

FDO series (Rev. 4.0)



Features

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

Product Identification

FDO 0804 - 100 M
1 2 3 4

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

Applications

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

Operating & Storage Condition :

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

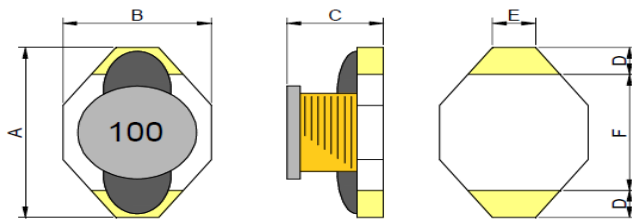
Test Equipment :

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

Standard Atmospheric Conditions :

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

Dimension & Recommended PAD Layout: [mm]

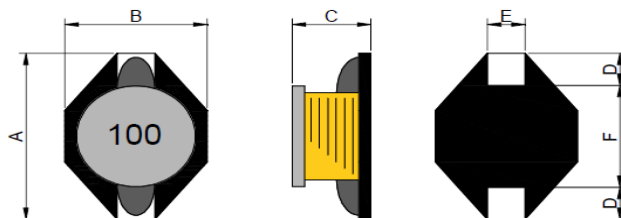


SCHEMATIC :



BASE MATERIAL :
CERAMICS

Size Code	A(max.)	B(max.)	C(max.)	D(±0.3)	E(±0.3)	F(±0.5)
0402	6.60	4.45	2.92	1.00	1.02	4.40



SCHEMATIC :



BASE MATERIAL :
PLASTICS

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. 4.0)**Electrical Characteristics**

P/N	L (uH) ±20%	DCR (Ω) max.	SRF (MHz) typ.	Isat (A) typ.	Irms (A) typ.
FDO0402-1R0M	1.00	0.05	130.0	2.90	2.90
FDO0402-1R5M	1.50	0.05	115.0	2.60	2.80
FDO0402-2R2M	2.20	0.07	90.0	2.30	2.40
FDO0402-2R7M	2.70	0.07	80.0	2.20	2.20
FDO0402-3R3M	3.30	0.08	70.0	2.00	2.00
FDO0402-4R7M	4.70	0.09	50.0	1.50	1.50
FDO0402-6R8M	6.80	0.13	45.0	1.20	1.40
FDO0402-100M	10.00	0.16	35.0	1.10	1.30
FDO0402-150M	15.00	0.23	30.0	0.90	1.20
FDO0402-220M	22.00	0.37	20.0	0.70	0.80
FDO0402-330M	33.00	0.51	15.0	0.58	0.60
FDO0402-470M	47.00	0.64	14.0	0.50	0.50
FDO0402-680M	68.00	0.86	11.0	0.40	0.40
FDO0402-101M	100.00	1.27	9.0	0.31	0.30
FDO0402-151M	150.00	2.00	6.0	0.27	0.25
FDO0402-221M	220.00	3.11	5.5	0.22	0.20
FDO0402-331M	330.00	3.80	5.0	0.18	0.16
FDO0402-471M	470.00	5.06	4.0	0.16	0.15
FDO0402-681M	680.00	9.20	3.0	0.14	0.12
FDO0402-102M	1000.00	13.80	2.0	0.10	0.07
FDO0802-100M	10.00	0.11	35.0	2.40	2.00
FDO0802-150M	15.00	0.15	33.0	2.00	1.50
FDO0802-220M	22.00	0.23	25.0	1.60	1.30
FDO0802-330M	33.00	0.30	19.0	1.40	1.10
FDO0802-470M	47.00	0.39	14.0	1.00	0.80
FDO0802-680M	68.00	0.66	12.0	0.90	0.70
FDO0802-101M	100.00	0.84	10.0	0.70	0.60
FDO0802-151M	150.00	1.20	8.0	0.60	0.50
FDO0802-221M	220.00	1.90	6.0	0.50	0.40
FDO0802-331M	330.00	2.70	5.0	0.40	0.30
FDO0802-471M	470.00	4.00	4.0	0.30	0.20
FDO0802-681M	680.00	5.30	3.0	0.20	0.10
FDO0802-102M	1000.00	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.

