

TDO Series (Rev. 1.0)



Applications

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

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, Q, RDC
- * HP8573D Network Analyzer-SRF

Features

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

Product Identification

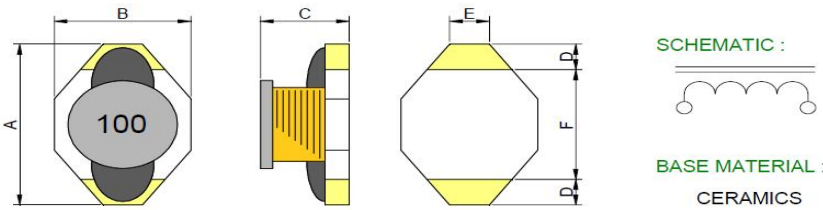
TDO **0804** - **100** **M**
 1 2 3 4

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

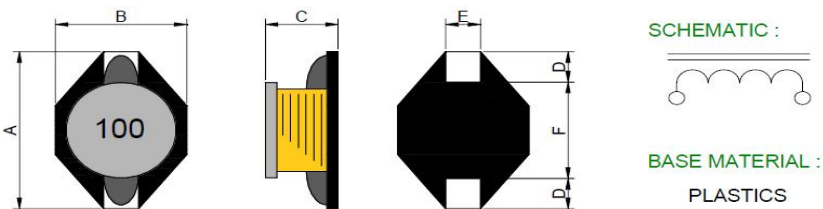
Standard Atmospheric Conditions

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

Dimension & Recommended PAD Layout: [mm]



Size Code	A(max.)	B(max.)	C(max.)	D(±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



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Electrical Characteristics

P/N	L (uH) ±20%	DCR (Ω) max.	SRF (MHz) typ.	Isat (A) typ.	Irms (A) typ.
TDO0402-1R0M	1.0	0.05	130.0	2.90	2.90
TDO0402-1R5M	1.5	0.05	115.0	2.60	2.80
TDO0402-2R2M	2.2	0.07	90.0	2.30	2.40
TDO0402-2R7M	2.7	0.07	80.0	2.20	2.20
TDO0402-3R3M	3.3	0.08	70.0	2.00	2.00
TDO0402-4R7M	4.7	0.09	50.0	1.50	1.50
TDO0402-6R8M	6.8	0.13	45.0	1.20	1.40
TDO0402-100M	10.0	0.16	35.0	1.10	1.30
TDO0402-150M	15.0	0.23	30.0	0.90	1.20
TDO0402-220M	22.0	0.37	20.0	0.70	0.80
TDO0402-330M	33.0	0.51	15.0	0.58	0.60
TDO0402-470M	47.0	0.64	14.0	0.50	0.50
TDO0402-680M	68.0	0.86	11.0	0.40	0.40
TDO0402-101M	100.0	1.27	9.0	0.31	0.30
TDO0402-151M	150.0	2.00	6.0	0.27	0.25
TDO0402-221M	220.0	3.11	5.5	0.22	0.20
TDO0402-331M	330.0	3.80	5.0	0.18	0.16
TDO0402-471M	470.0	5.06	4.0	0.16	0.15
TDO0402-681M	680.0	9.20	3.0	0.14	0.12
TDO0402-102M	1000.0	13.80	2.0	0.10	0.07
TDO0802-100M	10.0	0.11	35.0	2.40	2.00
TDO0802-150M	15.0	0.15	33.0	2.00	1.50
TDO0802-220M	22.0	0.23	25.0	1.60	1.30
TDO0802-330M	33.0	0.30	19.0	1.40	1.10
TDO0802-470M	47.0	0.39	14.0	1.00	0.80
TDO0802-680M	68.0	0.66	12.0	0.90	0.70
TDO0802-101M	100.0	0.84	10.0	0.70	0.60
TDO0802-151M	150.0	1.20	8.0	0.60	0.50
TDO0802-221M	220.0	1.90	6.0	0.50	0.40
TDO0802-331M	330.0	2.70	5.0	0.40	0.30
TDO0802-471M	470.0	4.00	4.0	0.30	0.20
TDO0802-681M	680.0	5.30	3.0	0.20	0.10
TDO0802-102M	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.



