	220	0.150	0.120	3000
FMBD322513-301NH	300	0.150	0.120	3000
FMBD322513-501NH	500	0.150	0.120	2000
FMBD322513-601NH	600	0.200	0.160	2000
FMBD322513-801NH	800	0.250	0.200	2000
FMBD322513-102NH	1000	0.300	0.240	2000
FMBD451616-190H	19 (tolerance: 12~25Ω)	0.015	0.012	6000
FMBD451616-260NH	26	0.050	0.040	3000
FMBD451616-310NH	31	0.050	0.040	3000
FMBD451616-600NH	60	0.060	0.048	3000
FMBD451616-750NH	75	0.060	0.048	3000
FMBD451616-800NH	80	0.080	0.064	3000
FMBD451616-900NH	90	0.100	0.080	3000
FMBD451616-121NH	120	0.100	0.080	3000
FMBD451616-151NH	150	0.100	0.080	3000
FMBD451616-221NH	220	0.150	0.120	2000
FMBD451616-301NH	300	0.200	0.160	2000
FMBD451616-501NH	500	0.250	0.200	1000
FMBD451616-601NH	600	0.300	0.240	1000

* Z-value tolerance： N=±25%

FMBD Series (Rev. 5.0)

Electrical Characteristics- High Current

Part Number	Z - value (ohm) @100MHz	DCR (ohm)		Rated Current (mA) max.
		max.	typ.	
FMBD453215-300NH	30	0.060	0.048	5000
FMBD453215-310NH	31	0.060	0.048	5000
FMBD453215-380NH	38	0.060	0.048	5000
FMBD453215-400NH	40	0.060	0.048	4000
FMBD453215-500NH	50	0.060	0.048	4000
FMBD453215-600NH	60	0.060	0.048	4000
FMBD453215-700NH	70	0.060	0.048	4000
FMBD453215-800NH	80	0.080	0.064	4000
FMBD453215-900NH	90	0.080	0.064	4000
FMBD453215-101NH	100	0.080	0.064	4000
FMBD453215-121NH	120	0.080	0.064	4000
FMBD453215-151NH	150	0.100	0.080	3000
FMBD453215-181NH	180	0.120	0.096	3000
FMBD453215-201NH	200	0.120	0.096	3000
FMBD453215-221NH	220	0.150	0.120	2000
FMBD453215-301NH	300	0.150	0.120	2000
FMBD453215-401NH	400	0.200	0.160	1000
FMBD453215-501NH	500	0.200	0.160	1000
FMBD453215-601NH	600	0.250	0.200	1000

* Z-value tolerance： N=±25%

FMBD Series (Rev. 5.0)

Electrical Characteristics- Super Current

Part Number	Z - value (ohm) @100MHz	DCR (ohm)		Rated Current (mA) max.
		max.	typ.	
FMBD100505-050S	5 (tolerance: 0~15Ω)	0.050	0.040	1800
FMBD100505-070S	7 (tolerance: 0~11Ω)	0.050	0.040	1800
FMBD100505-090S	9 (tolerance: 5~13Ω)	0.050	0.040	1800
FMBD100505-110S	11 (tolerance: 7~15Ω)	0.050	0.040	1800
FMBD100505-150S	15 (tolerance: 9~21Ω)	0.050	0.040	1800
FMBD100505-190S	19 (tolerance: 12~25Ω)	0.060	0.048	1500
FMBD100505-300NS	30	0.080	0.064	1300
FMBD100505-600NS	60	0.100	0.080	1000
FMBD100505-700NS	70	0.150	0.120	800
FMBD100505-800NS	80	0.150	0.120	800
FMBD100505-101NS	100	0.150	0.120	800
FMBD100505-121NS	120	0.150	0.120	800
FMBD100505-151NS	150	0.200	0.160	700
FMBD100505-201NS	200	0.250	0.200	700
FMBD100505-221NS	220	0.300	0.240	600
FMBD100505-301NS	300	0.300	0.240	600
FMBD100505-501NS	500	0.400	0.320	500
FMBD100505-601NS	600	0.500	0.400	500
FMBD100505-801NS	800	0.650	0.520	300
FMBD100505-102NS	1000	0.650	0.520	300
FMBD160808-050S	5 (tolerance: 0~15Ω)	0.020	0.016	6000
FMBD160808-070S	7 (tolerance: 0~11Ω)	0.020	0.016	6000
FMBD160808-090S	9 (tolerance: 5~13Ω)	0.020	0.016	6000
FMBD160808-110S	11 (tolerance: 7~15Ω)	0.030	0.024	5000
FMBD160808-150S	15 (tolerance: 9~21Ω)	0.030	0.024	5000
FMBD160808-190S	19 (tolerance: 12~25Ω)	0.030	0.024	5000
FMBD160808-300NS	30	0.030	0.024	4000
FMBD160808-500NS	50	0.040	0.032	3000
FMBD160808-600NS	60	0.040	0.032	3000
FMBD160808-700NS	70	0.060	0.048	2500
FMBD160808-800NS	80	0.060	0.048	2500
FMBD160808-101NS	100	0.060	0.048	2500
FMBD160808-121NS	120	0.065	0.052	2000
FMBD160808-151NS	150	0.090	0.072	1500
FMBD160808-181NS	180	0.090	0.072	1500
FMBD160808-221NS	220	0.120	0.096	1500
FMBD160808-301NS	300	0.180	0.144	1500
FMBD160808-501NS	500	0.180	0.144	1200
FMBD160808-601NS	600	0.180	0.144	1200
FMBD160808-801NS	800	0.300	0.240	700
FMBD160808-102NS	1000	0.400	0.320	600

* Z-value tolerance：N=±25%

FMBD Series (Rev. 5.0)

Electrical Characteristics- Super Current

Part Number	Z - value (ohm) @100MHz	DCR (ohm)		Rated Current (mA) max.
		max.	typ.	
FMBD201209-050S	5 (tolerance: 0~15Ω)	0.010	0.008	6000
FMBD201209-070S	7 (tolerance: 0~11Ω)	0.010	0.008	6000
FMBD201209-090S	9 (tolerance: 5~13Ω)	0.010	0.008	6000
FMBD201209-110S	11 (tolerance: 7~15Ω)	0.010	0.008	6000
FMBD201209-150S	15 (tolerance: 9~21Ω)	0.010	0.008	6000
FMBD201209-190S	19 (tolerance: 12~25Ω)	0.010	0.008	6000
FMBD201209-300NS	30	0.010	0.008	6000
FMBD201209-500NS	50	0.040	0.032	3500
FMBD201209-600NS	60	0.040	0.032	3500
FMBD201209-700NS	70	0.040	0.032	3000
FMBD201209-800NS	80	0.040	0.032	3000
FMBD201209-101NS	100	0.050	0.040	3000
FMBD201209-121NS	120	0.050	0.040	3000
FMBD201209-151NS	150	0.080	0.064	2500
FMBD201209-181NS	180	0.080	0.064	2500
FMBD201209-221NS	220	0.080	0.064	2500
FMBD201209-301NS	300	0.080	0.064	2500
FMBD201209-501NS	500	0.100	0.080	2000
FMBD201209-601NS	600	0.100	0.080	2000
FMBD201209-102NS	1000	0.120	0.096	1500
FMBD321609-050S	5 (tolerance: 0~15Ω)	0.010	0.008	6000
FMBD321609-070S	7 (tolerance: 0~11Ω)	0.010	0.008	6000
FMBD321609-090S	9 (tolerance: 5~13Ω)	0.015	0.012	6000
FMBD321609-110S	11 (tolerance: 7~15Ω)	0.015	0.012	6000
FMBD321609-150S	15 (tolerance: 9~21Ω)	0.015	0.012	6000
FMBD321609-190S	19 (tolerance: 12~25Ω)	0.015	0.012	6000
FMBD321609-260NS	26	0.015	0.012	6000
FMBD321609-280NS	28	0.015	0.012	6000
FMBD321609-300NS	30	0.015	0.012	6000
FMBD321609-310NS	31	0.025	0.020	4000
FMBD321609-500NS	50	0.025	0.020	4000
FMBD321609-600NS	60	0.025	0.020	4000
FMBD321609-700NS	70	0.035	0.028	4000
FMBD321609-800NS	80	0.035	0.028	4000

* Z-value tolerance：N=±25%

FMBD Series (Rev. 5.0)

Electrical Characteristics- Super Current

Part Number	Z - value (ohm) @100MHz	DCR (ohm)		Rated Current (mA) max.
		max.	typ.	
FMBD321609-101NS	100	0.035	0.028	4000
FMBD321609-121NS	120	0.035	0.028	4000
FMBD321609-151NS	150	0.045	0.036	3000
FMBD321609-181NS	180	0.055	0.044	3000
FMBD321609-221NS	220	0.055	0.044	3000
FMBD321609-301NS	300	0.065	0.052	2500
FMBD321609-501NS	500	0.085	0.068	2500
FMBD321609-601NS	600	0.100	0.080	2000
FMBD321609-801NS	800	0.110	0.088	2000
FMBD321609-102NS	1000	0.120	0.096	2000
FMBD451616-190S	19 (tolerance: 12~25Ω)	0.010	0.008	6000
FMBD451616-260NS	26	0.015	0.012	6000
FMBD451616-310NS	31	0.015	0.012	6000
FMBD451616-600NS	60	0.015	0.012	6000
FMBD451616-750NS	75	0.020	0.016	4000
FMBD451616-800NS	80	0.025	0.020	3000
FMBD453215-300NS	30	0.010	0.008	6000
FMBD453215-310NS	31	0.010	0.008	6000
FMBD453215-380NS	38	0.010	0.008	6000
FMBD453215-400NS	40	0.010	0.008	6000
FMBD453215-500NS	50	0.010	0.008	6000
FMBD453215-600NS	60	0.010	0.008	6000
FMBD453215-700NS	70	0.010	0.008	6000
FMBD453215-101NS	100	0.020	0.016	6000
FMBD453215-181NS	180	0.020	0.016	6000
FMBD453215-221NS	220	0.020	0.016	6000

* Z-value tolerance：N=±25%

FMBD Series (Rev. 5.0)

Electrical Characteristics- Ultra Current

Part Number	Z - value (ohm) @100MHz	DCR (ohm)		Rated Current (mA) max.
		max.	typ.	
FMBD160808-260NU	26	0.007	0.006	6000
FMBD201209-070NU	7	0.008	0.006	6000
FMBD201209-110NU	11	0.008	0.006	6000
FMBD201209-170NU	17	0.008	0.006	6000
FMBD201209-300NU	30	0.008	0.006	6000
FMBD201209-390NU	39	0.008	0.006	6000
FMBD201209-600NU	60	0.020	0.016	6000
FMBD201209-800NU	80	0.020	0.016	6000
FMBD201209-121NU	120	0.025	0.020	6000
FMBD321611-310NU	31	0.006	0.005	6000
FMBD321611-520NU	52	0.008	0.006	6000
FMBD321611-800NU	80	0.020	0.016	4000
FMBD321611-121NU	120	0.025	0.020	5000
FMBD322513-520NU	52	0.008	0.006	6000
FMBD322513-600NU	60	0.008	0.006	6000
FMBD322513-301NU	300	0.020	0.016	5000
FMBD451616-600NU	60	0.008	0.006	6000
FMBD453215-700NU	70	0.006	0.005	9000
FMBD453215-800NU	80	0.006	0.005	9000
FMBD453215-900NU	90	0.006	0.005	9000
FMBD453215-121NU	120	0.006	0.005	9000

* Z-value tolerance：N=±25%

FBCF Series (Rev. 5.0)

Applications

* Computer products- Mother Board , Hard Disk , TV card…
* Communication products- PAGER , Cordless Phone…
* Modem , OA products , power supplier…
* Countermeasures for complying with CE、FCC、 VDE or VCCl radiated emission.

Features

* RoHS compliant
* Use flat wire and could endure higher current (6Amps).
* It is mounted on the boards with surface mounting equipment .

Operating & Storage Condition

* Operating Temp. : -40 to +125°C
* Storage Temp. : -40 to +85°C
* Storage Life Time : 12 Months @25°C , RH 65%

Product Identification

FBCF	323023	-	400	N
1	2		3	4

1. Product Code
2. Size Code
3. Impedance: 40Ω
4. Tolerance: N=±35%

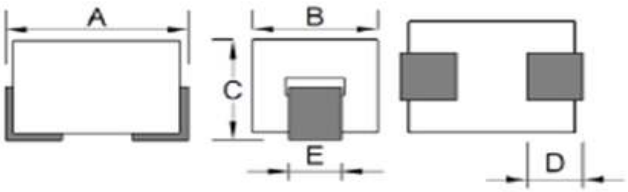
Test Equipment

* HP4284A, HP42841A, HP4287A, HP433B- L, IDC, Q, RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimensions: [mm]



Size Code	A(±0.4)	B(±0.25)	C(±0.25)	D(typ.)	E(typ.)
323023	3.10	2.90	2.20	0.80	0.85
403025	4.70	3.10	2.90	1.35	1.35
853225	9.00	3.10	2.80	1.50	1.25

Electrical Characteristics

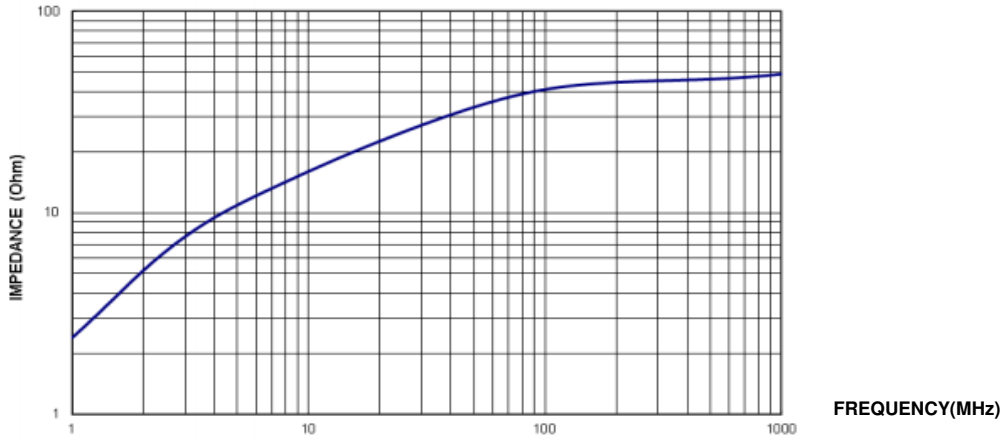
P/N	Impedance (Ω) @100MHz	DCR (mΩ)		IDC (A) @1MHz
		max.	typ.	
FBCF323023-400N	40 ±35%	0.60	0.48	15 typ.
FBCF403025-530N	53 ±35%	0.60	0.48	14 typ.
FBCF853225-101N	100 ±35%	1.00	0.80	13 typ.