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Electrical Characteristics

P/N	L (uH) ±20%	DCR (Ω) max.	SRF (MHz) typ.	Isat (A) typ.	Irms (A) typ.
FDO0804-1R0M	1.00	0.009	100.0	9.00	6.80
FDO0804-1R5M	1.50	0.010	90.0	8.00	6.40
FDO0804-2R2M	2.20	0.012	80.0	7.00	6.10
FDO0804-3R3M	3.30	0.015	65.0	6.40	5.40
FDO0804-4R7M	4.70	0.018	45.0	5.40	4.80
FDO0804-6R8M	6.80	0.027	38.0	4.60	4.40
FDO0804-100M	10.00	0.038	30.0	3.80	3.90
FDO0804-150M	15.00	0.046	27.0	3.00	3.10
FDO0804-220M	22.00	0.085	19.0	2.60	2.70
FDO0804-330M	33.00	0.100	15.0	2.00	2.10
FDO0804-470M	47.00	0.140	12.0	1.60	1.80
FDO0804-680M	68.00	0.200	10.0	1.40	1.50
FDO0804-101M	100.00	0.280	9.0	1.20	1.30
FDO0804-151M	150.00	0.400	6.0	1.00	1.00
FDO0804-221M	220.00	0.610	5.0	0.80	0.80
FDO0804-331M	330.00	1.020	4.5	0.60	0.60
FDO0804-471M	470.00	1.270	3.5	0.50	0.50
FDO0804-681M	680.00	2.020	2.5	0.40	0.40
FDO0804-102M	1000.00	3.000	2.0	0.30	0.30
FDO0810-1R0N	1.00	0.009	30.0	16.00	9.20
FDO0810-1R5M	1.50	0.010	28.0	15.00	8.00
FDO0810-2R0M	2.00	0.012	27.0	14.00	7.00
FDO0810-2R2M	2.20	0.012	27.0	14.00	7.00
FDO0810-3R3M	3.30	0.013	26.0	12.00	6.00
FDO0810-4R7M	4.70	0.018	25.0	10.00	4.00
FDO0810-6R3M	6.30	0.038	25.0	10.00	3.80
FDO0810-6R8M	6.80	0.039	23.0	9.00	3.60
FDO0810-8R2M	8.20	0.040	22.5	8.00	3.60
FDO0810-100M	10.00	0.040	22.0	8.00	3.50
FDO0810-150M	15.00	0.050	18.0	7.00	3.00
FDO0810-220M	22.00	0.070	11.0	5.50	2.50
FDO0810-330M	33.00	0.080	9.0	4.00	2.00
FDO0810-470M	47.00	0.110	8.0	3.80	1.60
FDO0810-680M	68.00	0.170	7.0	3.00	1.20
FDO0810-101M	100.00	0.220	5.0	2.50	1.20
FDO0810-151M	150.00	0.340	4.0	2.00	0.90
FDO0810-221M	220.00	0.440	3.5	1.60	0.70
FDO0810-331M	330.00	0.700	2.5	1.20	0.60
FDO0810-471M	470.00	0.950	2.0	1.00	0.30
FDO0810-681M	680.00	1.200	2.0	1.00	0.20
FDO0810-102M	1000.00	2.000	1.5	0.80	0.10

* Test Freq.: @100KHz / 1.0V

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* ΔT = 40°C rise typ at Irms.

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P/N	L (uH) ±20%	DCR (Ω) max.	SRF (MHz) typ.	Isat (A) typ.	Irms (A) typ.
FDO1306-1R0M	1.00	0.009	80.0	20.00	8.60
FDO1306-2R2M	2.20	0.014	60.0	16.00	7.10
FDO1306-3R3M	3.30	0.018	60.0	14.00	6.20
FDO1306-5R6M	5.50	0.020	40.0	12.00	5.30
FDO1306-100M	10.00	0.031	30.0	10.00	4.30
FDO1306-150M	15.00	0.036	22.0	8.00	4.00
FDO1306-220M	22.00	0.047	20.0	7.00	3.50
FDO1306-330M	33.00	0.066	15.0	5.50	3.00
FDO1306-470M	47.00	0.086	9.0	4.50	2.60
FDO1306-680M	68.00	0.130	8.0	3.50	2.30
FDO1306-101M	100.00	0.190	7.0	3.00	1.80
FDO1306-151M	150.00	0.250	6.0	2.60	1.50
FDO1306-221M	220.00	0.380	5.0	2.40	1.20
FDO1306-331M	330.00	0.560	4.0	1.90	1.00
FDO1306-471M	470.00	0.850	3.0	1.40	0.82
FDO1306-681M	680.00	1.100	2.5	1.20	0.72
FDO1306-102M	1000.00	1.800	2.0	1.00	0.56

* Test Freq.: @100KHz / 1.0V

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* ΔT = 40°C rise typ at Irms.