TPRH1205M TYPE

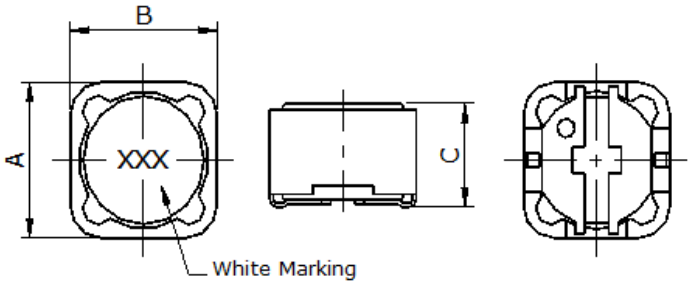
●FEATURE

1. Low core loss for high frequency power application
2. Mn-Zn material of drum core, High saturation

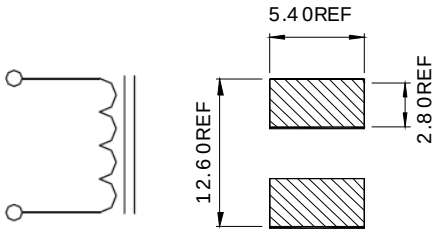
●Applications

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

●Shape and Dimension



●Schematics and Land Patterns(mm)



A=12.0±0.30m/m ; B=12.0±0.30m/m ; C=6.00m/m MAX

●Specification

Part Number	L(uH)	STAMP	DCR(Ω Max)	Isat(A)	Irms(A)
TPRH1205M-R47N	0.47±30%	R47	0.0036	33.2	14.7
TPRH1205M-1R0N	1.0±30%	1R0	0.0051	23.7	12.7
TPRH1205M-1R5N	1.5±30%	1R5	0.0047	18.4	12.9
TPRH1205M-2R2N	2.2±30%	2R2	0.0040	15.1	10.6
TPRH1205M-3R3N	3.3±30%	3R3	0.0105	12.8	8.63
TPRH1205M-4R7N	4.7±30%	4R7	0.0132	9.76	7.67
TPRH1205M-6R8N	6.8±30%	6R8	0.0168	8.74	6.81
TPRH1205M-8R2N	8.2±30%	8R2	0.0192	7.90	6.41
TPRH1205M-100M	10±20%	100	0.0231	7.22	5.57
TPRH1205M-150M	15±20%	150	0.0363	5.72	4.45
TPRH1205M-220M	22±20%	220	0.0462	4.74	3.95
TPRH1205M-270M	27±20%	270	0.055	4.20	3.50
TPRH1205M-330M	33±20%	330	0.064	3.86	3.19
TPRH1205M-470M	47±20%	470	0.097	3.13	2.59
TPRH1205M-680M	68±20%	680	0.144	2.64	2.13
TPRH1205M-820M	82±20%	820	0.162	2.41	2.01
TPRH1205M-101M	100±20%	101	0.214	2.21	1.75
TPRH1205M-151M	150±20%	151	0.33	1.79	1.41
TPRH1205M-221M	220±20%	221	0.50	1.47	1.14

Part Number	L(uH)	STAMP	DCR(Ω Max)	Isat(A)	Irms(A)
TPRH1205M-331M	330±20%	331	0.65	1.19	1.00
TPRH1205M-471M	470±20%	471	0.95	1.100	0.826
TPRH1205M-681M	680±20%	681	1.44	0.834	0.673
TPRH1205M-821M	820±20%	821	1.63	0.758	0.632
TPRH1205M-102M	1000±20%	102	2.13	0.695	0.552

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

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

Note3. Isat: DC current at which the inductance drops 30%(typ) from its value without current

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

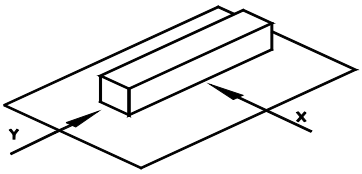
Note5 Inductance tolerance: M: ±20%, N: ±30%

●Order Code(Part Number)

1. TYPE NAME : TPRH1205M
2. INDUCTANCE VALUE : 100(10uH)
3. INDUCTANCE TOLERANCE : M(±20%)

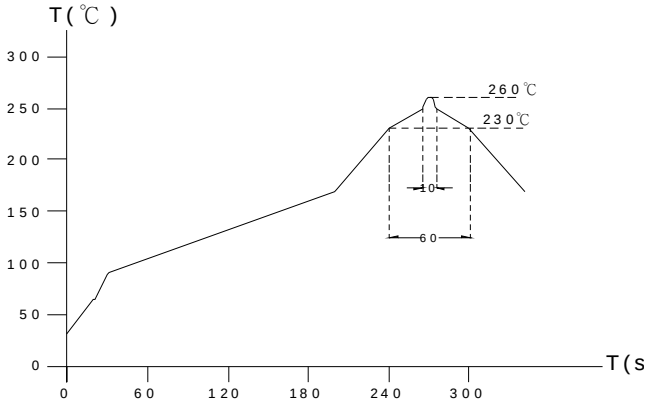
GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO + 125℃(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℃ ~ 125℃ (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

