

PIT05030 TYPE

●FEATURE

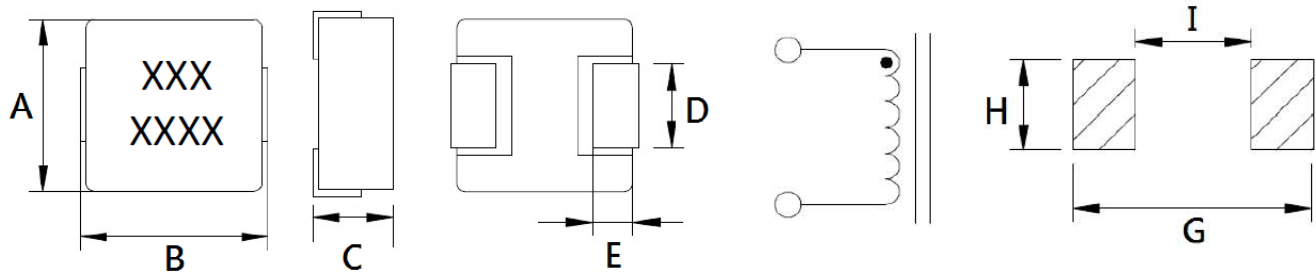
1. Shielded construction
2. Frequency range up to 5MHz, Low DCR(Ω),Low Buzz Noise

●Applications

1. Notebook, server application, High current power supplier

●Shape and Dimension

●Schematics and Land Patterns(mm)



A=5.40mm Max ; B=6.00mm Max ; C=3.00mm Max. ; D=1.50±0.3mm ; E=1.20mm Ref. ; G=6.20mm ; H=2.00mm ; I=2.50mm

●Specification

P/N	L (μ H)	RDC (m Ω) Typical	RDC (m Ω)Max	Isat (A)	Irms (A)
PIT05030-R22M	0.22±20%	3.70	4.40	21.0	15.5
PIT05030-R33M	0.33±20%	4.30	5.00	18.0	14.0
PIT05030-R47M	0.47±20%	6.40	7.40	16.0	12.0
PIT05030-R56M	0.56±20%	8.00	10.0	15.0	10.0
PIT05030-R68M	0.68±20%	10.0	12.0	14.0	8.5
PIT05030-1R0M	1.0±20%	13.0	14.0	11.0	7.0
PIT05030-1R5M	1.5±20%	16.0	25.0	10.0	6.0
PIT05030-2R2M	2.2±20%	25.0	35.0	9.0	5.5
PIT05030-3R3M	3.3±20%	32.0	38.0	8.0	5.0
PIT05030-4R7M	4.7±20%	50.0	53.0	6.0	4.6
PIT05030-5R6M	5.6±20%	55.0	63.0	4.5	4.25
PIT05030-6R8M	6.8±20%	68.0	76.2	4.3	4.0
PIT05030-100M	10±20%	110	128	3.5	2.75
PIT05030-150M	15±20%	165	190	2.6	2.1
PIT05030-220M	22±20%	220	250	1.7	1.9
PIT05030-330M	33±20%	380	440	1.6	1.6

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

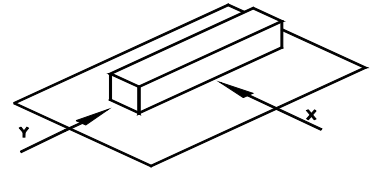
Note2. Measurement ambient temperature of L, DCR and IDC : at 25°C

Note3. Isat: DC current at which the inductance drops 20%(typ) from its value without current

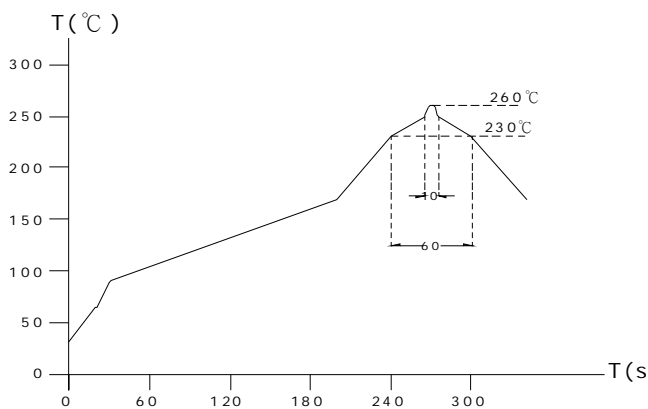
Note4. Irms: Average current for 40°C temperature rise from 25°C ambient(typical)

