PIT04020AD TYPE

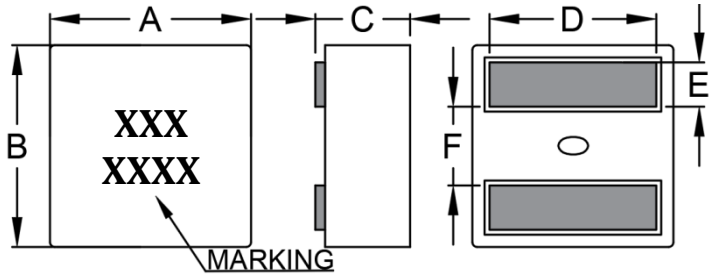
●FEATURE

1. Iron powder and ferrite composite, very Low DCR and High current

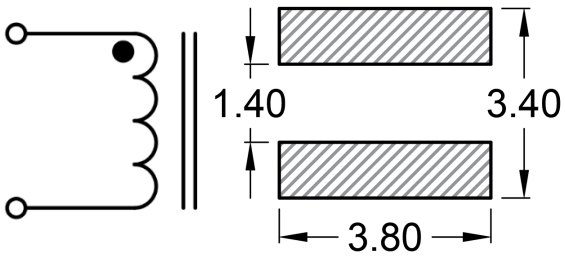
●Applications

1. Server, high current power supplies, DC/DC converters

●Shape and Dimension



●Schematics and Land Patterns(mm)



A=4.10+0.50-0.20mm ; B=4.10+0.50-0.20mm ; C=1.90±0.2mm. ; D=3.40±0.3mm ;
E=0.90±0.30mm ; F=1.60±0.30mm

●Specification

P/N	L	RDC		Isat(A)		Irms(A) Typ.	
	(μH)	(mΩ) Typ.	(mΩ) Max.	30% Typ.	Max.	△T: 20℃	△T: 40℃
PIT04020AD-R10M	0.10±20%	2.2	2.42	38.0	33.0	13.5	18.0
PIT04020AD-R22M	0.22±20%	4.1	4.6	19.5	18.8	13.0	16.8
PIT04020AD-R33M	0.33±20%	5.0	5.5	18.0	16.5	12.0	15.5
PIT04020AD-R36M	0.36±20%	5.6	6.3	17.0	15.0	11.0	14.5
PIT04020AD-R40M	0.40±20%	6.9	7.73	15.5	13.5	10.0	14.0
PIT04020AD-R47M	0.47±20%	7.8	8.58	14.5	13.0	9.0	12.5
PIT04020AD-R56M	0.56±20%	8.4	9.30	14.0	12.6	8.5	12.0
PIT04020AD-R60M	0.60±20%	8.6	9.52	13.7	12.3	8.0	11.7
PIT04020AD-R72M	0.72±20%	10.4	11.6	12.0	10.6	7.6	10.5
PIT04020AD-1R0M	1.00±20%	13.3	14.6	9.6	8.8	6.8	9.6
PIT04020AD-1R2M	1.20±20%	16.2	17.9	9.0	7.8	6.6	9.0
PIT04020AD-1R5M	1.50±20%	21.0	23.5	8.0	7.4	5.8	7.6
PIT04020AD-1R8M	1.80±20%	25.0	28.0	7.5	7.0	5.2	7.0

Note1. Measurement frequency of Inductance value : at 100KHz, 0.1V

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

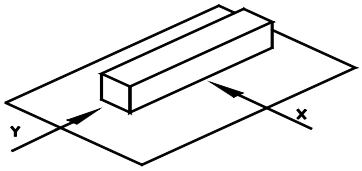
Note3. Isat: DC current at which the inductance drops 30%(Typ.) from its value without current

Note4. Inductance tolerance: M: ±20%

Note5. Packaging: Taping ; Quantity: 3000 Piece/reel

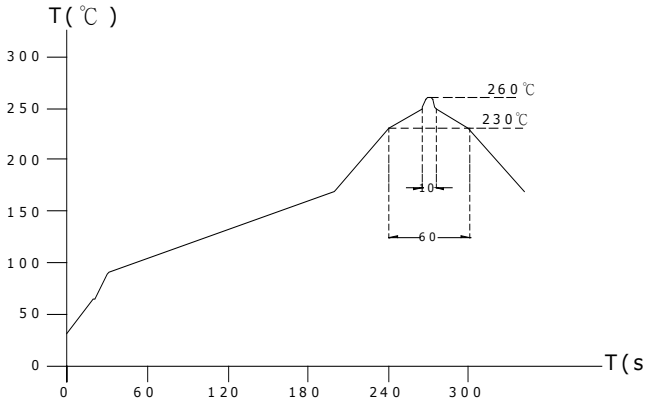
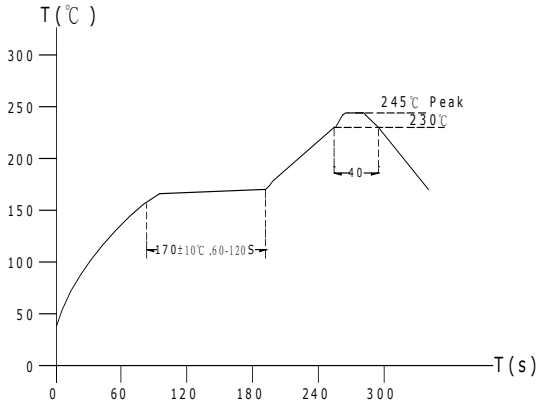
GENERAL CHARACTERISTICS

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) 5N. 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