* IDC: DC current (A) that will cause an approximate ΔT of 40°C

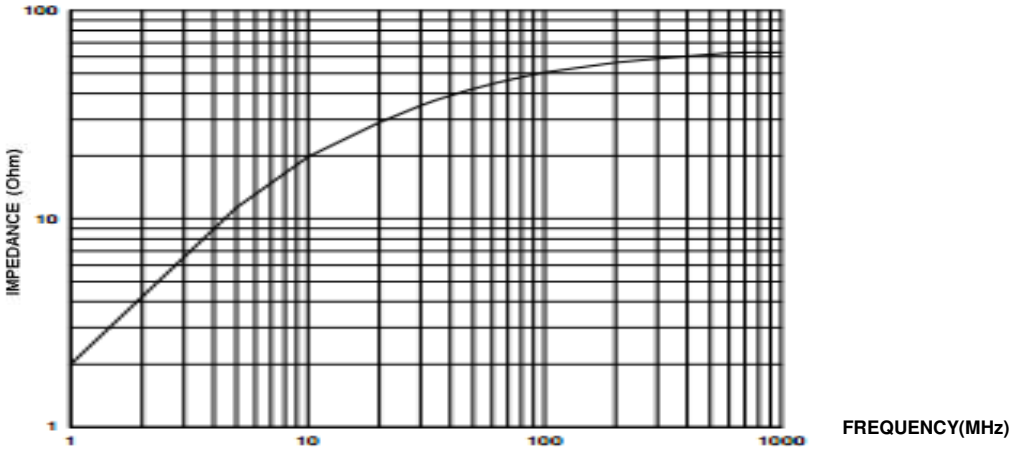
FBCF Series (Rev. 5.0)

Typical Impedance VS Frequency Curve

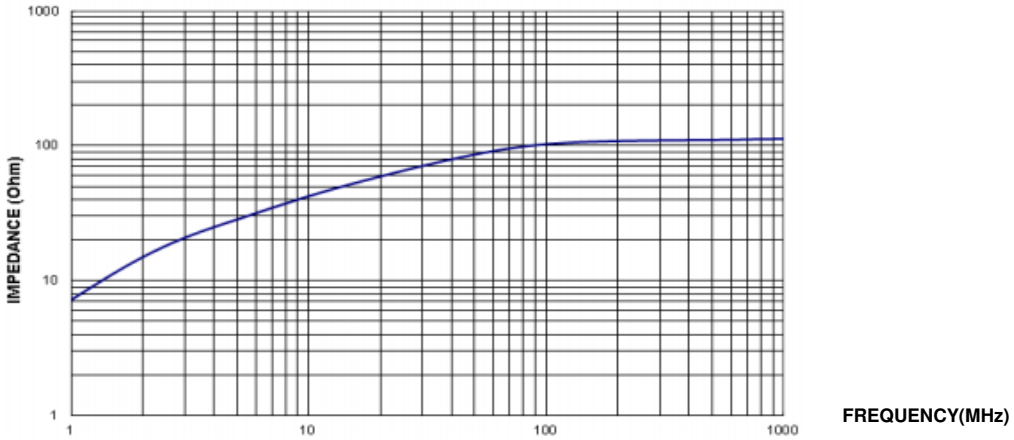
FBCF323023-400N



FBCF403025-530N



FBCF853225-101N



FBCH Series (Rev. 5.0)

FBCH series is powerful components with composite co-fired material to solve EMI problem for high speed differential signal transmission line as USB, and LVDS, without distortion to high speed signal transmission

Features

* RoHS compliant
* Adopt ferrite co-firing technology
* Miniaturized EMI common mode filter product

Applications

* Tablet/notebook/motherboard/set-top box/router...etc
* USB2.0/ Ethernet and other signal lines
* MIPI, MHL serial interface in mobile device

Product Identification

FBCH	1012	-	900	N
1	2		3	4

1. Product Code
2. Size Code
3. Impedance: 90Ω @100MHz
4. Tolerance: N=±25%

Operating & Storage Condition

* Operating Temp. : -40 to +85°C
* Storage Temp. : -40°C max.
* Storage Life Time : 6 Months @25°C , RH 65%

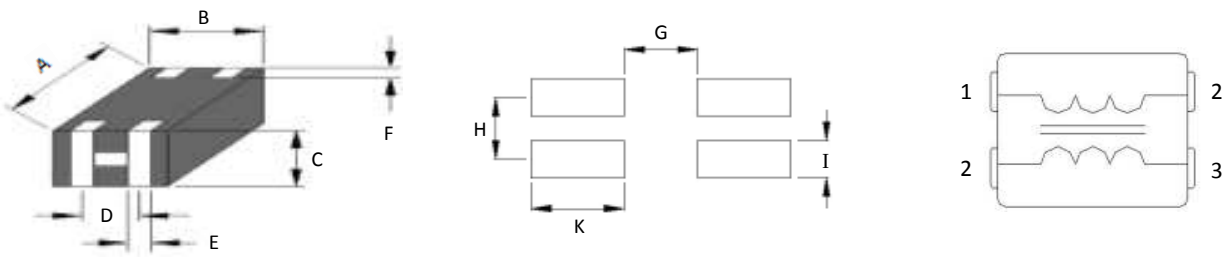
Test Equipment

* Agilent E4991A RF IMPEDANCE ANALYZER
* Agilent E5071C ENA SERIES NETWORK ANALYZER
* HP4338 MILLIOHMMETER

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimensions, Pad Layout & Schematic: [mm]



Size Code	A(±0.10)	B(±0.10)	C(±0.10)	D(±0.10)	E(±0.10)	F(±0.15)	G(ref.)	H(ref.)	K(ref.)	I(ref.)
1012	1.25	1.00	0.60	0.50	0.30	0.20	0.55	0.50	0.70	0.30

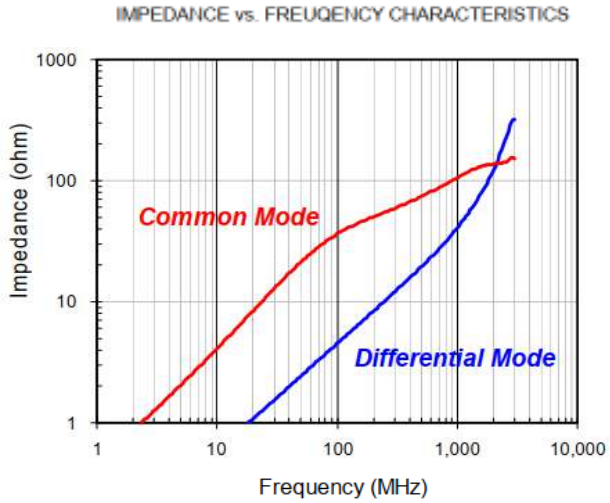
Electrical Characteristics

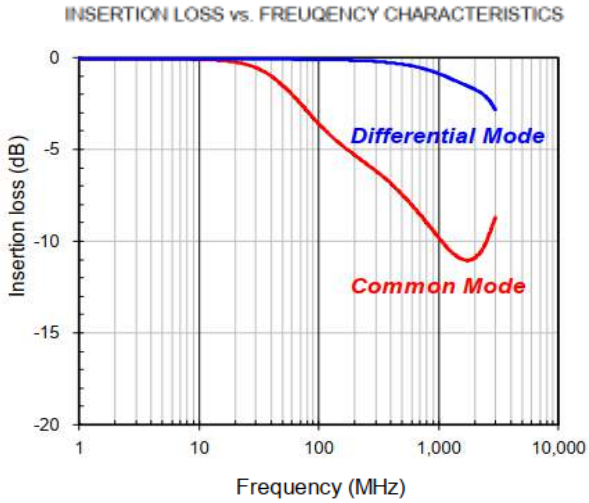
P/N	Impedance (Ω) @100MHz	DCR (mΩ)	IDC (mA)	Rated Voltage (V)	IR (MΩ)
FBCH1012-360N	36 ±25%	500 max.	300 max.	10 max.	200 min.
FBCH1012-670N	67 ±25%	500 max.	300 max.	10 max.	200 min.
FBCH1012-900N	90 ±25%	600 max.	300 max.	10 max.	200 min.

FBCH Series (Rev. 5.0)

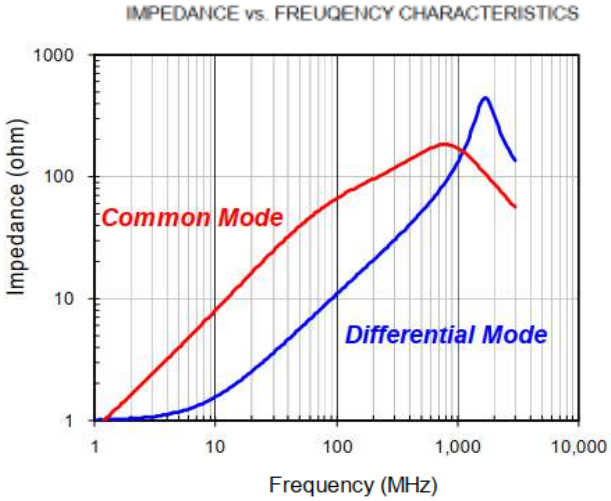
CHARACTERISTICS(REFERENCE)

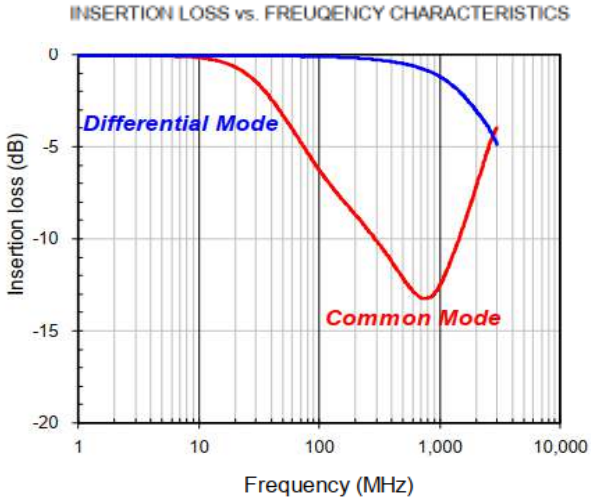
FBCH1012-360N



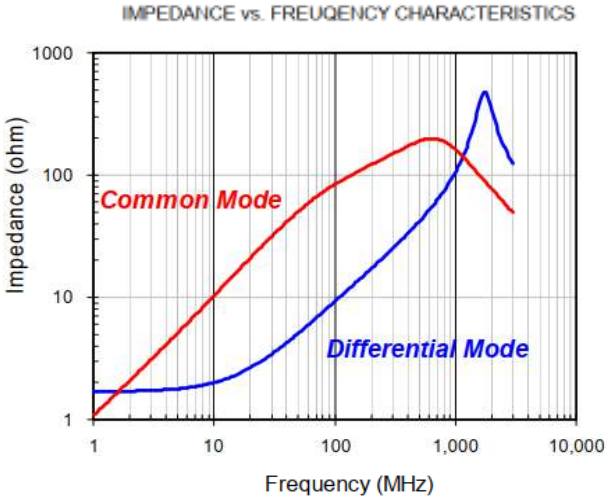


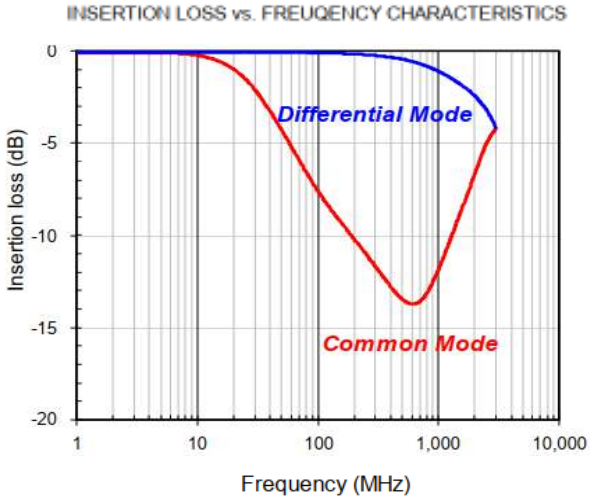
FBCH1012-670N





FBCH1012-900N





FBCM Series (Rev. 5.0)

Applications

* Main Board , Hard Disk , TV card…
* Communication products- PAGER , Cordless Phone…
* Modem , OA products , power supplier…
* Countermeasures for complying with CE、FCC、 VDE or VCCl radiated emission.

Features

* RoHS compliant
* Flat wire could endure higher current (6Amps).
* Being mounted in the boards with surface mounting equipment.

Operating & Storage Condition

* Operating Temp. : -40 to +125°C
* Storage Temp. : -40 to +85°C
* Storage Life Time : 12 Months @25°C , RH 65%

Product Identification

FBCM	855625	-	400	I
1	2		3	4

1. Product Code
2. Size Code
3. Impedance: 40Ω @100MHz
4. Tolerance: I=minimum

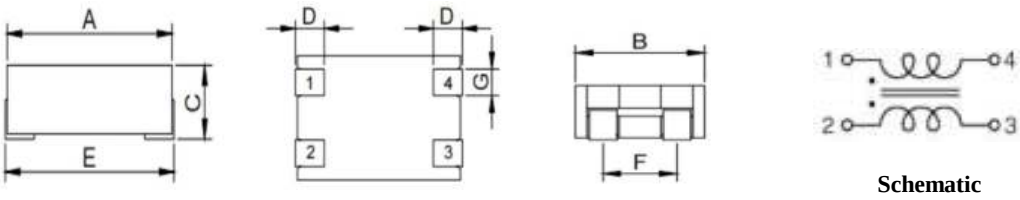
Test Equipment

* HP4284A, HP42841A, HP4287A, HP433B- L, IDC, RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimensions: [mm]



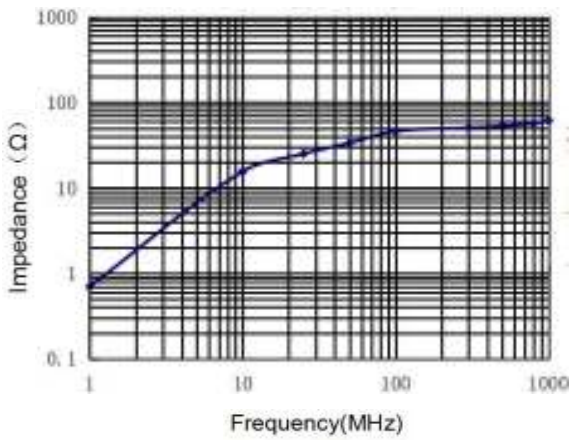
Schematic

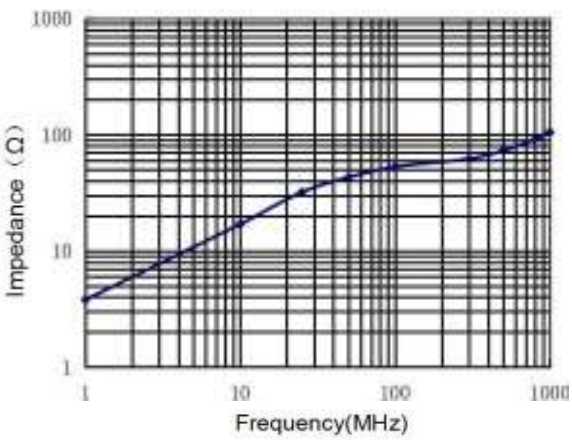
Size Code	A(±0.4)	B(±0.4)	C(±0.3)	D(±0.3)	E(±0.4)	F(typ.)	G(typ.)
455625	4.5	5.6	2.8	1.2	4.9	3.2	1.2
855625	8.5	5.6	2.8	1.5	8.9	3.2	1.2

Electrical Characteristics

P/N	Impedance (Ω) @25MHz	Impedance (Ω) @100MHz	DCR (mΩ)	IDC (A) @ ΔT=40°C
FBCM455625-250I	15.0 min.	25.0 min.	5.0 max.	10.0 max.
FBCM855625-400I	25.0 min.	40.0 min.	10.0 max.	6.0 max.