GENERAL CHARACTERISTICS

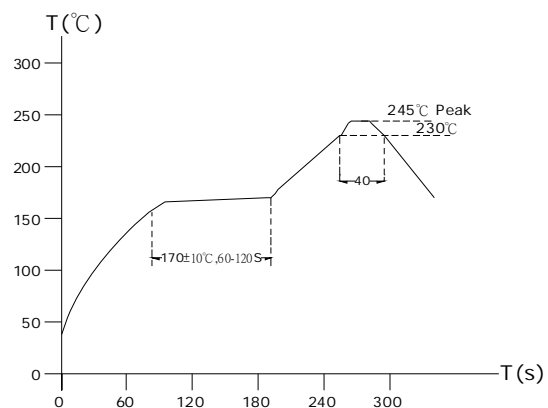
1. Operating temperature range: -55 TO + 125°C (Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has no external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y withstanding at 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 $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$ (-25~+80°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 90~95% 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 (10~55~10 Hz) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within $\pm 5\%$, 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°C, 10 seconds(See attached recommend reflow)
11. Storage condition: Temperature Range: 0°C ~ 35°C ; -55°C ~ 125°C (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

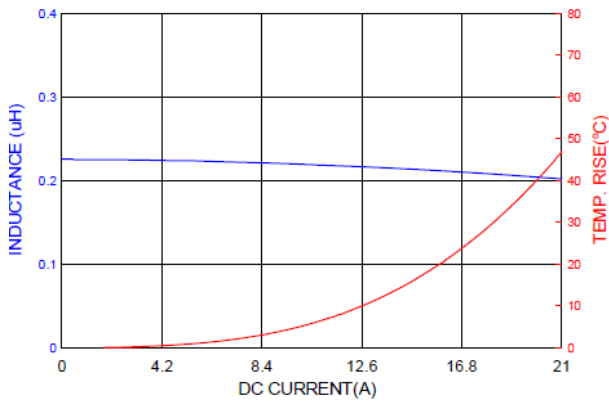


Lead-free the recommended reflow condition

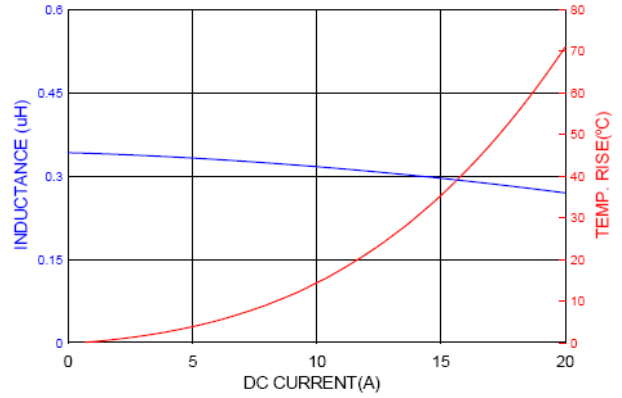


● Typical Electrical Curve: Inductance VS Isat , Irms VS TEMP.

