PIC05030 TYPE

●FEATURE

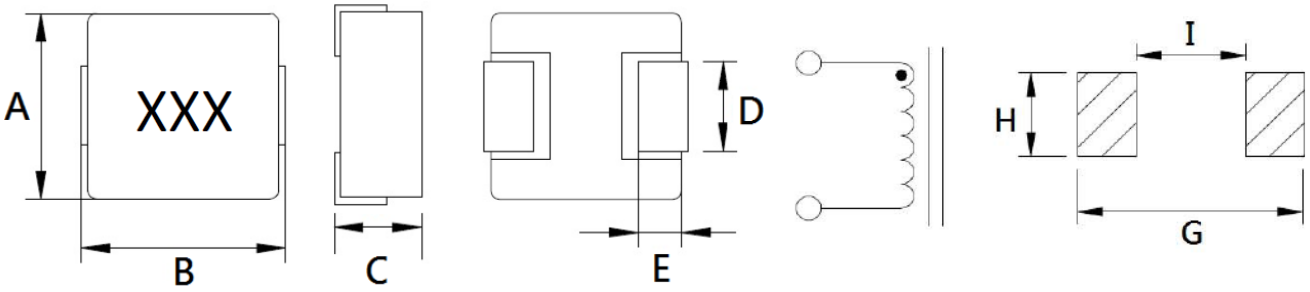
1. Shielded constrution
2. Frequency range up to 5MHz, Low DCR(Ω),Low Buzz Noise

●Applications

1. Notebook, server application, High current power supplier

●Shape and Dimension

●Schematics and Land Patterns(mm)



A=5.40m/m Max ; B=5.70m/m Max ; C=3.00m/m Max. ; D=2.20±0.3m/m ; E=1.20m/m Ref. ; G=6.00m/m ; H=2.20m/m ; I=2.50m/m

●Specification

P/N	L (μH)	RDC (mΩ) Typical	RDC (mΩ)Max	Isat (A)	Irms (A)
PIC05030-R47M	0.47±20%	7.40	8.50	12.0	11.0
PIC05030-R68M	0.68±20%	11.0	12.0	11.5	9.0
PIC05030-1R0M	1.0±20%	13.0	14.0	11.0	8.5
PIC05030-1R2M	1.2±20%	15.0	16.0	11.0	8.5
PIC05030-1R5M	1.5±20%	20.0	25.0	8.5	8.2
PIC05030-2R2M	2.2±20%	25.0	29.0	7.5	7.0
PIC05030-3R3M	3.3±20%	32.0	38.0	6.0	5.5
PIC05030-4R7M	4.7±20%	50.0	60.0	5.0	4.5
PIC05030-6R8M	6.8±20%	75.0	90.0	4.0	3.5
PIC05030-100M	10±20%	110	125	3.5	3.2

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

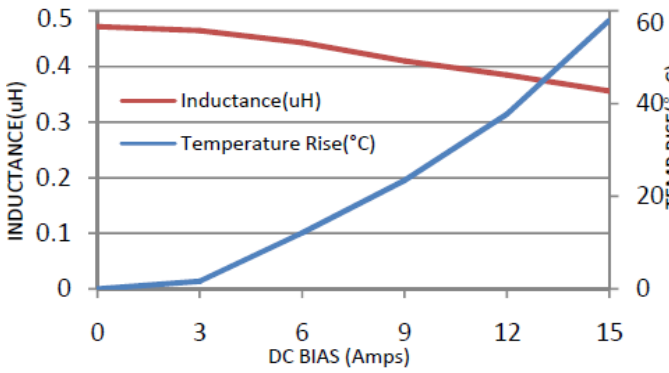
Note4. Irms: Average current for 40℃ temperature rise from 25℃ ambient(typical)

Note5. Inductance tolerance: M: ±20%

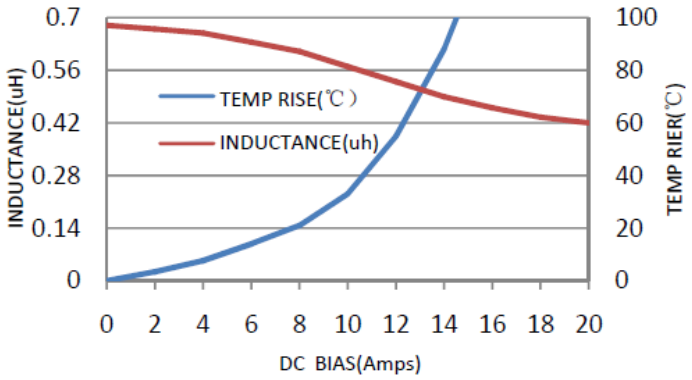
Note6. Packaging: Taping ; Quantity: 2000 Piece/reel