*** Typical Impedance VS Frequency Curve**





FMBA Series (Rev. 5.0)

Applications

* Communications
* Video and audio equipment
* Computer/ Remote control

Features

* Lower DC resistance
* Available in a wide range of impedance values
* Minimize heat and crosstalk between adjacent circuits
* Monolithic structure for high reliability

Operating & Storage Condition

* Operating Temp. : -40 to +85°C
* Storage Temp. : -40 to +85°C
* Storage Life Time : 12 Months @25°C , RH 65%

Product Identification

FMBA	321608	A	-	601	N
1	2	3		4	5

1. Product Code
2. Size Code
3. Material Code
4. Impedance: 600Ω
5. Tolerance: N=±25%

Test Equipment

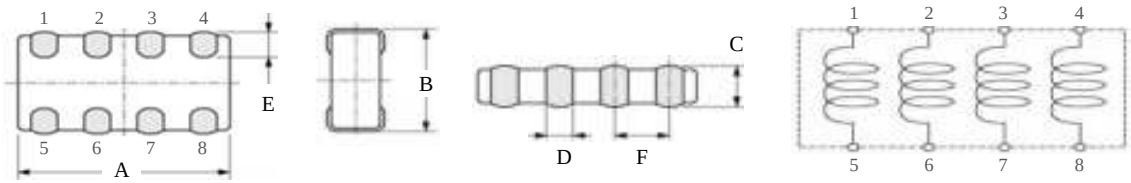
* HP4284A, HP4287A, HP433B- L, IDC, Q, RDC
* HP8753D NETWORK ANALYZER- SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension: [mm]

Bottom View	Side View	Front View	Equivalent Circuit Diagram



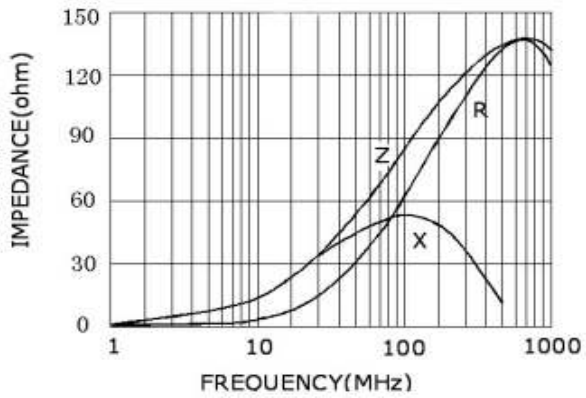
Size Code	A	B	C	D	E	F
201005	2.00±0.15	1.00±0.15	0.45±0.15	0.25±0.10	0.25±0.10	0.50±0.10
321608	3.20±0.20	1.60±0.20	0.80±0.15	0.40±0.15	0.30±0.20	0.80±0.10

Electrical Characteristics

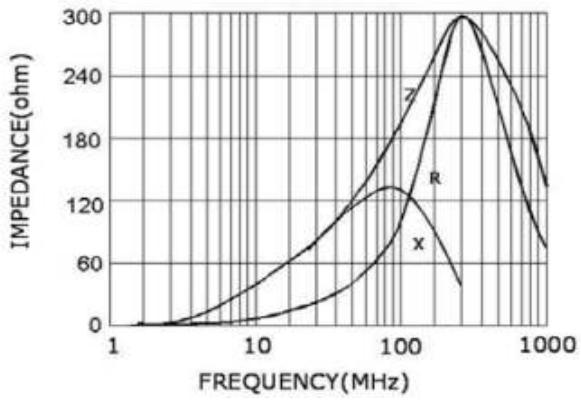
P/N	Impedance (Ω) @100MHz	DCR (Ω)		IDC (mA)
		Max.	Typ.	Max.
FMBA201005A-750N	75	0.20	0.16	200
FMBA201005A-221N	220	0.45	0.36	100
FMBA321608A-600N	60	0.25	0.20	200
FMBA321608A-121N	120	0.30	0.24	150
FMBA321608A-301N	300	0.30	0.24	150
FMBA321608A-601N	600	0.50	0.40	100
FMBA321608A-102N	1000	0.70	0.56	50
FMBA321608B-121N	120	0.40	0.32	150
FMBA321608B-221N	220	0.45	0.36	150
FMBA321608B-471N	470	0.55	0.44	100
FMBA321608B-601N	600	0.65	0.52	100
FMBA321608K-601N	600	0.70	0.56	100
FMBA321608K-102N	1000	0.80	0.64	50
FMBA321608H-121N	120	0.60	0.48	50
FMBA321608H-301N	300	1.00	0.80	50
FMBA321608H-601N	600	1.70	1.36	35
FMBA321608H-102N	1000	2.10	1.68	35

* Rated current < 1A, ΔT≤ 20°C

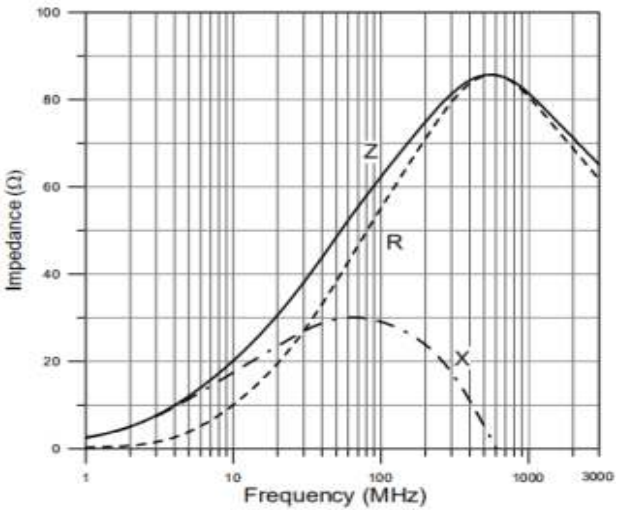
FMBA201005A-750N



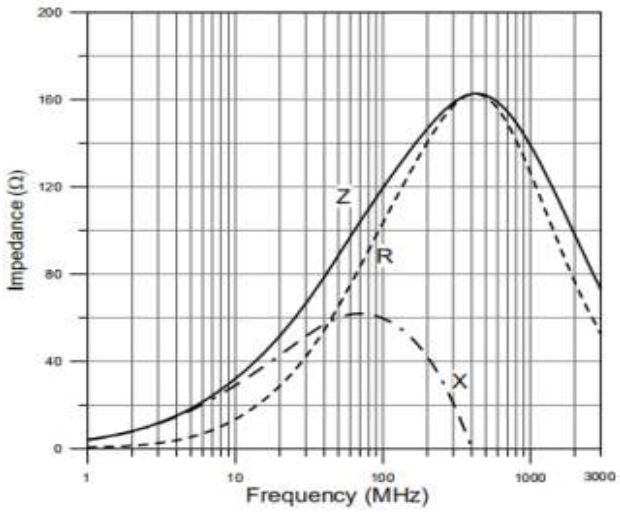
FMBA201005A-221N



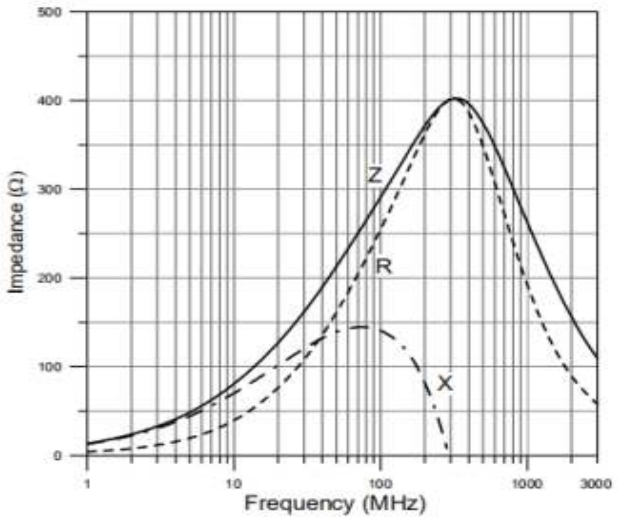
FMBA321608A-600N



FMBA321608A-121N



FMBA321608A-301N



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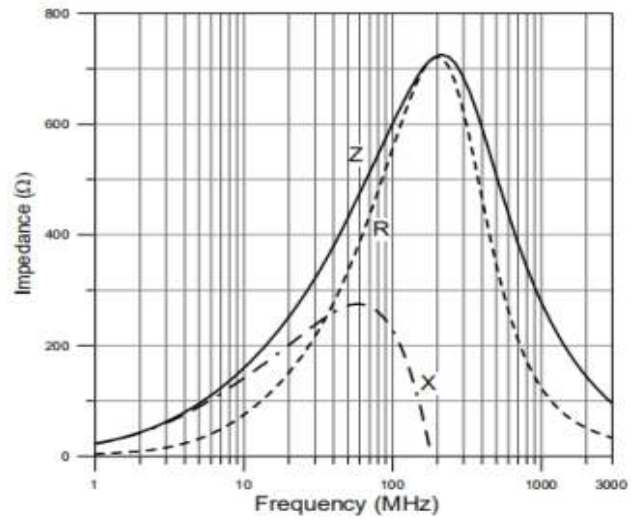
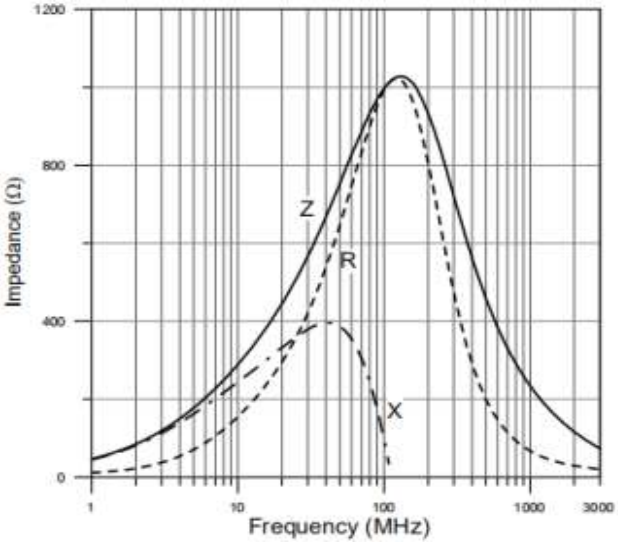


FMBA321608A-102N



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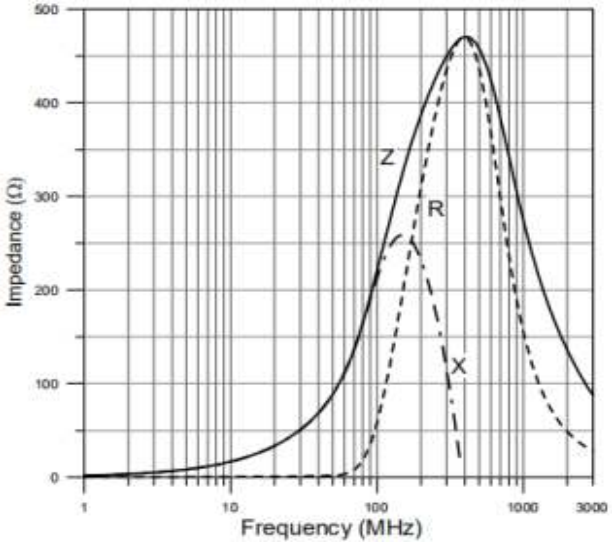
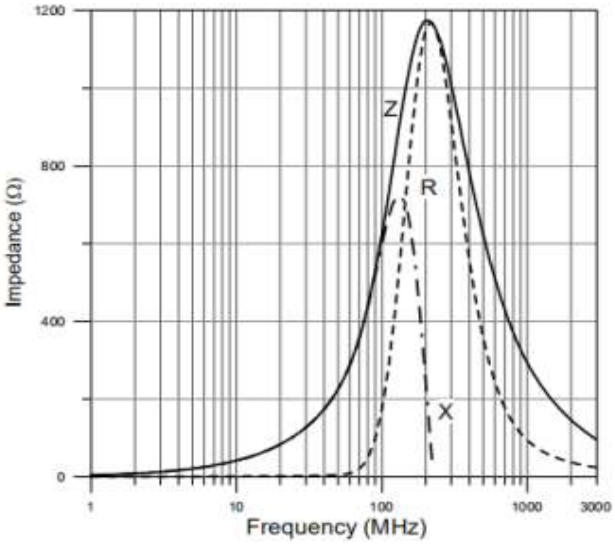
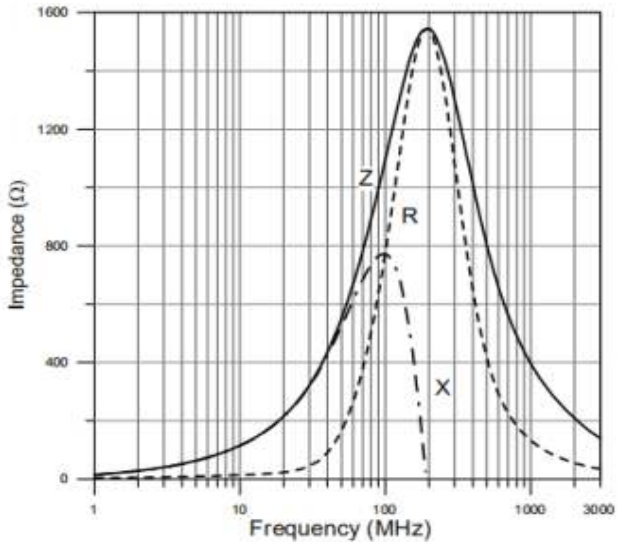


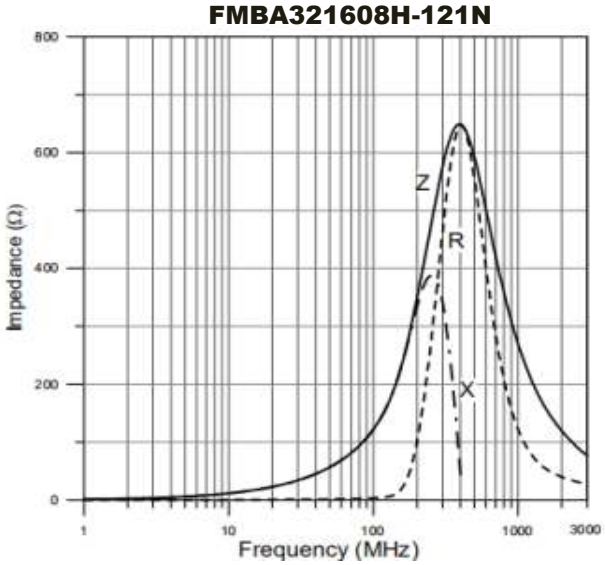
FMBA321608B-601N



FMBA321608K-102N



FMBA321608H-121N



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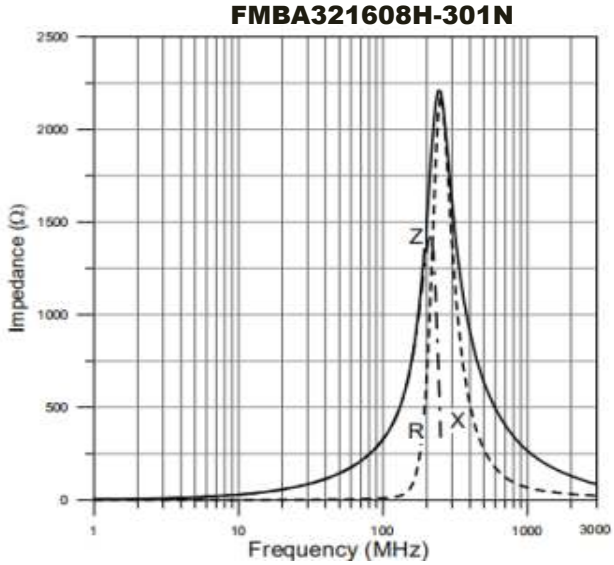
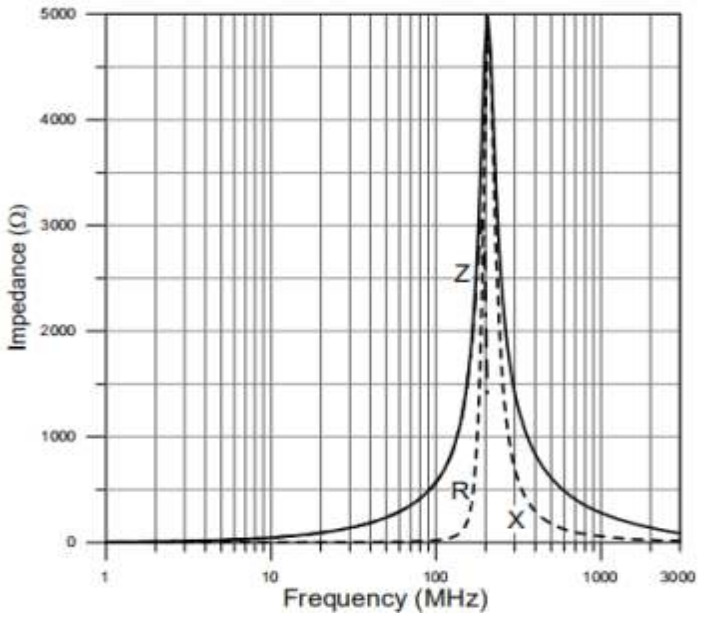


Z, R, X vs FREQUENCY CHARACTERISTICS

FMBA321608H-601N



FWHA Series (Rev. 5.0)

FWHA is the newest ferrite wire wound chip inductors. Coil covered with glue can effectively protect the coil. Greatly improved EMI shielding effect.

