

TPRH1005 TYPE

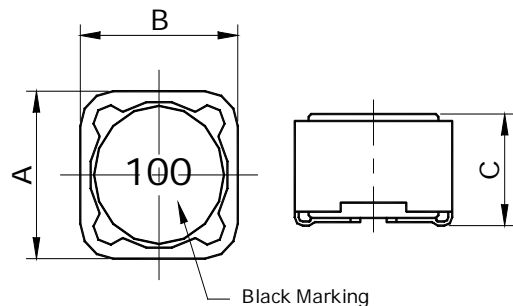
●FEATURE

1. Low core loss for high frequency power application
2. Large terminal surface

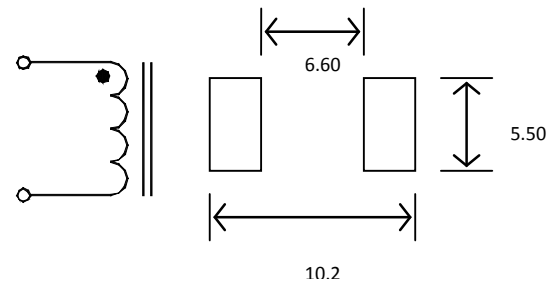
●Applications

1. Portable communication equipment, notebook computer
2. Hard Disk drives, and other electronic equipment

●Shape and Dimension



●Schematics and Land Patterns(mm)



A=10.10±0.50mm ; B=10.10±0.50mm ; C=5.20mm MAX

●Specification

Part Number	L(uH)	STAMP	DCR(mΩ)	Rated current(A)
TPRH1005-1R2N	1.2±30%	1R0	12±30%	9.00
TPRH1005-2R0N	2.0±30%	2R0	14±30%	8.50
TPRH1005-2R7N	2.7±30%	2R7	15±30%	8.00
TPRH1005-3R3M	3.3±20%	3R3	17±20%	6.70
TPRH1005-4R7M	4.7±20%	4R7	20±20%	5.00
TPRH1005-6R8M	6.8±20%	6R8	25±20%	4.80
TPRH1005-100M	10±20%	100	30±20%	3.80
TPRH1005-150M	15±20%	150	45±20%	3.30
TPRH1005-180M	18±20%	180	65±20%	3.10
TPRH1005-220M	22±20%	220	68±20%	3.00
TPRH1005-330M	33±20%	330	92±20%	2.30
TPRH1005-470M	47±20%	470	115±20%	2.00
TPRH1005-560M	56±20%	560	142±20%	1.90
TPRH1005-680M	68±20%	680	158±20%	1.80
TPRH1005-820M	82±20%	820	206±20%	1.60
TPRH1005-101M	100±20%	101	225±20%	1.40
TPRH1005-681M	680±20%	681	1680±20%	0.60
TPRH1005-102M	1000±20%	102	2400±20%	0.45

Note1. Measurement frequency of Inductance value : at 100KHz, 1V

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

Note3. The rated current indicates the current when the inductance decreases to 80% over of it's nominal value.

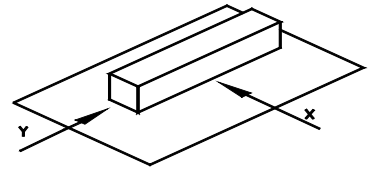
Note4. Inductance tolerance: M: $\pm 20\%$; N: $\pm 30\%$

●Order Code(Part Number)

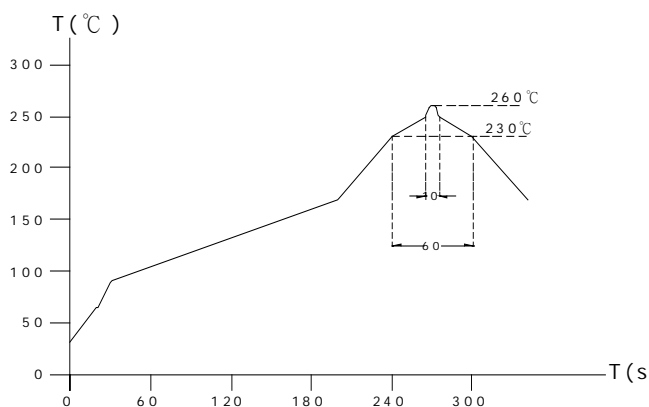
1. TYPE NAME : TPRH1005
2. INDUCTANCE VALUE : 100(10uH)
3. INDUCTANCE TOLERANCE : M($\pm 20\%$)

GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO + 105°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 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 $(0\sim2,000)\times10^{-6}/^{\circ}\text{C}$ (-25~+80°C).
7. Humidity characteristics(Moisture Resistance): Inductance deviation within $\pm5\%$, after 96 hours in 90~95% relative humidity at $40\pm2^{\circ}\text{C}$ and 1 hour drying under normal condition.
8. Vibration resistance: Inductance deviation within $\pm5\%$, 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 $\pm5\%$, 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°C, 10 seconds(See attached recommend reflow)
11. Storage environment: Storage condition: Temperature Range: 10°C ~ 35°C (Generally: 21°C ~ 31°C) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%) ; Transportation condition: Temperature Range: -35°C ~ 85°C , Humidity Range: 50% ~ 95% 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