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Electrical Characteristics

P/N	L (uH) ±20%	DCR (Ω) max.	SRF (MHz) typ.	Isat (A) typ.	Irms (A) typ.
TDO0804-1R0M	1.0	0.009	100.0	9.00	6.80
TDO0804-1R5M	1.5	0.010	90.0	8.00	6.40
TDO0804-2R2M	2.2	0.012	80.0	7.00	6.10
TDO0804-3R3M	3.3	0.015	65.0	6.40	5.40
TDO0804-4R7M	4.7	0.018	45.0	5.40	4.80
TDO0804-6R8M	6.8	0.027	38.0	4.60	4.40
TDO0804-100M	10.0	0.038	30.0	3.80	3.90
TDO0804-150M	15.0	0.046	27.0	3.00	3.10
TDO0804-220M	22.0	0.085	19.0	2.60	2.70
TDO0804-330M	33.0	0.100	15.0	2.00	2.10
TDO0804-470M	47.0	0.140	12.0	1.60	1.80
TDO0804-680M	68.0	0.200	10.0	1.40	1.50
TDO0804-101M	100.0	0.280	9.0	1.20	1.30
TDO0804-151M	150.0	0.400	6.0	1.00	1.00
TDO0804-221M	220.0	0.610	5.0	0.80	0.80
TDO0804-331M	330.0	1.020	4.5	0.60	0.60
TDO0804-471M	470.0	1.270	3.5	0.50	0.50
TDO0804-501M	500.0	1.500	3.0	0.50	0.50
TDO0804-681M	680.0	2.020	2.5	0.40	0.40
TDO0804-102M	1000.0	3.000	2.0	0.30	0.30
TDO0810-1R0N	1.0	0.009	30.0	16.00	9.20
TDO0810-1R5M	1.5	0.010	28.0	15.00	8.00
TDO0810-2R0M	2.0	0.012	27.0	14.00	7.00
TDO0810-2R2M	2.2	0.012	27.0	14.00	7.00
TDO0810-3R3M	3.3	0.013	26.0	12.00	6.00
TDO0810-4R7M	4.7	0.018	25.0	10.00	4.00
TDO0810-6R3M	6.3	0.038	25.0	10.00	3.80
TDO0810-6R8M	6.8	0.039	23.0	9.00	3.60
TDO0810-8R2M	8.2	0.040	22.5	8.00	3.60
TDO0810-100M	10.0	0.040	22.0	8.00	3.50
TDO0810-150M	15.0	0.050	18.0	7.00	3.00
TDO0810-220M	22.0	0.070	11.0	5.50	2.50
TDO0810-330M	33.0	0.080	9.0	4.00	2.00
TDO0810-470M	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.



SPECIFICATION

SMD POWER INDUCTOR

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Electrical Characteristics

P/N	L (uH) ±20%	DCR (Ω) max.	SRF (MHz) typ.	Isat (A) typ.	Irms (A) typ.
TDO0810-680M	68.0	0.170	7.0	3.00	1.20
TDO0810-101M	100.0	0.220	5.0	2.50	1.20
TDO0810-151M	150.0	0.340	4.0	2.00	0.90
TDO0810-221M	220.0	0.440	3.5	1.60	0.70
TDO0810-331M	330.0	0.700	2.5	1.20	0.60
TDO0810-471M	470.0	0.950	2.0	1.00	0.30
TDO0810-681M	680.0	1.200	2.0	1.00	0.20
TDO0810-102M	1000.0	2.000	1.5	0.80	0.10
TDO1306-1R0M	1.0	0.009	80.0	20.00	8.60
TDO1306-2R2M	2.2	0.014	60.0	16.00	7.10
TDO1306-3R3M	3.3	0.018	60.0	14.00	6.20
TDO1306-5R6M	5.5	0.020	40.0	12.00	5.30
TDO1306-100M	10.0	0.031	30.0	10.00	4.30
TDO1306-150M	15.0	0.036	22.0	8.00	4.00
TDO1306-220M	22.0	0.047	20.0	7.00	3.50
TDO1306-330M	33.0	0.066	15.0	5.50	3.00
TDO1306-470M	47.0	0.086	9.0	4.50	2.60
TDO1306-680M	68.0	0.130	8.0	3.50	2.30
TDO1306-101M	100.0	0.190	7.0	3.00	1.80
TDO1306-151M	150.0	0.250	6.0	2.60	1.50
TDO1306-221M	220.0	0.380	5.0	2.40	1.20
TDO1306-331M	330.0	0.560	4.0	1.90	1.00
TDO1306-471M	470.0	0.850	3.0	1.40	0.82
TDO1306-681M	680.0	1.100	2.5	1.20	0.72
TDO1306-102M	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.