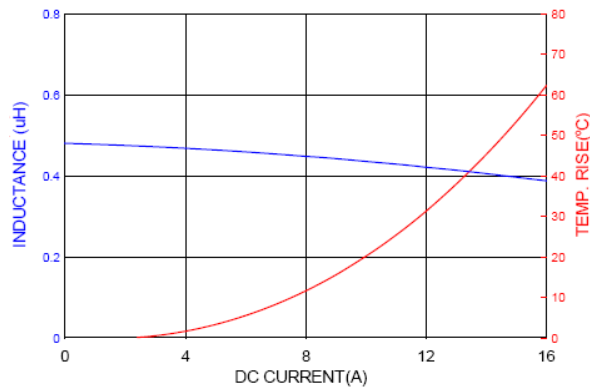
PIT05030-R22M



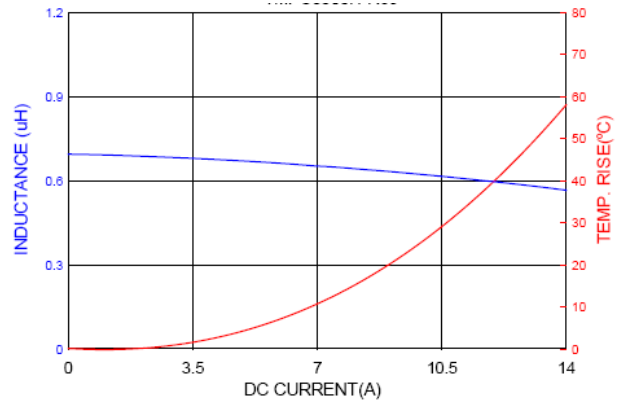
PIT05030-R33M



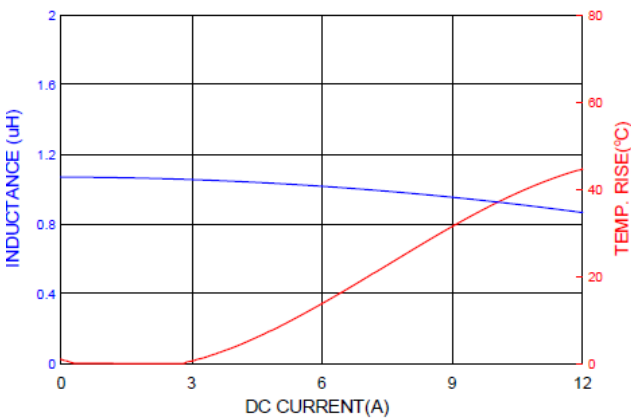
PIT05030-R47M



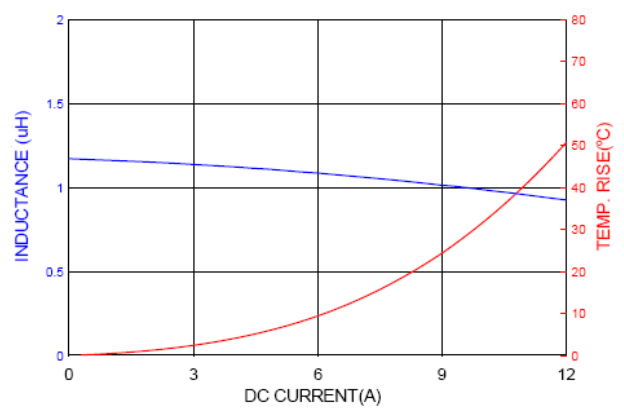
PIT05030-R68M



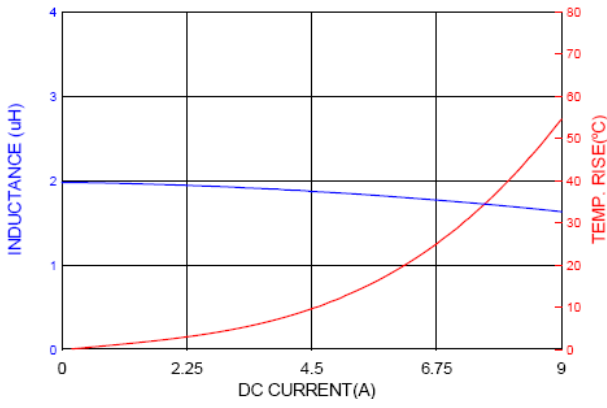
PIT05030-1R0M



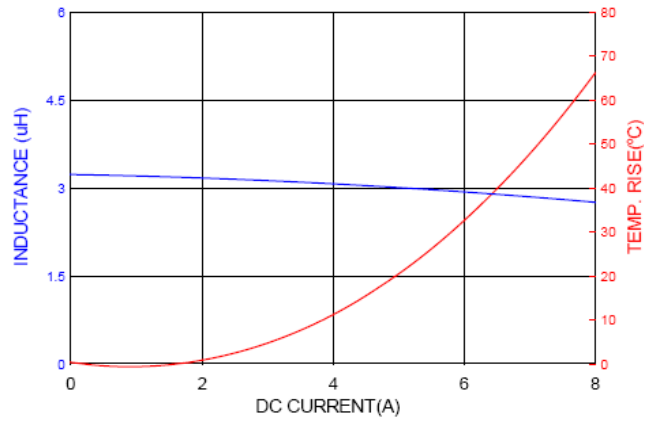
PIT05030-1R5M



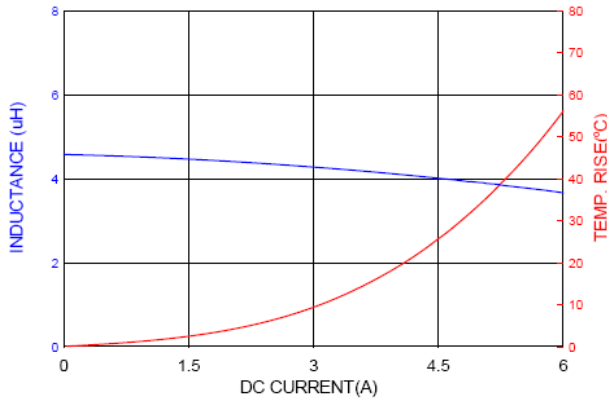
