

TPRH10D50 TYPE

●FEATURE

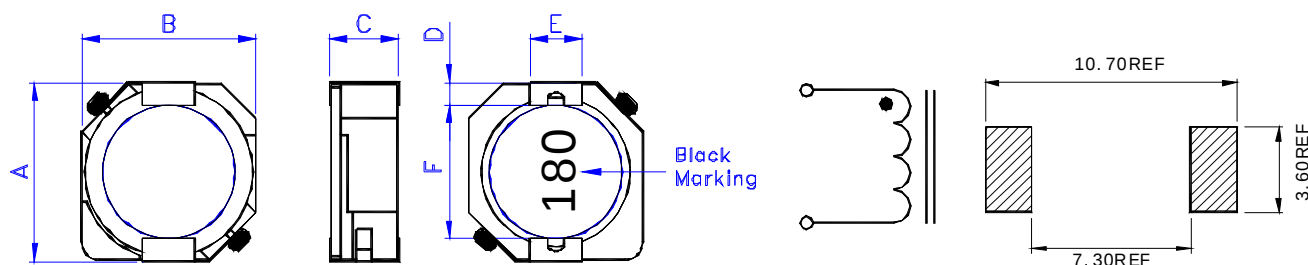
1. High current capacity ,Low DCR and magnetic shielded for low raditation

●Applications

1. Portable telephone, Notebook, and other electronic equipment

●Shape and Dimension

●Schematics and Land Patterns(mm)



A=10.10±0.30mm ; B=10.0±0.30mm ; C=5.10mm MAX ; D=1.20mm REF. ;

E=3.00mm REF ; F=7.70±0.30mm

●Specification

Part Number	L (uH)	Marking	DCR (ΩMax)	Isat (A)	Irms (A)
TPRH10D50-1R5□	1.5	1R5	5.8m	10.5	8.30
TPRH10D50-2R2□	2.2	2R2	7.2m	9.25	7.50
TPRH10D50-3R3□	3.3	3R3	10.4m	7.80	6.50
TPRH10D50-4R7□	4.7	4R7	12.3m	6.40	6.10
TPRH10D50-6R8□	6.8	6R8	18m	5.40	5.40
TPRH10D50-8R2□	8.2	8R2	20m	4.85	5.00
TPRH10D50-100□	10	100	26m	4.45	4.45
TPRH10D50-120□	12	120	33m	4.00	3.80
TPRH10D50-150□	15	150	41m	3.60	3.40
TPRH10D50-180□	18	180	46m	3.20	3.10
TPRH10D50-220□	22	220	61m	2.95	2.90
TPRH10D50-270□	27	270	69m	2.70	2.60
TPRH10D50-330□	33	330	84m	2.40	2.50
TPRH10D50-390□	39	390	106m	2.30	2.25
TPRH10D50-470□	47	470	130m	2.00	2.00
TPRH10D50-560□	56	560	149m	1.90	1.90
TPRH10D50-680□	68	680	201m	1.65	1.60
TPRH10D50-820□	82	820	227m	1.50	1.45
TPRH10D50-101□	100	101	253m	1.35	1.35

Part Number	L (uH)	Marking	DCR (Ω Max)	Isat (A)	Irms (A)
TPRH10D50-121□	120	121	303m	1.28	1.18
TPRH10D50-151□	150	151	370m	1.12	1.10
TPRH10D50-181□	180	181	419m	1.04	1.00
TPRH10D50-221□	220	221	500m	0.94	0.94
TPRH10D50-271□	270	271	672m	0.84	0.80
TPRH10D50-331□	330	331	812m	0.75	0.73
TPRH10D50-391□	390	391	953m	0.70	0.70
TPRH10D50-471□	470	471	1.29	0.60	0.54
TPRH10D50-561□	560	561	1.43	0.54	0.52
TPRH10D50-681□	680	681	1.60	0.52	0.51
TPRH10D50-821□	820	821	1.77	0.50	0.48
TPRH10D50-102□	1000	102	1.99	0.48	0.42

Note1. Measurement frequency of Inductance value : at 100KHz, 0.25V

Note2. Measurement ambient temperature of L, DCR and IDC : at 25°C

Note3. Isat: DC current at which the inductance drops 35%(max) from its value without current

Note4. Irms: Average current for 40°C temperature rise from 25°C ambient

Note5. Inductance tolerance: N: $\pm 30\%$; M: $\pm 20\%$

Note6. Ordering Code: TYPE NAME: TPRH10D50

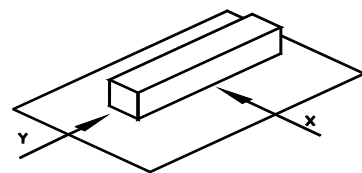
Main Inductance: 100 (10uH)

Tolerance : M ($\pm 20\%$)

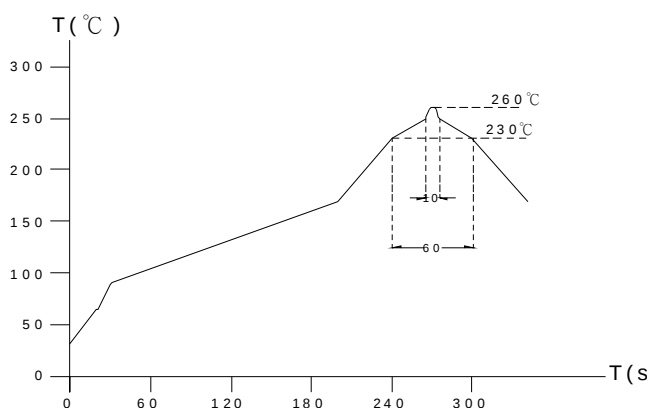
Note7. Packaging: Taping ; Quantity: TPRH10D50:750 Pieces/reel

GENERAL CHARACTERISTICS

1. Operating temperature range: -40°C TO $+105^{\circ}\text{C}$ (Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has no external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y withstanding at below conditions.
Terminal should not peel off. (refer to figure at right) 5. 0N 60 sec.
4. Insulating resistance: Over $100\text{M}\Omega$ at 100V D.C. between coil and core.
5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
6. Temperature characteristics: Inductance coefficient $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$ ($-25\sim +80^{\circ}\text{C}$ degree Celsius), inductance deviation within $\pm 5.0\%$, after 96 hours.
7. Humidity characteristics(Moisture Resistance): Inductance deviation within $\pm 5\%$, after 96 hours in $90\sim 95\%$ relative humidity at $40 \pm 2^{\circ}\text{C}$ and 1 hour drying under normal condition.
8. Vibration resistance: Inductance deviation within $\pm 5\%$, after vibration for 1 hour. In each of three orientations at sweep vibration ($10\sim 55\sim 10\text{ Hz}$) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within $\pm 5\%$, after being dropped once with 981m/s^2 (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
10. Resistance to Soldering Heat: 260°C , 10 seconds(See attached recommend reflow)
11. Storage condition: Temperature Range: $0^{\circ}\text{C} \sim 35^{\circ}\text{C}$; $-40^{\circ}\text{C} \sim 105^{\circ}\text{C}$ (after PCB) , Humidity Range: $50\% \sim 70\% \text{ RH}$
12. Use components within 12 months. If 12 months or more have elapsed, check solderability before use.
13. Reflow profile recommend:



Lead-free heat endurance test



Lead-free the recommended reflow condition

