

THNB Series

Through-hole Inductor

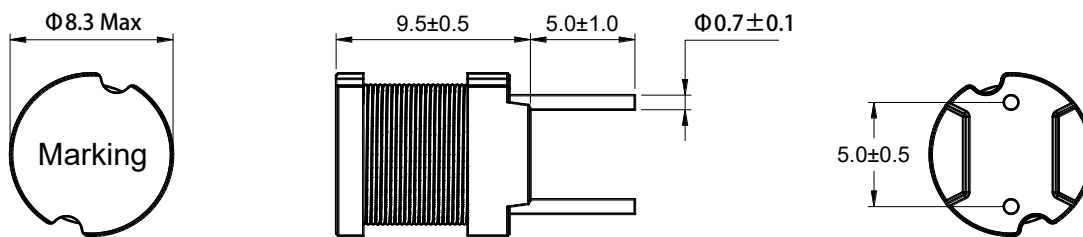
Size 0810



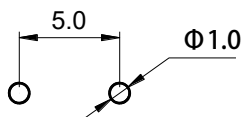
FEATURES

- High reliability, high consistency inductance.
- High saturation current
- Lead free product, RoHS compliant.
- Widely used in power supply, DC-DC converter, computer and peripherals, air-condition, home electric appliance, and etc.
- Operating temperature : -40°C ~ +125°C (Including coil's temperature rise)
- Quantity : 300 pcs

Dimensions: [mm]



Land Pattern: [mm]



Schematic:



Electrical Properties:

Part No.	Inductance (μH)	D.C.R. ($\text{m}\Omega$)		Saturation current (A)		Temperature rise current (A)
		Typical	Max	Typical	Max	Typical
THNB0810-1R0N	1.00 $\pm$ 30%	8.20	9.84	18.0	14.4	7.76
THNB0810-2R2M	2.20 $\pm$ 20%	12.8	15.4	12.4	9.92	6.21
THNB0810-3R3M	3.30 $\pm$ 20%	15.6	18.7	9.90	7.92	5.62
THNB0810-4R7M	4.70 $\pm$ 20%	19.0	22.8	8.40	6.72	5.10
THNB0810-6R8M	6.80 $\pm$ 20%	24.2	29.0	6.80	5.44	4.52
THNB0810-100K	10.0 $\pm$ 10%	29.6	35.5	5.60	4.48	4.08
THNB0810-150K	15.0 $\pm$ 10%	37.5	45.0	4.70	3.76	3.63
THNB0810-180K	18.0 $\pm$ 10%	42.0	50.4	4.30	3.44	3.43
THNB0810-220K	22.0 $\pm$ 10%	45.8	55.0	3.80	3.04	3.28

Part No.	Inductance (μH)	D.C.R. ($\text{m}\Omega$)		Saturation current (A)		Temperature rise current (A)
		Typical	Max	Typical	Max	Typical
THNB0810-330K	33.0 $\pm 10\%$	59.5	71.4	3.30	2.64	2.88
THNB0810-470K	47.0 $\pm 10\%$	89.7	108	2.75	2.20	2.35
THNB0810-101K	100 $\pm 10\%$	199	239	1.82	1.46	1.57
THNB0810-151K	150 $\pm 10\%$	286	343	1.40	1.12	1.31
THNB0810-181K	180 $\pm 10\%$	352	422	1.23	0.98	1.18
THNB0810-221K	220 $\pm 10\%$	393	472	1.20	0.96	1.12
THNB0810-331K	330 $\pm 10\%$	592	710	1.02	0.82	0.84
THNB0810-471K	470 $\pm 10\%$	890	1,068	0.85	0.68	0.69
THNB0810-681K	680 $\pm 10\%$	1,300	1,560	0.71	0.57	0.57
THNB0810-102J	1,000 $\pm 5\%$	1,900	2,280	0.59	0.47	0.47
THNB0810-122J	1,200 $\pm 5\%$	2,150	2,580	0.49	0.39	0.44
THNB0810-152J	1,500 $\pm 5\%$	2,690	3,228	0.45	0.36	0.40
THNB0810-222J	2,200 $\pm 5\%$	4,185	5,022	0.39	0.31	0.32
THNB0810-332J	3,300 $\pm 5\%$	6,630	7,956	0.32	0.26	0.25
THNB0810-392J	3,900 $\pm 5\%$	7,418	8,902	0.30	0.24	0.24
THNB0810-472J	4,700 $\pm 5\%$	8,400	10,080	0.28	0.22	0.22
THNB0810-103J	10,000 $\pm 5\%$	20,100	24,120	0.17	0.14	0.14
THNB0810-223J	22,000 $\pm 5\%$	46,400	55,680	0.15	0.12	0.09

All data is tested based on 25°C ambient temperature.

Inductance measure condition at 100kHz, 5mA.

Saturation current: the value of DC current when the inductance decrease 20% of its initial value.

Temperature rise current: the actual value of DC current when the temperature rise is $\Delta T 40^\circ\text{C}$ ($T_a = 25^\circ\text{C}$).

Typical Electrical Characteristics:

Saturation current VS temperature rise current curve