Features

* Very strong solderability
* Highly accurate dimensions
* Terminals are highly resistant to external forces
* Highly resistant to mechanical shocks and pressure
* Minmize the noise and howling

Applications

* Telecom and datacom applications such as Xdsl
* Cable modem
* Set-top box
* CATV filter/tuner
* Wireless LAN, etc

Product Indentfication

FWHA	0603	-	100	M
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 10uH
4. Tolerance: M=±20%

Operating & Storage Condition

* Operating Temp : -40 to +85°C
* Storage Temp : -10 to +40°C
* Storage Life Time: 12 Months @25°C , RH 65%

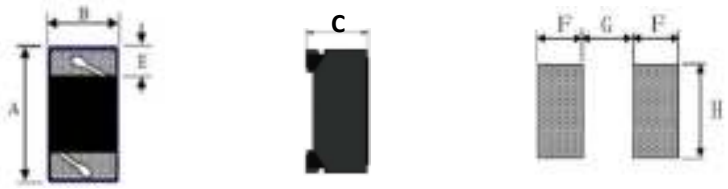
Test Equipment

* HP4291A-Z, HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Setwork Analyzer- SRF

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-10%

Dimension & Recommended PAD Layout: [mm]



Size Code	A(max.)	B(max.)	C(max.)	E(±0.1)	F(typ.)	G(typ.)	H(typ.)
0603	1.80	1.30	1.30	0.33	0.64	0.64	1.02

Electrical Characteristics

P/N	Inductance (uH)	SRF (MHz) typ.	DCR (mΩ) ±30%	Isat. (mA) typ.	Irms. (mA) typ.
FWHA0603-1R0M	1.0	350	210	1100	720
FWHA0603-1R5M	1.5	300	390	650	520
FWHA0603-2R2M	2.2	250	460	680	480
FWHA0603-4R7M	4.7	100	700	450	400
FWHA0603-6R8M	6.8	50	1250	360	300
FWHA0603-100M	10.0	25	1300	270	380
FWHA0603-150M	15.0	25	2000	270	230
FWHA0603-220M	22.0	10	3900	220	160

* Inductance Test Condition: @1MHz/0.25v
* Irms DC current (A) that will cause an approximate ΔT of 40°C
* Isat DC current (A) that will cause L to drop approximately 35%

FAL Series (Rev. 5.0)

Applications

* TV, radios and radio transceivers, telephones.
* Others various electronic products.

Features

* RoHS compliant
* To be compact, small and light-weight, wide range of inductance
* To be high Q and self-resonant frequencies
* Tapping type that is convenient for automatic insertion

Operating & Storage Condition

* Operating Temp : -25 to +85°C
* Storage Temp : -25 to +85°C
* Storage Life Time :12 Months @25°C,RH 65%

Product Identification

FAL	0307	-	1R0	K
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 1.0uH
4. Tolerance: K= ±10%; M= ±20%

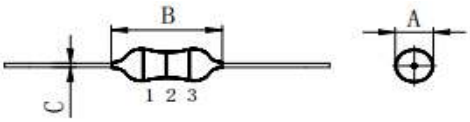
Test Equipment

* HP4284A,HP42841A-L,IDC,Q,RDC
* HP8753D NETWORK ANALYZER-SRF
* HM9461, HIOKI3540

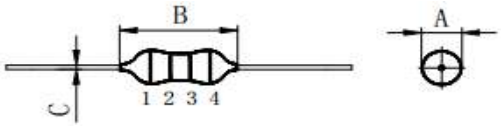
Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimensions : [mm]



(Type A)



(Type B)

Size Code	A(max.)	B(max.)	C(±0.10)	Type
0204	Φ2.8	4.8	Φ0.45	A
0307	Φ3.0/Φ3.2	7.0	Φ0.50	B
0410	Φ4.0	10.5	Φ0.60	B
0412	Φ4.5/Φ5.0	12.7	Φ0.65	B
0510	Φ5.0	11.0	Φ0.60	B
0512	Φ5.0	12.0	Φ0.60	B
0514	Φ5.0/Φ5.5	14.0/15.0	Φ0.65	B

Color Code	Nominal Inductance	Multiplier	Tolerance
Black	0	x 1	±20%
Brown	1uH	x 10	-
Red	2uH	x 100	-
Orange	3uH	x 1000	-
Yellow	4uH	-	-
Green	5uH	-	-
Blue	6uH	-	-
Violet	7uH	-	-
Gray	8uH	-	-
White	9uH	-	-
Gold	-	x 0.1	±5%
Silver	-	x 0.01	±10%

* Test condition: @1KHz / 1.0V
* IDC : This indicates the value of current when the inductance is 10% lower than it's initial value at D.C. superimposition or D.C.current when at ΔT=40°C,whichever is lower. (Ta=25°C)

FAL Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance (uH)	Q Value (min.)	Frequency (MHz)	DCR (Ω) max.	SRF (MHz) min.	IDC (mA) max.
FAL0204-R22M	0.22	35	25.2	0.40	150.0	400
FAL0204-R27M	0.27	35	25.2	0.43	150.0	380
FAL0204-R33M	0.33	35	25.2	0.48	150.0	370
FAL0204-R39M	0.39	35	25.2	0.51	150.0	350
FAL0204-R47K/M	0.47	35	25.2	0.56	150.0	330
FAL0204-R56K/M	0.56	35	25.2	0.61	150.0	320
FAL0204-R68K/M	0.68	35	25.2	0.67	150.0	310
FAL0204-R82K/M	0.82	35	25.2	0.74	150.0	290
FAL0204-1R0K	1.00	35	25.2	0.80	150.0	270
FAL0204-1R2K	1.20	40	7.96	0.90	110.0	260
FAL0204-1R5K	1.50	40	7.96	1.00	80.0	250
FAL0204-1R8K	1.80	40	7.96	1.10	60.0	240
FAL0204-2R2K	2.20	40	7.96	1.20	45.0	230
FAL0204-2R7K	2.70	40	7.96	1.30	40.0	220
FAL0204-3R3K	3.30	40	7.96	1.40	38.0	210
FAL0204-3R9K	3.90	40	7.96	1.50	36.0	200
FAL0204-4R7K	4.70	40	7.96	1.70	32.0	190
FAL0204-5R6K	5.60	40	7.96	1.90	30.0	180
FAL0204-6R8K	6.80	40	7.96	2.00	28.0	175
FAL0204-8R2K	8.20	40	7.96	2.20	26.0	165
FAL0204-100K	10.00	40	7.96	2.50	24.0	160
FAL0204-120K	12.00	40	2.52	2.50	22.0	150
FAL0204-150K	15.00	40	2.52	2.80	20.0	145
FAL0204-180K	18.00	40	2.52	3.10	16.7	140
FAL0204-220K	22.00	40	2.52	3.40	15.0	130
FAL0204-270K	27.00	40	2.52	4.30	13.0	80
FAL0204-330K	33.00	40	2.52	4.70	12.0	76
FAL0204-390K	39.00	40	2.52	5.20	11.0	74
FAL0204-470K	47.00	40	2.52	5.80	9.0	70
FAL0204-560K	56.00	40	2.52	6.40	8.0	68
FAL0204-680K	68.00	40	2.52	7.20	7.0	64
FAL0204-820K	82.00	40	2.52	9.50	6.5	46
FAL0204-101K	100.00	40	2.52	12.00	6.0	44
FAL0204-121K	120.00	40	0.796	13.00	5.5	42
FAL0204-151K	150.00	40	0.796	16.00	5.0	39
FAL0204-181K	180.00	40	0.796	18.00	4.8	37
FAL0204-221K	220.00	40	0.796	20.00	4.5	35
FAL0204-271K	270.00	30	0.796	20.00	3.5	25
FAL0204-331K	330.00	30	0.796	20.00	3.0	25

* Isat: DC current at which the inductance drops approximate 10% from its value without current
* Irms: DC current that causes the temperature rise (△T ≤40°C) from 25°C ambient.
* Rated Current: It is either the inductance is 10% lower than its initial value in DC saturation characteristics or temperature raise becomes △T=40℃(Ta=25℃), whichever is lower.
* Tolerance: K= ±10%; M= ±20%

FAL Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance (uH)	Q Value (min.)	Frequency (MHz)	DCR (Ω) max.	SRF (MHz) min.	IDC (mA) max.
FAL0307-R22M	0.22	40	25.2	0.08	150.0	740
FAL0307-R27M	0.27	40	25.2	0.09	150.0	740
FAL0307-R33M	0.33	40	25.2	0.10	150.0	740
FAL0307-R39M	0.39	40	25.2	0.10	150.0	740
FAL0307-R47K/M	0.47	40	25.2	0.11	150.0	740
FAL0307-R56K/M	0.56	40	25.2	0.12	150.0	740
FAL0307-R68K/M	0.68	40	25.2	0.13	150.0	740
FAL0307-R82K/M	0.82	40	25.2	0.14	150.0	740
FAL0307-1R0K	1.00	40	25.2	0.15	150.0	740
FAL0307-1R2K	1.20	40	25.2	0.18	150.0	740
FAL0307-1R5K	1.50	40	25.2	0.20	150.0	700
FAL0307-1R8K	1.80	50	7.96	0.23	125.0	655
FAL0307-2R2K	2.20	50	7.96	0.27	110.0	630
FAL0307-2R7K	2.70	50	7.96	0.28	95.0	595
FAL0307-3R3K	3.30	50	7.96	0.30	70.0	575
FAL0307-3R9K	3.90	50	7.96	0.32	65.0	555
FAL0307-4R7K	4.70	50	7.96	0.35	36.0	530
FAL0307-5R6K	5.60	50	7.96	0.40	32.0	500
FAL0307-6R8K	6.80	50	7.96	0.48	28.0	470
FAL0307-8R2K	8.20	50	7.96	0.56	23.0	425
FAL0307-100K	10.00	50	7.96	0.75	18.0	370
FAL0307-120K	12.00	50	2.52	0.80	17.0	350
FAL0307-150K	15.00	50	2.52	0.93	16.0	335
FAL0307-180K	18.00	50	2.52	1.00	15.0	315
FAL0307-220K	22.00	50	2.52	1.20	13.0	285
FAL0307-270K	27.00	50	2.52	1.80	11.0	270
FAL0307-330K	33.00	50	2.52	2.10	10.0	255
FAL0307-390K	39.00	50	2.52	2.30	9.5	240
FAL0307-470K	47.00	50	2.52	2.60	8.5	205
FAL0307-560K	56.00	50	2.52	2.90	7.5	195
FAL0307-680K	68.00	50	2.52	3.30	6.5	185
FAL0307-820K	82.00	50	2.52	3.80	6.0	175
FAL0307-101K	100.00	50	2.52	4.20	5.5	165
FAL0307-121K	120.00	60	0.796	4.70	5.4	160
FAL0307-151K	150.00	60	0.796	5.40	4.7	150
FAL0307-181K	180.00	60	0.796	6.00	4.3	140
FAL0307-221K	220.00	60	0.796	7.00	4.0	130
FAL0307-271K	270.00	60	0.796	7.70	3.7	120
FAL0307-331K	330.00	60	0.796	11.10	3.4	100
FAL0307-391K	390.00	60	0.796	12.60	2.8	95
FAL0307-471K	470.00	60	0.796	14.00	2.5	90
FAL0307-561K	560.00	60	0.796	15.50	2.3	85
FAL0307-681K	680.00	60	0.796	25.30	2.0	75
FAL0307-821K	820.00	60	0.796	27.50	1.5	65
FAL0307-102K	1000.00	50	0.796	31.40	1.2	60
FAL0307-122K	1200.00	50	0.252	37.00	0.9	50
FAL0307-152K	1500.00	45	0.252	39.00	0.8	40

* Isat: DC current at which the inductance drops approximate 10% from its value without current
* Irms: DC current that causes the temperature rise (△T ≤40°C) from 25°C ambient.
* Rated Current: It is either the inductance is 10% lower than its initial value in DC saturation characteristics or temperature raise becomes △T=40℃(Ta=25℃), whichever is lower.
* Tolerance: K= ±10%; M= ±20%

FAL Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance (uH)	Q Value (min.)	Frequency (MHz)	DCR (Ω) max.	SRF (MHz) min.	IDC (mA) max.
FAL0410-R27M	0.27	45	25.2	0.09	270	980
FAL0410-R33M	0.33	45	25.2	0.10	250	980
FAL0410-R39M	0.39	45	25.2	0.12	230	980
FAL0410-R47K/M	0.47	45	25.2	0.13	220	980
FAL0410-R56K/M	0.56	45	25.2	0.14	200	980
FAL0410-R68K/M	0.68	45	25.2	0.15	190	980
FAL0410-R82K/M	0.82	45	25.2	0.16	172	980
FAL0410-1R0K	1.00	45	7.96	0.17	157	920
FAL0410-1R2K	1.20	50	7.96	0.18	144	880
FAL0410-1R5K	1.50	50	7.96	0.20	130	830
FAL0410-1R8K	1.80	55	7.96	0.22	121	790
FAL0410-2R2K	2.20	55	7.96	0.24	110	750
FAL0410-2R7K	2.70	60	7.96	0.25	100	720
FAL0410-3R3K	3.30	65	7.96	0.30	94	670
FAL0410-3R9K	3.90	65	7.96	0.35	80	640
FAL0410-4R7K	4.70	70	7.96	0.40	80	620
FAL0410-5R6K	5.60	70	7.96	0.43	74	590
FAL0410-6R8K	6.80	75	7.96	0.48	68	550
FAL0410-8R2K	8.20	80	7.96	0.52	53	530
FAL0410-100K	10.00	80	7.96	0.58	70	500
FAL0410-120K	12.00	75	2.52	0.63	34	480
FAL0410-150K	15.00	70	2.52	0.72	20	460
FAL0410-180K	18.00	70	2.52	0.77	14	430
FAL0410-220K	22.00	50	2.52	0.84	9.9	410
FAL0410-270K	27.00	50	2.52	0.94	7.6	390
FAL0410-330K	33.00	50	2.52	1.03	6.3	370
FAL0410-390K	39.00	50	2.52	1.12	6.3	350
FAL0410-470K	47.00	45	2.52	1.22	6.3	340
FAL0410-560K	56.00	40	2.52	1.34	6.2	320
FAL0410-680K	68.00	40	2.52	1.47	5.7	305
FAL0410-820K	82.00	35	2.52	1.62	5.3	290
FAL0410-101K	100.00	30	2.52	1.80	4.8	275
FAL0410-121K	120.00	70	0.796	3.00	3.8	185
FAL0410-151K	150.00	70	0.796	4.20	3.5	175
FAL0410-181K	180.00	70	0.796	4.60	3.3	165
FAL0410-221K	220.00	70	0.796	5.10	3.0	155
FAL0410-271K	270.00	65	0.796	6.00	2.8	145
FAL0410-331K	330.00	65	0.796	6.40	2.6	137
FAL0410-391K	390.00	65	0.796	7.00	2.4	133
FAL0410-471K	470.00	60	0.796	7.70	2.3	126
FAL0410-561K	560.00	60	0.796	8.50	2.1	120
FAL0410-681K	680.00	55	0.796	9.40	1.9	113
FAL0410-821K	820.00	55	0.796	12.00	1.9	105
FAL0410-102K	1000.00	50	0.796	17.40	1.4	100
FAL0410-122K	1200.00	50	0.252	20.00	1.2	90
FAL0410-152K	1500.00	30	0.252	25.00	1.0	85
FAL0410-182K	1800.00	30	0.252	30.00	0.9	80