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

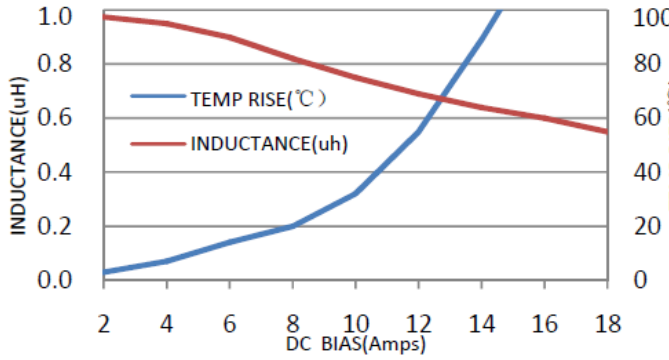
PIC05030-R47M



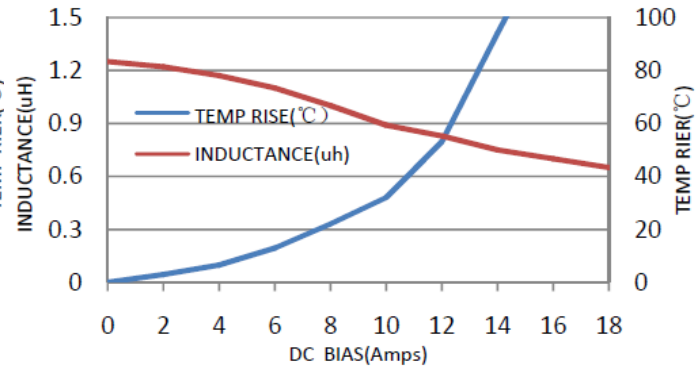
PIC05030-R68M



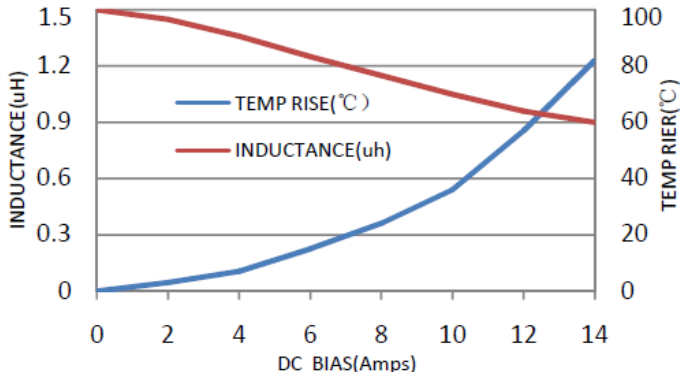
PIC05030-1R0M



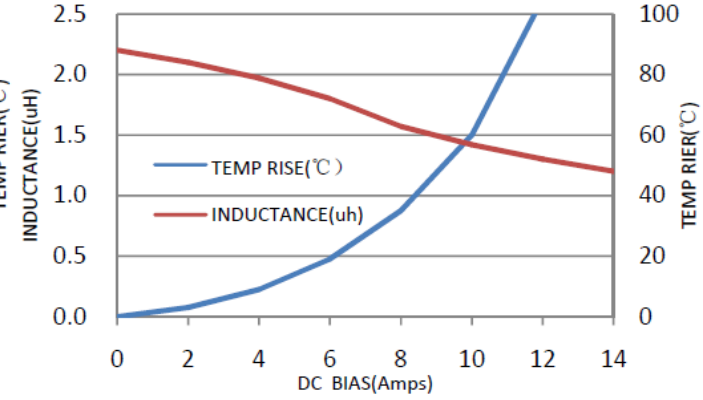
PIC05030-1R2M



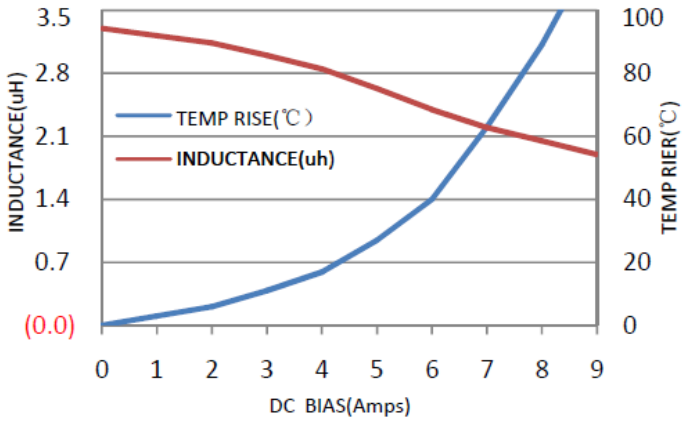
PIC05030-1R5M



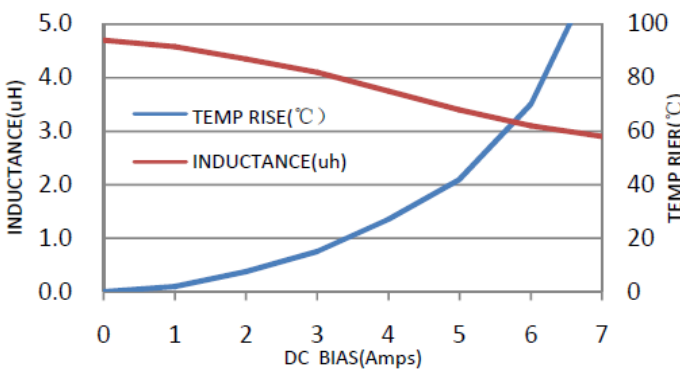
PIC05030-2R2M



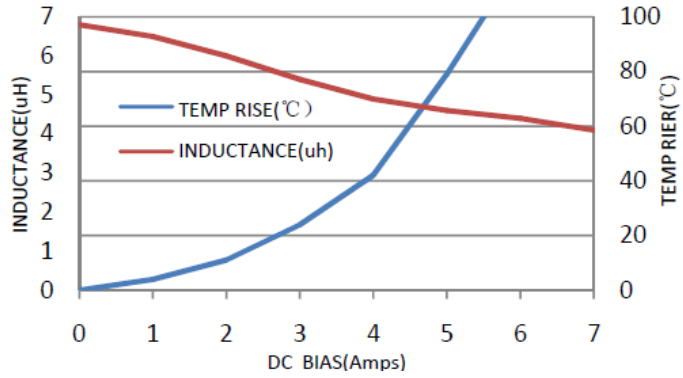
PIC05030-3R3M



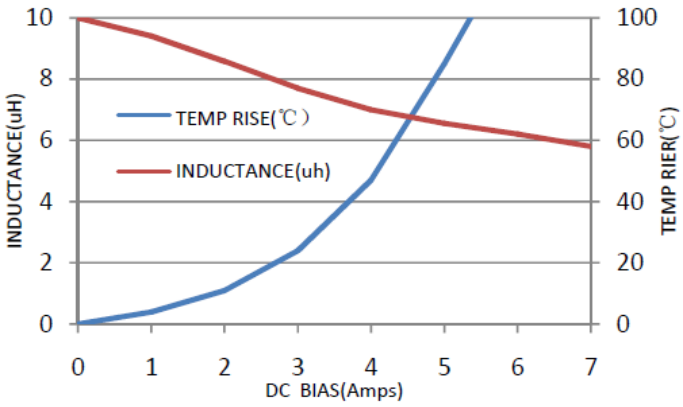
PIC05030-4R7M



PIC05030-6R8M

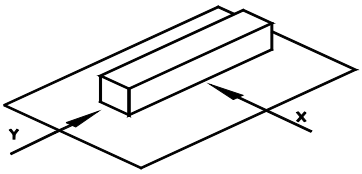


PIC05030-100M



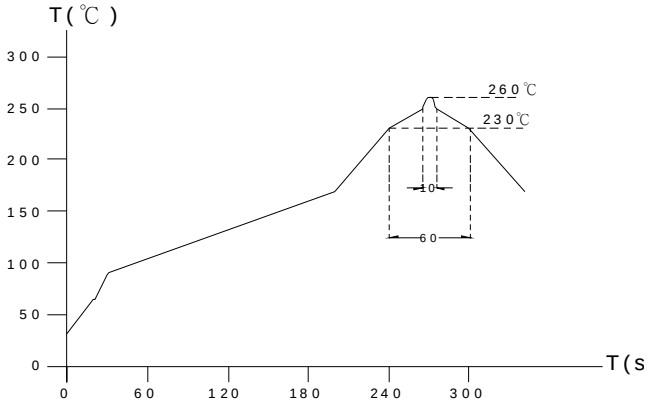
GENERAL CHARACTERISTICS

1. Operating temperature range: -55 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.Ywithstanding 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℃) 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 environment: Storage condition: Temperature Range: 10℃ ~ 35℃ (Generally: 21℃ ~ 31℃) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%) ; Transportation condition: Temperature Range: -35℃ ~ 85℃ , 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