PIT05030-2R2M



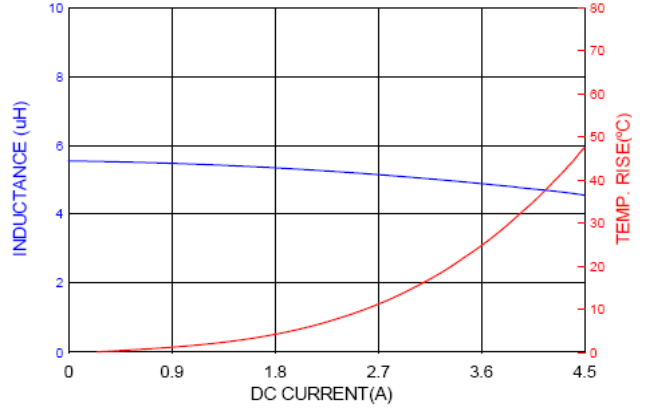
PIT05030-3R3M



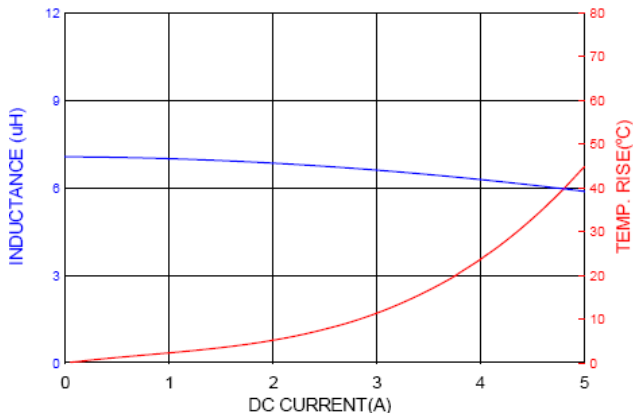
PIT05030-4R7M



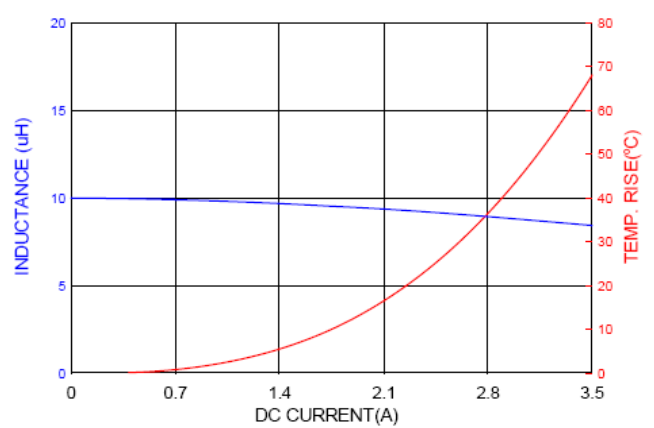
PIT05030-5R6M



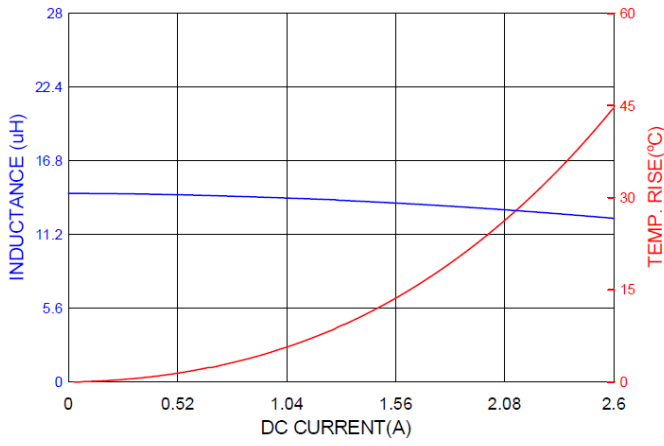
PIT05030-6R8M



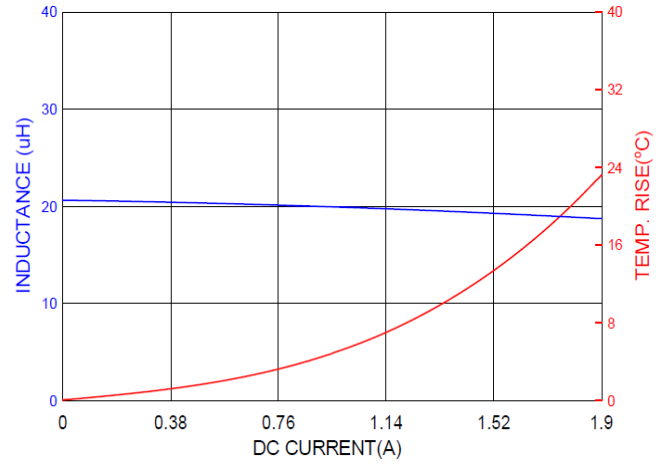
PIT05030-100M



PIT05030-150M



PIT05030-220M



PIT05030-330M