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* Tolerance: K= ±10%; M= ±20%

FAL Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance (uH)	Q Value (min.)	Frequency (MHz)	DCR (Ω) max.	SRF (MHz) min.	IDC (mA) max.
FAL0410-222K	2200	30	0.252	35.00	0.80	75
FAL0410-272K	2700	30	0.252	40.00	0.70	70
FAL0410-332K	3300	30	0.252	65.00	0.65	65
FAL0410-392K	3900	30	0.252	71.00	0.65	50
FAL0410-472K	4700	30	0.252	78.00	0.60	40
FAL0410-562K	5600	30	0.252	100.00	0.56	30
FAL0410-682K	6800	30	0.252	125.00	0.54	30

Part No.	Inductance (uH)	Frequency (MHz)	DCR (Ω) max.	SRF (MHz) min.	Isat (mA) max.	Irms (mA) max.
FAL0412-1R0K/M	1.00	7.96	0.018	190.00	3000	3300
FAL0412-1R2K/M	1.20	7.96	0.019	170.00	2700	3200
FAL0412-1R5K/M	1.50	7.96	0.020	160.00	2500	3100
FAL0412-1R8K/M	1.80	7.96	0.023	150.00	2100	2900
FAL0412-2R2K/M	2.20	7.96	0.031	130.00	2000	2600
FAL0412-2R7K/M	2.70	7.96	0.033	120.00	1900	2500
FAL0412-3R3K/M	3.30	7.96	0.054	110.00	1700	1900
FAL0412-3R9K/M	3.90	7.96	0.060	100.00	1500	1800
FAL0412-4R7K/M	4.70	7.96	0.068	86.00	1400	1700
FAL0412-5R6K/M	5.60	7.96	0.074	64.00	1300	1600
FAL0412-6R8K/M	6.80	7.96	0.080	44.00	1200	1600
FAL0412-8R2K/M	8.20	7.96	0.087	32.00	1100	1500
FAL0412-100K	10.00	1KHz	0.095	25.00	970	1500
FAL0412-120K	12.00	1KHz	0.110	17.00	880	1400
FAL0412-150K	15.00	1KHz	0.150	13.00	790	1200
FAL0412-180K	18.00	1KHz	0.160	10.00	710	1100
FAL0412-220K	22.00	1KHz	0.190	8.40	640	1000
FAL0412-270K	27.00	1KHz	0.220	8.00	580	950
FAL0412-330K	33.00	1KHz	0.240	7.60	530	910
FAL0412-390K	39.00	1KHz	0.260	7.10	480	880
FAL0412-470K	47.00	1KHz	0.350	6.00	430	790
FAL0412-560K	56.00	1KHz	0.470	5.80	400	650
FAL0412-680K	68.00	1KHz	0.530	4.30	370	610
FAL0412-820K	82.00	1KHz	0.600	4.10	330	580
FAL0412-101K	100.00	1KHz	0.670	3.90	300	550
FAL0412-121K	120.00	1KHz	0.900	3.60	270	470
FAL0412-151K	150.00	1KHz	1.200	3.20	250	410
FAL0412-181K	180.00	1KHz	1.400	2.80	220	380
FAL0412-221K	220.00	1KHz	1.900	2.30	200	320
FAL0412-271K	270.00	1KHz	2.100	2.10	180	310
FAL0412-331K	330.00	1KHz	2.400	1.90	170	290
FAL0412-391K	390.00	1KHz	3.000	1.70	150	260
FAL0412-471K	470.00	1KHz	3.400	1.40	140	240

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* Tolerance: K= ±10%; M= ±20%

FAL Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance (uH)	Frequency (MHz)	DCR (Ω) max.	SRF (MHz) min.	Isat (mA) max.	Irms (mA) max.
FAL0412-561K	560.00	1KHz	4.7	1.30	130	210
FAL0412-681K	680.00	1KHz	6.4	1.20	110	180
FAL0412-821K	820.00	1KHz	7.1	1.10	100	170
FAL0412-102K	1000.00	1KHz	7.9	1.00	95	160
FAL0412-122K	1200.00	1KHz	9.0	0.94	87	150
FAL0412-152K	1500.00	1KHz	12.0	0.76	78	130
FAL0412-182K	1800.00	1KHz	14.0	0.72	71	120
FAL0412-222K	2200.00	1KHz	19.0	0.64	64	100
FAL0412-272K	2700.00	1KHz	25.0	0.56	58	90
FAL0412-332K	3300.00	1KHz	29.0	0.53	52	83
FAL0412-392K	3900.00	1KHz	34.0	0.48	48	77
FAL0412-472K	4700.00	1KHz	37.0	0.45	44	74
FAL0412-562K	5600.00	1KHz	50.0	0.40	40	63
FAL0412-682K	6800.00	1KHz	58.0	0.36	36	59
FAL0412-822K	8200.00	1KHz	68.0	0.29	33	54
FAL0412-103K	10000.00	1KHz	75.0	0.27	30	52

Part No.	Inductance (uH)	Q Value (min.)	Frequency (MHz)	DCR (Ω) max.	SRF (MHz) min.	IDC (mA) max.
FAL0510-4R7K	4.7	20	7.96	0.06	50.00	900
FAL0510-100K	10.0	15	7.96	0.45	30.00	750
FAL0510-220K	22.0	30	2.52	0.65	8.00	450
FAL0510-820K	82.0	20	2.52	0.82	3.80	330
FAL0510-101K	100.0	20	2.52	0.75	3.50	300
FAL0510-121K	120.0	20	0.796	1.20	3.30	250
FAL0510-151K	150.0	20	0.796	1.80	3.20	225
FAL0510-181K	180.0	20	0.796	2.00	2.80	200
FAL0510-221K	220.0	30	0.796	2.10	2.60	180
FAL0510-271K	270.0	30	0.796	2.50	2.40	170
FAL0510-331K	330.0	30	0.796	3.00	2.20	160
FAL0510-391K	390.0	30	0.796	3.50	2.00	150
FAL0510-471K	470.0	30	0.796	4.00	1.90	140
FAL0510-561K	560.0	30	0.796	5.40	1.80	130
FAL0510-681K	680.0	40	0.796	6.00	1.50	120
FAL0510-821K	820.0	50	0.796	7.50	1.20	110
FAL0510-102K	1000.0	50	0.252	8.00	1.00	100
FAL0510-122K	1200.0	60	0.252	14.50	0.95	95
FAL0510-152K	1500.0	60	0.252	16.50	0.90	90
FAL0510-182K	1800.0	60	0.252	19.00	0.90	85
FAL0510-222K	2200.0	60	0.252	27.50	0.80	80
FAL0510-272K	2700.0	60	0.252	40.00	0.75	75
FAL0510-332K	3300.0	50	0.252	50.00	0.70	62
FAL0510-392K	3900.0	50	0.252	53.00	0.65	59
FAL0510-472K	4700.0	50	0.252	60.00	0.60	55
FAL0510-562K	5600.0	50	0.252	64.00	0.50	40
FAL0510-682K	6800.0	50	0.252	73.00	0.45	35
FAL0510-822K	8200.0	30	0.252	80.00	0.40	30

* Isat: DC current at which the inductance drops approximate 10% from its value without current
* Irms: DC current that causes the temperature rise (△T ≤40°C) from 25°C ambient.
* Rated Current: It is either the inductance is 10% lower than its initial value in DC saturation characteristics or temperature raise becomes △T=40℃(Ta=25℃), whichever is lower.
* Tolerance: K= ±10%; M= ±20%

FAL Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance (uH)	Q Value (min.)	Frequency (MHz)	DCR (Ω) max.	SRF (MHz) min.	IDC (mA) max.
FAL0510-103K	10000	25	79.6KHz	132	0.35	25
FAL0510-123K	12000	25	79.6KHz	143	0.30	20
FAL0510-153K	15000	25	79.6KHz	166	0.25	18
FAL0510-183K	18000	25	79.6KHz	185	0.20	15
FAL0510-223K	22000	20	1KHz/79.6KHz	330	0.15	12
FAL0510-273K	27000	20	1KHz/79.6KHz	370	0.10	10
FAL0510-303K	30000	40	1KHz/79.6KHz	240	0.25	10
FAL0512-220K	22	30	2.520	0.35	8.00	550
FAL0512-101K	100	10	2.520	0.50	3.50	300
FAL0512-221K	220	10	0.796	2.10	2.60	160
FAL0512-331K	330	30	0.796	2.50	2.20	130
FAL0512-391K	390	30	0.796	2.80	2.00	125
FAL0512-471K	470	30	1KHz/0.796M	3.00	1.90	120
FAL0512-561K	560	30	0.796	4.50	1.80	115
FAL0512-681K	680	30	0.796	4.60	1.50	110
FAL0512-821K	820	30	0.796	5.00	1.20	105
FAL0512-102K	1000	50	1KHz/0.252M	5.00	1.00	100
FAL0512-122K	1200	60	0.252	14.50	0.95	90
FAL0512-152K	1500	60	0.252	16.50	0.90	85
FAL0512-182K	1800	60	0.252	19.00	0.90	80
FAL0512-222K	2200	60	1KHz/0.252M	27.50	0.80	70
FAL0512-272K	2700	60	0.252	40.00	0.75	65
FAL0512-332K	3300	50	0.252	50.00	0.70	60
FAL0512-392K	3900	50	0.252	53.00	0.65	55
FAL0512-472K	4700	50	0.252	60.00	0.60	50
FAL0512-562K	5600	50	1KHz/0.252M	64.00	0.50	45
FAL0512-682K	6800	40	0.252	73.00	0.45	40
FAL0512-822K	8200	30	0.252	80.00	0.40	30
FAL0512-103K	10000	30	79.6KHz	132.00	0.35	25

* Isat: DC current at which the inductance drops approximate 10% from its value without current
* Irms: DC current that causes the temperature rise (△T ≤40°C) from 25°C ambient.
* Rated Current: It is either the inductance is 10% lower than its initial value in DC saturation characteristics or temperature raise becomes △T=40℃(Ta=25℃), whichever is lower.
* Tolerance: K= ±10%; M= ±20%

FAL Series (Rev. 5.0)

Electrical Characteristics

Part No.	Inductance (uH)	Q Value (min.)	Frequency (MHz)	DCR (Ω) max.	SRF (MHz) min.	Isat (mA) max.	Irms (mA) max.
FAL0514-1R0K/M	1.0	10	7.96	0.022	300.0	5600	3800
FAL0514-1R2K/M	1.2	10	7.96	0.024	260.0	5500	3700
FAL0514-1R5K/M	1.5	10	7.96	0.026	250.0	5000	3600
FAL0514-1R8K/M	1.8	10	7.96	0.029	240.0	4700	3100
FAL0514-2R2K/M	2.2	10	7.96	0.031	220.0	4500	2900
FAL0514-2R7K/M	2.7	10	7.96	0.034	195.0	4000	2700
FAL0514-3R3K/M	3.3	10	7.96	0.038	155.0	3400	2600
FAL0514-3R9K/M	3.9	10	7.960	0.040	115.0	3100	2500
FAL0514-4R7K/M	4.7	10	7.96	0.044	85.0	2800	2400
FAL0514-5R6K/M	5.6	10	7.96	0.048	55.0	2600	2100
FAL0514-6R8K/M	6.8	10	7.96	0.051	50.0	2400	2000
FAL0514-8R2K/M	8.2	10	7.96	0.056	38.0	2200	1950
FAL0514-100K	10.0	10	7.96	0.062	24.0	2100	1900
FAL0514-120K	12.0	10	2.52	0.076	18.0	1800	1800
FAL0514-150K	15.0	10	2.52	0.088	16.0	1700	1700
FAL0514-180K	18.0	10	2.52	0.110	15.0	1600	1600
FAL0514-220K	22.0	10	2.52	0.130	14.0	1400	1550
FAL0514-270K	27.0	10	2.52	0.140	13.0	1300	1300
FAL0514-330K	33.0	10	2.52	0.200	11.0	1200	1200
FAL0514-390K	39.0	10	2.52	0.220	10.0	1100	1000
FAL0514-430K	43.0	10	2.52	0.280	9.5	1000	950
FAL0514-470K	47.0	10	2.52	0.280	9.5	1000	950
FAL0514-560K	56.0	10	2.52	0.300	8.0	900	900
FAL0514-680K	68.0	10	2.52	0.340	7.5	800	800
FAL0514-820K	82.0	10	2.52	0.385	7.0	700	750
FAL0514-101K	100.0	10	2.52	0.480	6.5	700	700
FAL0514-121K	120.0	15	0.796	0.595	5.0	600	600
FAL0514-151K	150.0	15	0.796	0.900	4.5	550	500
FAL0514-181K	180.0	15	0.796	1.100	4.0	500	400
FAL0514-221K	220.0	15	0.796	1.250	3.8	440	390
FAL0514-271K	270.0	15	0.796	1.850	3.5	420	330
FAL0514-331K	330.0	15	0.796	2.100	3.0	380	310
FAL0514-391K	390.0	15	0.796	2.280	2.8	340	300
FAL0514-471K	470.0	15	0.796	3.220	2.5	320	280
FAL0514-561K	560.0	15	0.796	3.850	2.2	290	270
FAL0514-681K	680.0	15	0.796	4.000	2.1	260	240
FAL0514-821K	820.0	15	0.796	5.000	2.0	250	230
FAL0514-102K	1000.0	15	0.252	5.800	1.8	220	190
FAL0514-122K	1200.0	15	0.252	7.100	1.6	200	180
FAL0514-152K	1500.0	15	0.252	7.800	1.5	190	170
FAL0514-222K	2200.0	35	0.252	20.000	1.0	140	140
FAL0514-332K	3300.0	35	0.252	27.000	0.8	130	120
FAL0514-472K	4700.0	30	0.252	30.000	0.7	120	100
FAL0514-562K	5600.0	15	0.252	30.000	0.5	100	90
FAL0514-682K	6800.0	15	0.252	30.000	0.4	90	80
FAL0514-822K	8200.0	15	0.252	37.500	0.4	80	70
FAL0514-103K	10000.0	15	79.6KHz	42.000	0.4	70	60

* Isat: DC current at which the inductance drops approximate 10% from its value without current
* Irms: DC current that causes the temperature rise (△T ≤40°C) from 25°C ambient.
* Rated Current: It is either the inductance is 10% lower than its initial value in DC saturation characteristics or temperature raise becomes △T=40℃(Ta=25℃), whichever is lower.
* Tolerance: K= ±10%; M= ±20%

FUF Series (Rev. 5.0)

FUF Smooth surface and magnetic core can effectively shield EMI. It is widely applied to power line shielding interference and filtering the clutter.

