TPRH10D30 TYPE

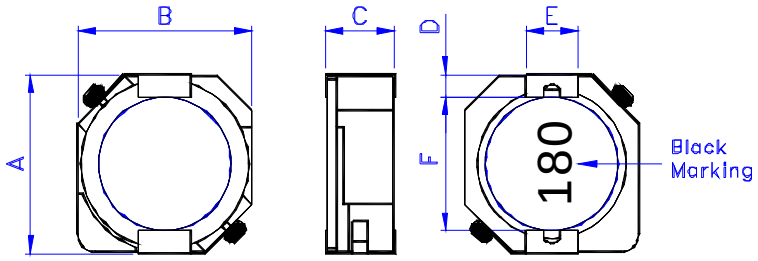
●FEATURE

1. High current capacity and Low DCR
2. Magnetic shielded for low raditation

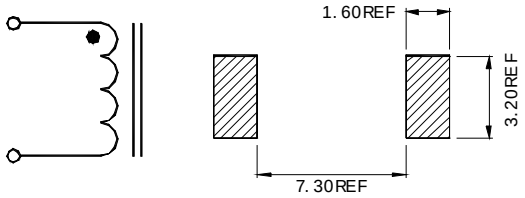
●Applications

1. Portable telephone, Personal Computer
2. Notebook, and other electronic equipment

●Shape and Dimension



●Schematics and Land Patterns(mm)



A=10.40m/m MAX ; B=10.30m/m MAX ; C=3.00m/m MAX ; D=1.20m/m REF. ;
E=3.00m/m REF ; F=8.00m/m MAX

●Specification

Part Number	L (uH)	Marking	DCR (ΩMax)	Isat (A)	Irms (A)
TPRH10D30-1R5□	1.5	1R5	11.0m	8.00	5.80
TPRH10D30-2R2□	2.2	2R2	16.9m	6.70	5.10
TPRH10D30-3R3□	3.3	3R3	21m	5.56	4.70
TPRH10D30-4R7□	4.7	4R7	30m	4.65	4.00
TPRH10D30-6R8□	6.8	6R8	35m	3.84	3.60
TPRH10D30-8R2□	8.2	8R2	50m	3.54	3.00
TPRH10D30-100□	10	100	59m	3.18	2.80
TPRH10D30-150□	15	150	91m	2.60	2.05
TPRH10D30-220□	22	220	143m	2.16	1.60
TPRH10D30-330□	33	330	202m	1.74	1.35
TRPH10D30-470□	47	470	299m	1.43	1.20
TPRH10D30-560□	56	560	325m	1.36	1.15
TPRH10D30-680□	68	680	429m	1.22	0.95
TRPH10D30-820□	82	820	494m	1.14	0.80
TPRH10D30-101□	100	101	683m	1.02	0.70
TPRH10D30-121□	120	121	754m	0.89	0.65

Part Number	L (uH)	Marking	DCR (Ω Max)	Isat (A)	Irms (A)
TPRH10D30-151□	150	151	871m	0.84	0.51

Note1. Measurement frequency of Inductance value : at 100KHz

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

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

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

Note5. Inductance tolerance: N: ±30% ; M: ±20%

Note6. Ordering Code: TYPE NAME: TPRH10D30

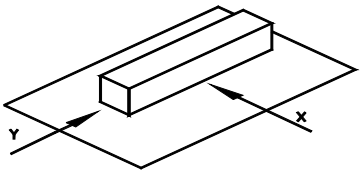
Main Inductance: 100 (10uH)

Tolerance : M (±20%)

Note7.Packaging: Taping ; Quantity: TPRH10D30:1000 Pieces/reel

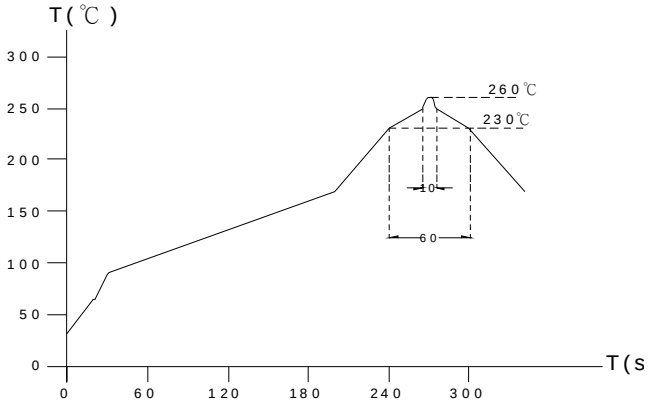
GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO + 105℃(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 100MΩ 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 (0~2,000)x10-6/℃(-25~+80℃ degree Celsius), inductance deviation within±5.0%, after 96 hours.
7. Humidity characteristics(Moisture Resistance): Inductance deviation within ±5%, after 96 hours in 90~95% relative humidity at 40 ±2℃and 1 hour drying under normal condition.
8. Vibration resistance: Inductance deviation within ±5%, after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within ±5%, after being dropped once with 981m/s2 (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
10. Resistance to Soldering Heat: 260℃, 10 seconds(See attached recommend reflow)
11. Storage condition: Temperature Range: 0℃ ~ 35℃；-40℃ ~ 105℃ (after PCB)，Humidity Range: 50% ~ 70% 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