FMAS series (Rev. 4.0)

FMASseries is designed with low RDC and ultra large current.Itsmolded 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. This series also Provides customers with embossed carrier type packaging for automatic mounting machine.

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: 8.4 * 7.9 * 7.0mm
3. Inductance: 2.2uH
4. Tolerance: M=20%, N=30%

Operating & Storage Condition :

* Operating Temp :Stand Type:-25 to +125 ℃
* Storage Temp : Stand Type: -25 to +125 ℃
* Storage Life Time: 12 Months @25 ℃,RH40～65%

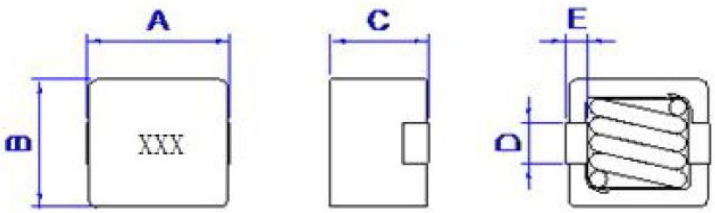
Test Equipment :

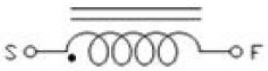
* HP4284A,HP42841A- L,IDC,Q.RDC
* HP8753D Network Analyzer - SRF

Standard Atmospheric Conditions :

* Ambient Temp : 20 ±15 ℃
* Relative Humidity : 65 ±20%

Dimension & Recommended PAD Layout: [mm]





Equivalent Circuit

Size Code	A	B	C	D	E
FMAS0807	8.4±0.4	7.9±0.4	7.0±0.5	2.3±0.2	1.5±0.2
FMAS1009	10.9±0.4	10.0±0.4	9.3±0.4	3.0±0.2	1.6±0.2
FMAS1210	12.1±0.3	11.4±0.3	9.5±0.5	3.3±0.2	2.0±0.2

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Electrical Characteristics

P/N	L (uH)	Tolerance	RDC (mΩ) typ.	RDC (mΩ) max.	Isat (A) max. @L-Drop 30%	Irms (A) max. @△T=45 ℃
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	6.99	11.0	14.0
FMAS1009-R22M	0.22	20%	0.6	0.66	60.00	21.50
FMAS1009-R33M	0.33	20%	0.6	0.66	55.00	21.50
FMAS1009-R47M	0.47	20%	0.80	0.88	47.00	20.50
FMAS1009-R68M	0.68	20%	0.80	0.88	38.00	20.50
FMAS1009-R82M	0.82	20%	1.35	1.49	36.00	20.00
FMAS1009-1R0M	1.00	20%	1.35	1.49	32.00	20.00
FMAS1009-1R5M	1.50	20%	2.50	2.75	27.00	18.50
FMAS1009-2R2M	2.20	20%	3.70	4.07	22.00	16.50
FMAS1009-3R3M	3.30	20%	5.40	5.94	18.00	14.00
FMAS1009-4R7M	4.70	20%	8.20	9.02	17.00	13.00
FMAS1009-6R8M	6.80	20%	13.20	14.52	14.50	11.50
FMAS1009-8R2M	8.20	20%	13.20	14.52	12.00	11.50
FMAS1009-100M	10.00	20%	20.70	22.77	10.00	9.00
FMAS1210-R22M	0.22	20%	0.53	0.58	60.00	27.00
FMAS1210-R33M	0.33	20%	0.53	0.58	55.00	27.00
FMAS1210-R47M	0.47	20%	0.72	0.79	48.00	26.00
FMAS1210-R68M	0.68	20%	0.72	0.79	38.00	26.00
FMAS1210-R82M	0.82	20%	1.17	1.29	36.00	24.00
FMAS1210-1R0M	1.00	20%	1.17	1.29	32.00	24.00
FMAS1210-1R5M	1.50	20%	2.10	2.31	27.00	19.50
FMAS1210-2R2M	2.20	20%	3.05	3.36	23.00	18.00
FMAS1210-3R3M	3.30	20%	4.40	4.84	17.00	17.00
FMAS1210-4R7M	4.70	20%	6.35	6.99	17.00	15.50
FMAS1210-6R8M	6.80	20%	8.98	9.88	13.00	13.00
FMAS1210-8R2M	8.20	20%	9.90	10.89	12.00	13.00
FMAS1210-100M	10.00	20%	14.40	15.84	10.00	9.00

* 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%