Features

* RoHS compliant
* Extremely high impedance
* Much lower permeability
* Lower loss over 1MHz
* Applied range: 1MhZ -1001MHZ

Applications

* Data line
* Audio cable
* Various antennas
* Power line shielding interference

Product Identification

FUF	130B	_	151	I
1	2		3	4

1. Product Code
2. Core Code
3. Impedance: 150ohm @100MHz
4. I: minimum

Operating & Storage Condition

* Operating Temp. : -40 to +85°C
* Storage Temp. : -40 to +85°C
* Storage Life Time : 12 Months @25°C , RH 65%

Test Equipment

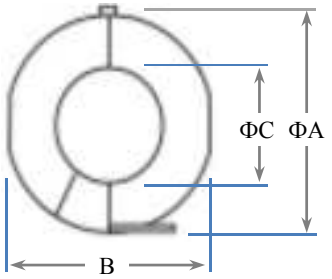
* HP4191A (IMPEDANCE ANALYZER)
* HP4342A (Q METER)

Standard Atmospheric Conditions

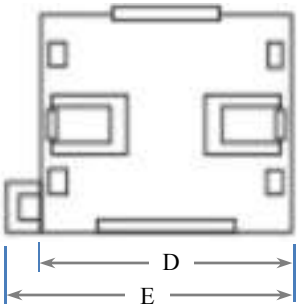
* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

Dimension and Impedance: [mm]

Front View



Side View



P/N	A(±1.0)	B(±1.0)	C(±0.8)	D(±1.0)	E(±1.0)	Impedance (Ω) min.	
						@25MHz	@100MHz
FUF070A-900I	15.5	14.0	7.0	18.0	22.0	45	90
FUF090A-141I	20.0	/	9.0	31.5	35.5	90	145
FUF110B-131I	20.5	20.5	11.0	31.5	35.5	60	130
FUF130B-151I	30.0	/	13.0	34.0	39.0	100	150

* Test Winding : Φ0.5 × 110mm × 0.5 TS

FWC Series (Rev. 5.0)

Features & Applications

* High permeability shielding for wireless charging receiving coils
* High saturation powered iron - not affected by permanent locating magnets
* Blocks charging flux from sensitive components or batteries
* Durable construction

Product Identification

FWC	-	T	505006	-	001	□
1		2	3		4	5

1. Product Code
2. [T]-Tx ; [R]-Rx.
3. Size Code.
4. Series No.
5. [A-Z]: For customized design.

Operating & Storage Condition

* Operating Temp. : -55 to +85°C
* Storage Temp. : -25 to +35°C
* Storage Life Time: 12 Months @25°C, RH 65%

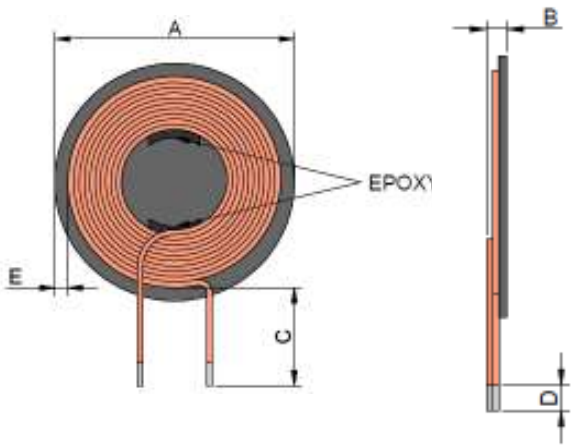
Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

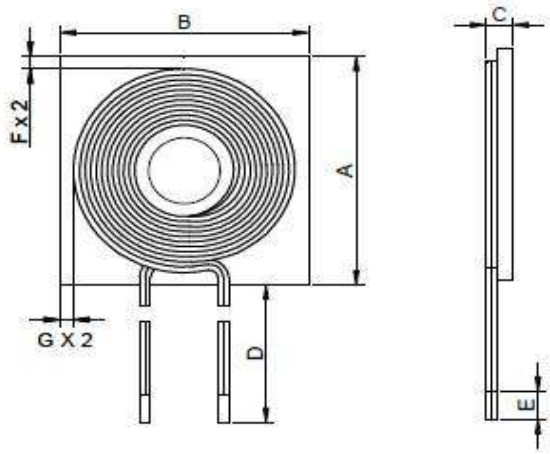
Dimension: [mm]

【FWC-T Series】

FWC-T5028 (Figure 1)

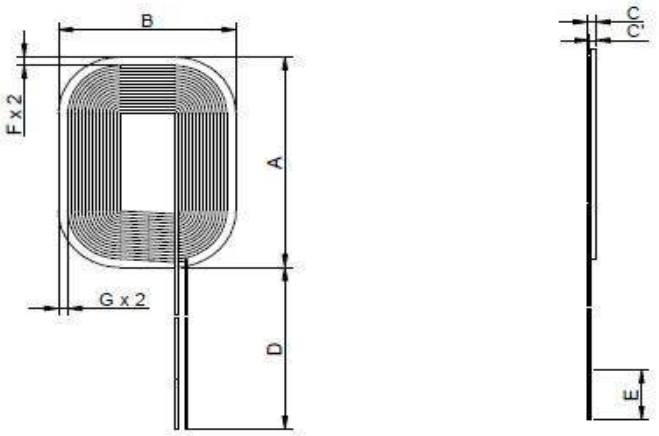


FWC-T5050 (Figure 2)



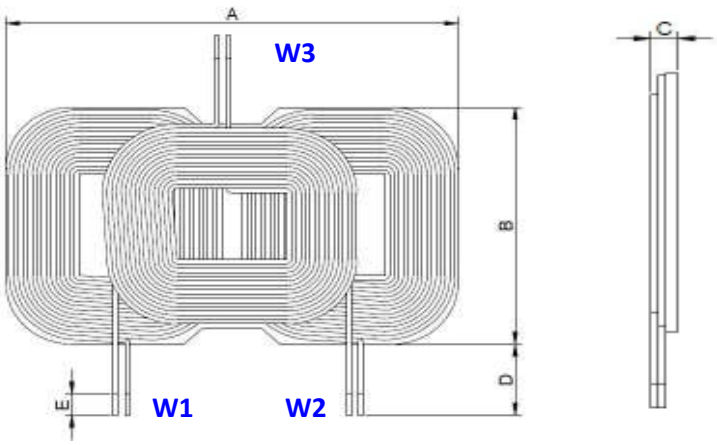
Size Code	A(±0.5)	B(±0.5)	C(±0.3)	D(±0.5)	E(±0.1)	F(min.)	G(min.)	Figure
5028	50.0	2.8	19.0±0.1	5.0	2.0	-	-	1
505005	50.0	50.0	5.2	30.0	6.0	2.0	2.0	2
505006	50.0	50.0	5.7	50.0	10.0	2.0	2.0	2

FWC-T574803



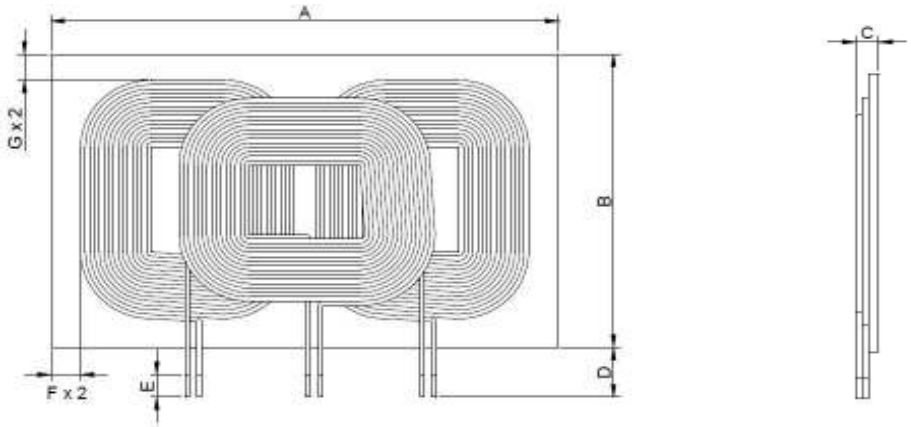
Size Code	A(±1.0)	B(±0.5)	C(max.)	C'(typ.)	D(±3.0)	E(±1.0)	F(±0.5)	G(±0.5)
574803	57.0	48.5	3.3	2.05	48.0	3.0	2.0	1.65

FWC-T975304



Size Code	A(max.)	B(±0.3)	C(max.)	D(±3.0)	E(±1.0)
975304	97.0	53.0	4.0	20	5.0

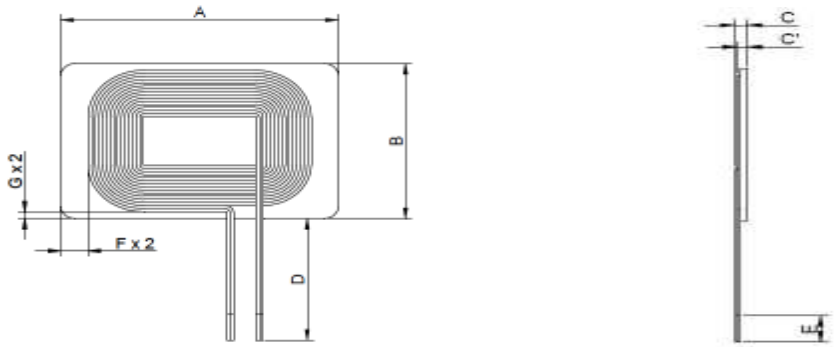
FWC-T1075805



Size Code	A(max.)	B(max.)	C(±0.2)	D(±3.0)	E(±1.0)	F(min.)	G(min.)
1075805	107.0	58.0	3.4	20.0	5.0	5.0	2.0

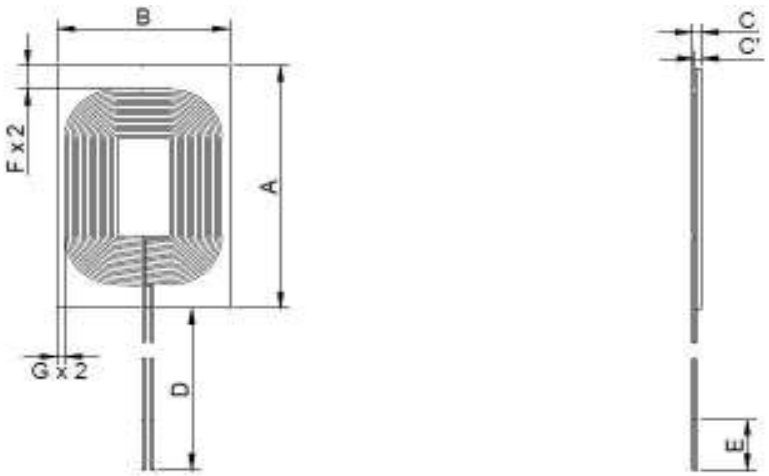
【FWC-R Series】

FWC-R443114



Size Code	A(±0.5)	B(±0.5)	C(max.)	C'(typ.)	D(±3.0)	E(±1.0)	F(min.)	G(min.)
443114	44.0	31.0	1.4	0.95	22.0	5.0	2.5	1.0

FWC-R483201



Size Code	A(±0.5)	B(±0.5)	C(max.)	C'(typ.)	D(±5.0)	E(±1.0)	F(min.)	G(min.)
483201	48.0	32.0	1.3	0.87	50.0	10.0	2.5	1.2

FWC Series (Rev. 5.0)

Electrical Characteristics

P/N	Inductance (uH)	DCR (mΩ)	Isat. (A)	Irms. (A)	WPC No.
Tx Type					
FWC-T5028-001	6.3 +/-10%	35.0 Typ. / 50.0 Max.	23.0 Max.	3.8 Max.	N/A
FWC-T505005-001	24.0 +/-8%	71.0 Typ. / 75.0 Max.	30.0 Max.	5.0 Max.	A10
FWC-T505006-002	6.3 +/-10%	28.5 Typ. / 35.0 Max.	40.0 Max.	10.0 Max.	A11
FWC-T574803-001	11.5 +/-10%	60.0 +/-20%	35.0 Max.	5.2 Max.	A6 Single
FWC-T1075805-001	11.5 +/-10%	60.0 +/-20%	35.0 Max.	5.2 Max.	A6
FWC-T975304-001	11.5 (W1, 2) +/-10%	60.0 +/-20%	35.0 Max.	5.2 Max.	A6
FWC-T975304-001	10.5 (W3) +/-10%	60.0 +/-20%	35.0 Max.	5.2 Max.	A6
Rx Type					
FWC-R443114-001	10.0 +/-0.5	150 Typ. / 180 Max.	1.0 Max.	2.8 Max.	N/A
FWC-R483201-001	13.0 +/-8%	210 Typ. / 250 Max.	3.0 Max.	2.5 Max.	N/A

* Test Condition: @ 100KHz, 1.0V.
* Irms DC current (A) that will cause an approximate ΔT of 40°C.
* Isat DC current (A) that will cause L to drop approximately 10%.

FTR95 (Rev. 5.0)

Applications

* Isolated interfaces such as RS-485, RS-232, RS-422, I2C, or low power LAN

Features

* One channel with choke.
* Supports serial daisy chain / IsoSPI.
* Holds reference designs with Analog Device's Model.
* RoHS compliant.

Operating & Storage Condition

* Operating Temp. : -40 to +125°C
* Storage Temp. : -40 to +125°C
* Storage Life Time : 12 Months @25°C , RH 65%

Product Identification

FTR	95	-	151	B
1	2		3	4

1. Product Code
2. Size Code
3. Inductance: 150uH
4. B: Inductance between 150uH and 450uH

Test Equipment

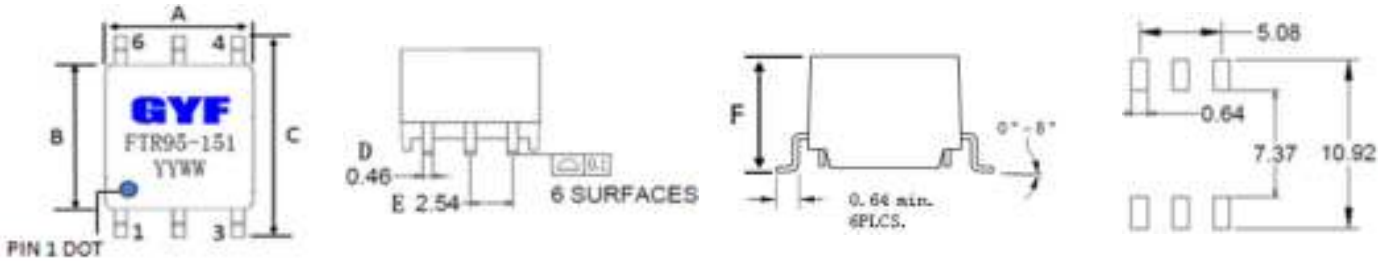
* Wayne kerr 3260B/G LCR Meter
* Wayne kerr 3265B Bias Current Source
* CH9053

Standard Atmospheric Conditions

* Ambient Temp : 20+/-15°C
* Relative Humidity : 65+/-20%

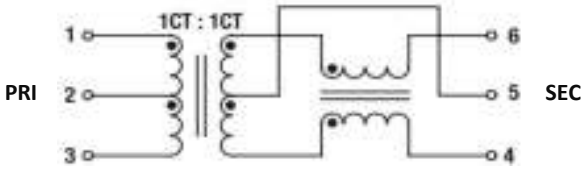
Dimension & Recommended Pad Layout: [mm]

Top View | Side View | Left View | Layout



Size Code	A(+/-0.25)	B(+/-0.25)	C(+/-0.25)	D(+/-0.05)	E(+/-0.05)	F(+/-0.1)
95	7.60	6.80	9.45	0.46	2.54	5.30

Schematic



Electrical Characteristics

P/N	L (1-3/6-4)	Leakage Inductance (1-3 short 6-4)	Turns Ratio (±2%)	Hi-Pot (Pri-Sec) @ 1mA, 60sec.	DCR (max.)	
					1-3	6-4
FTR95-151B	150-450uH	0.5uH max.	1-3:6-4=1:1	4300VDC	0.55Ω	0.85Ω
	Insertion Loss @4MHZ	**Return Loss** (Z out = 100 ohms) @4MHZ	**CMRR** @1-200MHZ	**Cross Talk** (Between Each Channel) @4MHZ		
	-0.25dB max.	-20dB min.	-35dB min.	-50dB min.		

* L & Leakage Inductance Test Conditions: 100KHz/ 0.1V

SERIES	SIZE	DIMENSION (mm)	MPQ (pcs)
FBCF	323023	3.1*2.9*2.2	1000
	403025	4.7*3.1*2.9	1000
	853225	9.0*3.1*2.8	500
FBCM	455625	4.5*5.6*2.8	2400
	855625	8.5*5.6*2.8	2400
FCD	32	3.5*3.0*2.0	3000
	43	4.5*4.0*3.2	2000
	52	5.8*5.2*2.5	3000
	53	5.8*5.2*3.2	2000
	54	5.8*5.2*4.5	1500
	73	7.8*7.0*3.5	1000
	75	7.8*7.0*5.0	1000
	77	7.8*7.0*7.0	800
	105	10.0*9.0*5.5	1000
	106	10.0*9.0*6.6	800
	108	10.0*9.0*8.0	500
FCDN	32	3.7*3.7*1.8	3000
	42	4.7*4.7*2.0	3000
	43	4.7*4.7*3.0	2000
	52	5.7*5.7*2.0	2000
	53	5.7*5.7*3.0	2000
	62	6.7*6.7*2.0	2000
	63	6.7*6.7*3.0	1500
	64	6.7*6.7*4.1	1000
	83	8.0*8.0*3.0	1500
	84	8.0*8.0*4.0	1000
	85	8.0*8.0*4.5	1000
	86	8.0*8.0*6.0	800
FCDM	104	10.2*10.2*3.8	1000
	105	10.2*10.2*5.0	800
FCMC	4520	4.7*4.5*2.0	1000
	7060	7.0*6.0*3.8	1500
	9070	9.0*7.0*4.8	700
	1211	12.0*10.8*6.4	500
	1513	15.0*13.0*6.6	350
FDRH	62	6.3*6.3*3.0	1000
	64	6.3*6.3*5.0	1000
	73	7.3*7.3*3.5	1000
	74	7.3*7.3*4.5	1000
	124	12.0*12.0*5.0	800
	125	12.0*12.0*6.0	500
	127	12.0*12.0*8.0	500
	129	12.0*12.0*10.0	400

SERIES	SIZE	DIMENSION (mm)	MPQ (pcs)
FDRM	73	7.3*7.3*3.5	1000
	74	7.3*7.3*4.5	1000
	125	12.0*12.0*6.0	500
	127	12.0*12.0*8.0	500
	129	12.0*12.0*10.0	4000
FDLW	0502	5.0*4.8*2.5	2500
	0504	5.0*4.8*4.5	1000
FMAT	6030	7.0*6.9*3.3	1000
	6040	7.0*6.9*4.0	1000
	6050	7.0*6.9*5.0	1000
	1030	10.5*10.2*3.1	800
	1040	10.5*10.2*4.2	800
	1050	10.5*10.2*5.0	800
	1335	13.0*12.8*3.5	500
	1350	13.0*12.8*5.0	500
	1365	13.0*12.8*6.5	500
	1890	18.3*18.2*9.2	250
	2212	22.5*22.0*12.4	120
FMBD	060303	0.6*0.3*0.3	15000
	100505	1.0*0.5*0.5	10000
	160808	1.6*0.8*0.8	4000
	201209	2.0*1.25*0.9	4000
	321609	3.2*1.6*0.9	4000
	321611	3.2*1.6*1.1	3000
	322513	3.2*2.5*1.3	3000
	451616	4.5*1.6*1.6	2000
	453215	4.5*3.2*1.5	3000
FMBL	100505	1.0*0.5*0.5	10000
	160808	1.6*0.8*0.8	4000
	201209	2.0*1.25*0.9	4000
	201212	2.0*1.25*1.25	3000
	252010	2.5*2.0*0.9	3000
	321609	3.2*1.6*0.9	4000
	321611	3.2*1.6*1.1	3000
	322513	3.2*2.5*1.3	3000
	453215	4.5*3.2*1.5	3000
FMCC	1005	1.0*0.5*0.5	10000
	1608	1.6*0.8*0.8	4000
	2012	2.0*1.2*0.9	4000

SERIES	SIZE	DIMENSION (mm)	MPQ (pcs)
FMDA	3020	3.6*3.2*2.0	3000
	4020	4.1*4.4*2.0	3000
	5015	5.2*5.6*1.5	3000
	5018	5.2*5.6*1.8	3000
	5020	5.2*5.6*2.0	3000
	5030	5.2*5.6*3.0	2000
	5040	5.2*5.6*4.0	2000
	6018	6.6*7.1*1.8	2000
	6020	6.6*7.1*2.0	2000
	6024	6.6*7.1*2.4	2000
	6030	6.6*7.1*3.0	1000
	6040	6.6*7.1*4.0	1000
	6050	6.6*7.1*5.0	1000
	1030	10.2*11.0*3.0	1000
	1040	10.2*11.0*4.0	1000
	1045	10.2*11.0*4.5	800
	1050	10.2*11.0*5.0	800
	1235	12.8*14.0*3.5	500
	1240	12.8*14.0*4.0	500
	1260	12.8*14.0*6.0	500
	1265	12.8*14.0*6.5	500
	1770	17.1*17.3*7.0	300
	2213	23.8*22.4*13.0	120
FMDL	201610	2.0*1.6*1.0	3000
	252010	2.5*2.0*1.0	3000
	252012	2.5*2.0*1.2	3000
FMDS	3020	3.6*3.2*2.0	3000
	4020	4.9*4.4*2.0	3000
	5020	5.9*5.2*2.0	3000
	5030	5.9*5.2*3.0	2500
	6020	7.6*6.9*2.0	2000
	6024	7.6*6.9*2.4	1500
	6030	7.6*6.9*3.0	1000
	6040	7.6*6.9*4.0	1000
	6050	7.9*7.0*5.0	1000
	8060	9.5*8.5*6.2	1000
	1030	11.8*10.8*3.0	1000
	1040	11.8*10.8*4.0	1000
	1050	11.8*10.8*5.2	800
	1235	14.5*13.0*3.5	500
	1240	14.5*13.0*4.0	500
	1250	14.5*13.0*5.0	500
	1260	14.5*13.0*6.0	500
	1265	14.5*13.0*6.8	400/500
	1770	19.0*17.5*7.0	300

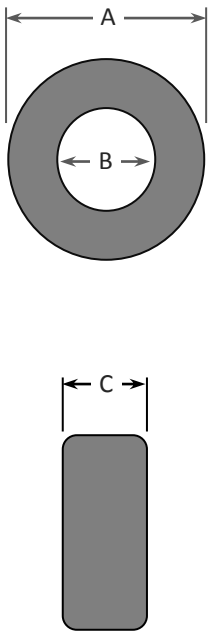
SERIES	SIZE	DIMENSION (mm)	MPQ (pcs)
FNR	201610	1.6*2.0*1.0	2000
	252010	2.0*2.5*1.1	2000
	252012	2.0*2.5*1.2	2000
	3010	3.0*3.0*1.0	2000
	3012	3.0*3.0*1.2	2000
	3015	3.0*3.0*1.5	2000
	4012	4.0*4.0*1.3	4500
	4018	4.0*4.0*1.8	3000
	4020	4.0*4.0*2.1	3000
	4030	4.0*4.0*3.0	2000
	5020	5.0*5.0*2.0	3000
	5030	5.0*5.0*3.0	2000
	5040	5.0*5.0*4.0	1500
	6015	6.0*6.0*1.5	3000
	6020	6.0*6.0*2.2	3000
	6028	6.0*6.0*2.8	2000
	6045	6.0*6.0*4.5	1500
	8040	8.0*8.0*4.0	1000
	8060	8.0*8.0*6.0	800
	8065	8.0*8.0*6.5	800
	1050	10.0*10.0*5.0	800
FSCM	1210	1.2*1.0*0.8	4000
	1608	1.6*0.8*1.1	4000
	2012	2.0*1.2*1.2	2000
	3216	3.2*1.6*1.8	2000
	4532	4.5*3.2*2.8	500
FSL	63	6.2*6.2*3.0	1500
	73	7.4*7.4*3.5	1000
	74	7.4*7.4*4.5	1000
	104	10.4*10.4*4.8	800
	126	12.8*12.8*5.8	500
	127	12.8*12.8*6.8	500
	128	12.8*12.8*7.8	500
FWHC	0603	1.8*1.2*1.0	4000
	0805	2.4*1.65*1.2	2000
	1008	2.9*2.54*2.0	2000
	1210	3.6*2.9*2.4	2000
FWHF	0402	1.27*0.76*0.61	10000
	0603	1.8*1.2*1.02	4000
	0805	2.4*1.73*1.52	2000
	1008	2.9*2.54*2.03	2000

Physical Pictures :

铁硅铝磁环
Sendust Cores

常规产品
Normal Products

Core Dimensions : [mm]



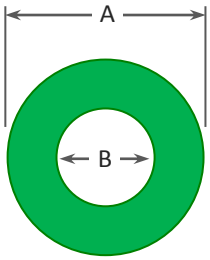
Core	A(max.)	B(min.)	C(max.)
031125	8.51	3.43	3.81
038125	10.29	4.27	4.60
040125	10.80	4.57	4.60
044125	11.89	5.89	4.72
050125	13.46	6.99	5.51
065125	17.40	9.53	7.11
068125	18.03	9.02	7.11
080125	21.10	12.07	7.11
090125	23.62	13.39	8.38
092125	24.30	13.77	9.70
106125	27.70	14.10	11.99
130125	33.83	19.30	11.61
141125	36.63	21.54	11.28
157125	40.72	23.30	15.37
184125	47.63	23.32	18.92
185125	47.63	27.89	16.13
200125	51.69	30.94	14.35
225125	58.00	34.70	14.86
226125	58.00	25.60	16.10

Physical Pictures :

锰锌绿环
MnZn Cores

常规产品
Normal Products

Core Dimensions : [mm]



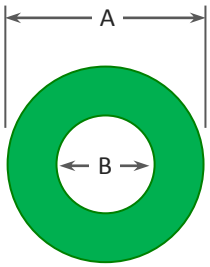
Core	A	B	C
9*5*3	9.0±0.3	5.0±0.3	3.0±0.3
9*5*4	9.0±0.3	5.0±0.3	4.0±0.3
9*5*5	9.0±0.3	5.0±0.3	5.0±0.3
10*5*5	10.0±0.3	5.0±0.3	5.0±0.3
10*6*4	10.0±0.3	6.0±0.3	4.0±0.3
10*6*5	10.0±0.3	6.0±0.3	5.0±0.3
12*6*4	12.0±0.3	6.0±0.3	4.0±0.3
12*6*6	12.0±0.3	6.0±0.3	6.0±0.3
12.7*7.9*5.0	12.7±0.4	7.9±0.3	5.0±0.3
12.7*7.9*6.4	12.7±0.4	7.9±0.3	6.4±0.3
14*8*4	14.4±0.4	8.0±0.3	4.0±0.3
14*8*6	14.4±0.4	8.0±0.3	7.0±0.3
14*8*7	14.4±0.4	8.0±0.3	7.0±0.3
14*9*5	14.4±0.4	9.0±0.3	5.0±0.3
16*9*5	16.0±0.4	9.0±0.3	5.0±0.3
16*9*7	16.0±0.4	9.0±0.3	7.0±0.3
16*9*8	16.0±0.4	9.0±0.3	8.0±0.3
16*12*8	16.0±0.4	12.0±0.3	8.0±0.3
18*10*5	18.0±0.4	10.0±0.3	5.0±0.3
18*10*7	18.0±0.4	10.0±0.3	7.0±0.3
18*10*8	18.0±0.4	10.0±0.3	8.0±0.3
18*10*10	18.0±0.4	10.0±0.3	10.0±0.3
18*12*6	18.0±0.4	12.0±0.3	6.0±0.3
18*12*8	18.0±0.4	12.0±0.3	8.0±0.3
20*10*7	20.0±0.4	10.0±0.3	7.0±0.3
20*10*10	20.0±0.4	10.0±0.3	10.0±0.3
20*12*8	20.0±0.4	12.0±0.3	8.0±0.3
20*12*10	20.0±0.4	12.0±0.3	10.0±0.3
22*14*8	22.0±0.5	14.0±0.4	8.0±0.4
22*14*10	22.0±0.5	14.0±0.4	10.0±0.4
25*15*7	25.0±0.5	15.0±0.4	7.0±0.4
25*15*8	25.0±0.5	15.0±0.4	8.0±0.4
25*15*10	25.0±0.5	15.0±0.4	10.0±0.4

Physical Pictures :

锰锌绿环
MnZn Cores

常规产品
Normal Products

Core Dimensions : [mm]



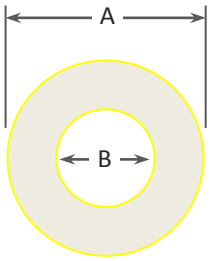
Core	A	B	C
25*15*12	25.0±0.5	15.0±0.4	12.0±0.4
25*15*13	25.0±0.5	15.0±0.4	13.0±0.4
25*15*15	25.0±0.5	15.0±0.4	15.0±0.4
28*19*12	28.0±0.5	19.0±0.4	12.0±0.4
28*19*15	28.0±0.5	19.0±0.4	15.0±0.4
31*19*8	31.0±0.8	19.0±0.7	8.0±0.6
31*19*13	31.0±0.8	19.0±0.7	13.0±0.6
31*19*15	31.0±0.8	19.0±0.7	15.0±0.6
35*25*8	35.0±0.8	25.0±0.7	8.0±0.6
36*19*8	36.0±0.8	19.0±0.7	8.0±0.6
36*19*13	36.0±0.8	19.0±0.7	13.0±0.6
36*19*15	36.0±0.8	19.0±0.7	15.0±0.6
36*23*10	36.0±0.8	23.0±0.7	10.0±0.6
36*23*13	36.0±0.8	23.0±0.7	13.0±0.6
36*23*15	36.0±0.8	23.0±0.7	15.0±0.6
37*22*15	37.0±0.8	22.0±0.7	15.0±0.6
38*19*13	38.0±0.8	19.0±0.7	13.0±0.6
38*22*14	38.0±0.8	22.0±0.7	14.0±0.6
38*22*15	38.0±0.8	22.0±0.7	15.0±0.6
47*27*10	47.0±1.0	27.0±0.8	10.0±0.8
47*27*15	47.0±1.0	27.0±0.8	15.0±0.8
50*30*20	50.0±1.5	30.0±1.0	20.0±0.8
50*31*19	50.0±1.5	31.0±1.0	19.0±0.8
56*26*20	56.0±1.5	26.0±1.0	20.0±0.8
60*40*20	60.0±1.5	40.0±1.0	20.0±0.8
60*40*25	60.0±1.5	40.0±1.0	25.0±0.8
63*38*15	63.0±1.5	38.0±1.0	15.0±0.8
63*38*20	63.0±1.5	38.0±1.0	20.0±0.8
63*38*25	63.0±1.5	38.0±1.0	25.0±0.8
65*38*20	65.0±1.5	38.0±1.0	20.0±0.8
68*44*13.5	68.0±1.5	44.0±1.0	13.5±0.8
68*44*15.0	68.0±1.5	44.0±1.0	15.0±0.8

Physical Pictures :

黄白磁环
Yellow/White Cores

常规产品
Normal Products

Core Dimensions : [mm]



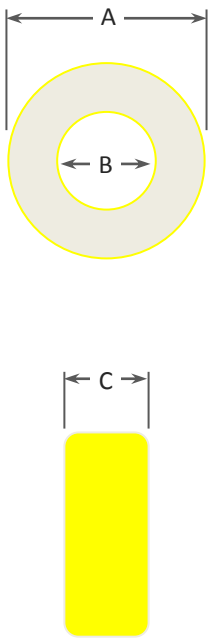
Core	A	B	C
16-26	4.06±0.25	1.98±0.25	1.52±0.25
20-26	5.08±0.25	2.24±0.25	1.78±0.25
22-26	5.66±0.40	2.46±0.40	3.63±0.50
25-26	6.48±0.40	3.05±0.40	2.44±0.50
26-26	6.73±0.40	2.67±0.40	4.83±0.50
27-26	7.11±0.40	3.84±0.40	3.25±0.50
30-26	7.80±0.40	3.84±0.40	3.25±0.50
37-26	9.53±0.40	5.21±0.40	3.25±0.50
38-26	9.53±0.40	4.45±0.40	4.83±0.50
40-26	10.2±0.50	5.21±0.50	4.14±0.50
44-26	11.2±0.50	5.82±0.50	4.04±0.50
50-26	12.7±0.50	7.70±0.50	4.83±0.50
50-26B	12.7±0.50	7.70±0.50	6.35±0.50
50-26C	12.7±0.50	7.70±0.50	8.51±0.50
50-26D	12.7±0.50	7.70±0.50	9.53±0.50
51-26C	12.7±0.50	5.08±0.50	6.35±0.50
60-26	15.2±0.50	8.53±0.50	5.94±0.50
60-26D	15.2±0.50	8.53±0.50	11.9±0.50
68-26	17.5±0.50	9.40±0.50	4.83±0.50
68-26A	17.5±0.50	9.40±0.50	6.35±0.50
68-26D	17.5±0.50	9.40±0.50	9.53±0.64
72-26	18.3±0.50	7.11±0.50	6.60±0.64
80-26	20.2±0.50	12.6±0.50	6.35±0.64
80-26B	20.2±0.50	12.6±0.50	9.53±0.64
80-26D	20.2±0.50	12.6±0.50	12.7±0.64
90-26	22.9±0.50	14.0±0.50	9.53±0.64
94-26	23.9±0.50	14.2±0.64	7.92±0.76
95-26B	23.9±0.50	12.6±0.64	9.53±0.76
106-26	26.9±0.50	14.5±0.64	11.1±0.76
106-26A	26.9±0.50	14.5±0.50	7.92±0.64
106-26B	26.9±0.50	14.5±0.50	14.6±0.64

Physical Pictures :

黄白磁环
Yellow/White Cores

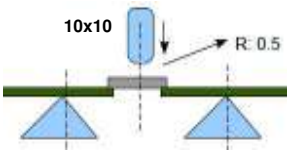
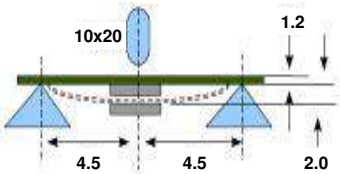
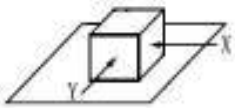
常规产品
Normal Products

Core Dimensions : [mm]



Core	A	B	C
124-26	31.6±0.50	18.0±0.50	7.11±0.64
130-26	33.0±0.50	19.8±0.50	11.1±0.64
130-26A	33.0±0.50	19.8±0.50	5.72±0.64
131-26	33.0±0.50	16.3±0.50	11.1±0.64
132-26	33.0±0.50	17.8±0.50	11.1±0.64
141-26	35.9±0.50	22.4±0.50	10.5±0.64
150-26	38.4±0.64	21.5±0.64	11.1±0.76
150-26A	38.4±0.64	21.5±0.64	8.26±0.76
157-26	39.9±0.64	24.1±0.64	14.5±0.76
175-26	44.5±0.64	27.2±0.64	16.5±0.76
184-26	46.7±0.64	24.1±0.64	18.0±0.76
200-26	50.8±0.64	31.8±0.64	14.0±0.76
200-26B	50.8±0.64	31.8±0.64	25.4±0.76
201-26	50.8±0.64	24.1±0.64	22.2±0.76
224-26C	57.2±0.64	31.8±0.64	19.1±0.76
225-26	57.2±0.64	35.7±0.64	14.0±0.76
225-26B	57.2±0.64	35.7±0.64	25.4±0.76
249-26	63.5±0.76	35.7±0.76	25.4±0.76
250-26	63.5±0.76	31.8±0.76	25.4±0.76
300-26	77.2±0.76	49.0±0.76	12.7±0.76
300-26D	77.2±0.76	49.0±0.76	25.4±0.76
400-26	102±0.76	57.2±0.76	16.5±0.76
400-26D	102±0.76	57.2±0.76	33.0±0.76

SMD Type :

SN	Test Item	Test Method	Standard	Samples
1	Thermal Shock 冷热冲击测试	Temperature: - 40 °C / +85 °C kept stabilized for 30 minutes ; Cycle: 100 cycles (power off)	No appearance deformation Inductance deviation within ±5%	30pcs
2	Humidity Resistance 防潮性能测试	Humidity: 90%- 95% RH; Temperature: 40±2 °C Time: 500±12 hours	No appearance deformation Inductance deviation within ±5%	30pcs
3	HighTemperature 耐热测试	Temperature: 105±2 °C Time: 500±12 Hours	No appearance deformation Inductance deviation within ±5%	30pcs
4	Low Temperature 耐寒测试	Temperature: - 40± 2 °C Time: 500±12 Hours	No appearance deformation Inductance deviation within ±5%	30pcs
5	Temperature and Humidity Cycle 温/湿度循环测试	Temperature / Humidity / Time 25 °C ± 2 °C / 90% - 95% RH / 3.0 hours 55 °C ± 2 °C / 95% - 96% RH / 5.0 hours 25 °C ± 2 °C / 90% - 95% RH / 3.0 hours Cycle: 100 cycles	No appearance deformation Inductance deviation within ±5%	30pcs
6	Reflow Heating Resistance 回流焊耐热性测试	IR-Reflow (3 times) Preheat: 150~200°C Time: 60-120 sec. Peak Temp.: 255±5 °C Time: 30 sec. Reflow Temp.: above 217 °C Time: 60-150 sec.	No appearance deformation Inductance deviation within ±5%	30pcs
7	Iron Heating Resistance 烙铁焊耐热性测试	Soldering Temp.: 350 ± 5 °C Time: 3±1 sec.	No appearance deformation Inductance deviation within ±5%	30pcs
8	Withstanding Voltage 耐压测试	100 VDC/ 1 minute, between core & winding	No dielectric breakdown	30pcs
9	Rated Current 额定电流测试	Temperature: 25±3 °C; Time: 10 minutes Load: Rated Current	Inductance and Temp. Rise variation within spec.	30pcs
10	Bending Strength 折断力测试	Uint: mm IR-Reflow (2 times) Force : 1 kgf/ min. 	No appearance deformation Inductance deviation within ±3%	30pcs
11	Flexure Strength 抗弯强度测试	Uint: mm IR-Reflow (2 times) Solder cream 0.15mm 	No appearance deformation Inductance deviation within ±3%	30pcs
12	Electrode Strength 电极强度测试	Mounted on PCB Pushed in X, Y direction, Strength: 5N for 10±2 sec. 	No electrode detachment No appearance deformation Inductance deviation within ±3%	30pcs
13	Vibration 振动测试	Frequency: 10Hz-55Hz Amplitude: 1.5mm Direction: X,Y,Z Time: 2 hours for each Product: after packing	No appearance deformation Inductance deviation within ±3%	30pcs
14	Dropping 跌落测试	Freely dropped down; Height: 1m ; Direction: 1 Angle ridge; 3 surfaces; Product: after packing	No appearance deformation Inductance deviation within ±3%	30pcs

Remark:

* Before/after reliability test for above each item, to carry out visual and crucial dimension inspection is a must. If needed, use visual aids or equipment such as 10X magnifying glass & microscope etc. to check.

DIP Type :

SN	Test Item	Test Method	Standard	Samples
1	Thermal Shock 冷热冲击测试	Temperature: - 40 °C / +85 °C kept stabilized for 30 minutes ; Cycle: 100 cycles (power off)	No appearance deformation Inductance deviation within ±5%	30pcs
2	Humidity Resistance 防潮性能测试	Humidity: 90%- 95% RH; Temperature: 40±2 °C Time: 500±12 hours	No appearance deformation Inductance deviation within ±5%	30pcs
3	HighTemperature 耐热测试	Temperature: 105±2 °C Time: 500±12 hours	No appearance deformation Inductance deviation within ±5%	30pcs
4	Low Temperature 耐寒测试	Temperature: - 40 ± 2 °C Time: 500±12 hours	No appearance deformation Inductance deviation within ±5%	30pcs
5	Temperature and Humidity Cycle 温/湿度循环测试	Temperature Humidity Time 25 °C ± 2 °C 90% - 95% RH 3.0 hours 55 °C ± 2 °C 95% - 96% RH 5.0 hours 25 °C ± 2 °C 90% - 95% RH 3.0 hours Cycle: 100 cycles	No appearance deformation Inductance deviation within ±5%	30pcs
6	Tin Dipping Resistance 浸锡耐热性测试	Soldering Temp.: 260 ± 5 °C Time: 3±1 sec. Cycle: 3 cycles.	No appearance deformation Inductance deviation within ±5%	30pcs
7	Iron Heating Resistance 烙铁焊耐热性测试	Soldering Temp.: 350 ± 5 °C Time: 3±1 sec.	No appearance deformation Inductance deviation within ±5%	30pcs
8	Withstanding Voltage 耐压测试	100 VDC/ 1 minute, between core & winding	No dielectric breakdown	30pcs
9	Rated Current 额定电流测试	Temperature: 25±3 °C; Time: 10 minutes Load: rated current	Inductance and Temp. Rise variation within spec.	30pcs
10	Terminal Strength 端子强度测试	Pulling terminals Time: 60 sec. at 10N force	No terminal detachment No appearance deformation Inductance deviation within ±3%	30pcs
11	Vibration 振动测试	Frequency: 10Hz-55Hz Amplitude: 1.5mm Direction: X,Y,Z Time: 2 hours each Product: after packing	No appearance deformation Inductance deviation within ±3%	30pcs
12	Dropping 跌落测试	Freely dropped down; Height: 1m ; Direction: 1 angle ridge; 3 surfaces. Product: after packing	No appearance deformation Inductance deviation within ±3%	30pcs

Remark:

* Before/after reliability test for above each item, to carry out visual and crucial dimension inspection is a must. If needed, use visual aids or equipment such as 10X magnifying glass & microscope etc. to check.

RECOMMENDATION

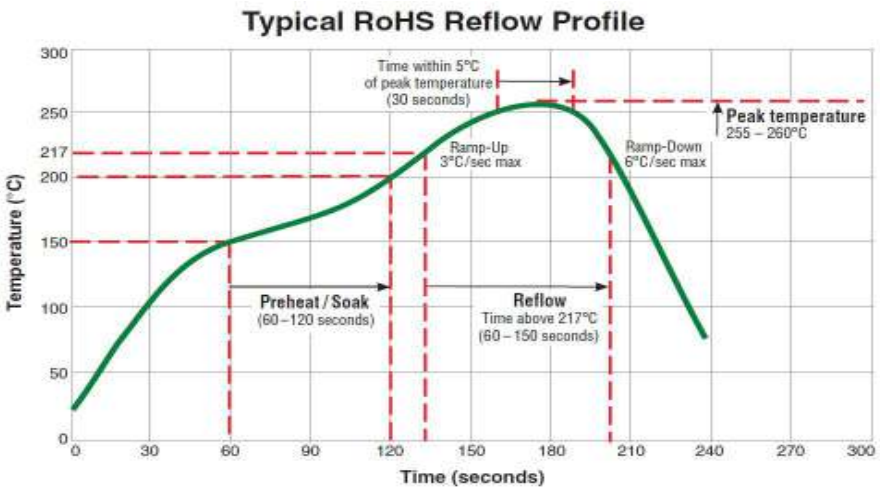
【GENERAL】

* Products shouldn't be kept in unsuitable storage conditions, such as areas susceptible to high temperatures, high humidity, dust or corrosion.
* Don't use products in a place where dew condenses. Since dew condensation caused by temperature change, pay special attention when using products in a sealed condition.
* Always handle products with care.
* Don't touch electrodes directly with bare hands as oil secretions may inhibit soldering.
* Always ensure optimum conditions for soldering.
* Don't bend the terminals or subject them to excessive stress.
* Please ensure that all terminals and case lugs are completely fixed with solder onto PCB.
* Avoid placing chip inductors near the edge of the PCB.
* Our SMD coils are designed for automatic mounting. Please be careful if soldering by hand.
* Don't touch any exposed winding part and avoid coming into contact with the guide of electrode in automatic mounting.
* Specification limits the quality of the component as a single unit. An entirely evaluation in your application circuit is a must.
* When using our high voltage inverter transformers, place keep 2mm away from the electric conductor.

【SOLDERING】

◆ **Reflow soldering-** please refer to following condition

* After reflow soldering, don't add any stress to a product until it returns to normal temperature



◆ **Lead free soldering**

* As using products with lead free soldering, we request to use them after confirming of adhesion, temperature of resistance to soldering heat, soldering etc. sufficiently.

◆ **Soldering iron**

* Put the soldering iron on the land-pattern.
* Soldering iron's temperature - Below 350°C (FCD43 Type).
* Duration - 3 seconds or less
* The soldering iron should not directly touch the inductor.

RECOMMENDATION

【CLEANING】

* Refrain from cleaning coils. Ultrasonic cleaning may cause broken products. If it is a must, kindly refer to the following advice or consult with our company.
* When cleaning the PC board after the inductors are all mounted, select the appropriate cleaning solution according to the type of flux used and purpose of the cleaning（e.g. to remove soldering flux or other materials from the production process.）
* Cleaning conditions should be determined after verifying through a test run, the cleaning process doesn't affect the inductor's characteristics.
* The use of inappropriate solutions could cause foreign substances such as flux residue to adhere to the inductor, resulting in a degradation of the inductor's electrical properties, especially insulation resistance.
* Inappropriate cleaning such as insufficient or excessive cleaning may detrimentally affect the performance of the inductors.
* In case of ultrasonic cleaning, too much power output could cause excessive vibration of the PC board which may lead to the cracking of the inductor or the soldered portion, or decrease the terminal electrodes' strength. So following conditions shall be checked one by one.
  - Ultrasonic output below 20W
  - Ultrasonic frequency below 40KHz
  - Ultrasonic washing period 5 minutes or less

【HANDLING】

* Keep the product away from all magnets and magnetic objects.
* Breakaway PC boards (splitting along perforations)
  - When splitting PC board after mounting, care should be taken not to give any stresses of deflection or twisting to board.
  - Board separation should not be done manually, but by using the appropriate devices.
* Mechanical considerations
  - Please do not give the product any excessive mechanical shocks and power in transportation.
* Pick-up pressure
  - Damage and characteristic can vary with an excessive shock or stress. Please don't push to add any pressure to a winding part.
* Packing- Please avoid accumulation of a packing box as much as possible.

【STORAGE】

* To maintain the solderability of terminal electrodes and to keep the packaging material in good condition, care must be taken to control temperature and humidity in the storage area. Humidity should especially be kept as low as possible.
* Recommended conditions:
  Ambient temperature Below 40℃
  Humidity Below 70% RH
* Ambient temperature must be kept below 40℃. Even under ideal storage conditions inductor electrode solderability decreases as time passes, so inductors should be used within 6 months from the time of delivery.
* In case of storage over 6 months, solderability shall be checked before actual usage.
* The packaging material should be kept where no chlorine or sulfur exists in the air.
* Under a high temperature and humidity environment, problems such as reduced solderability caused by oxidation of terminal electrodes and deterioration of taping/ packaging materials may take place.

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