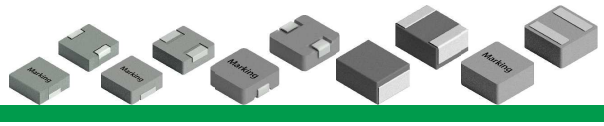
An ISO 9001 Company

MOLDING POWER INDUCTORS
HIGH CURRENT INDUCTORS
-EPIT05012 SERIES



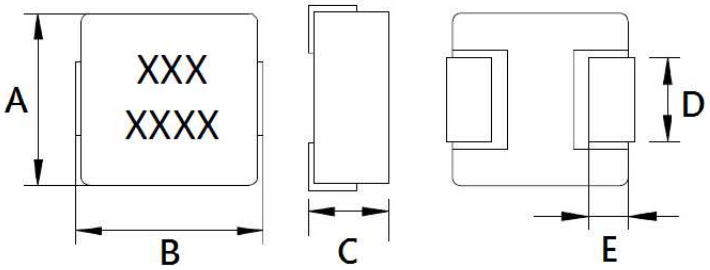
●FEATURE

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

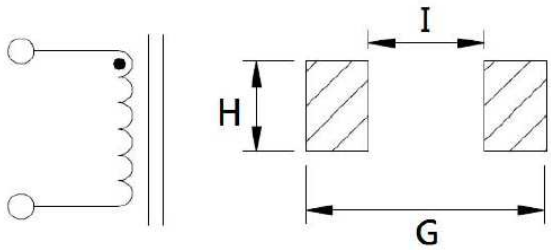
●Applications

1. Notebook, server application, High current power supplier

●Shape and Dimension



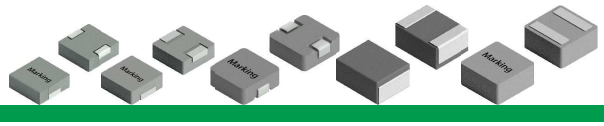
●Schematics and Land Patterns(mm)



A=5.40m/m Max ; B=6.00m/m Max ; C=1.20m/m Max. ; D=2.50m/m Ref. ; E=1.20m/m Ref. ; G=6.20m/m ; H=2.80m/m ; I=2.20m/m

●Specification

P/N	L (μH)	RDC (mΩ) Typical	RDC (mΩ)Max	Isat (A)	Irms (A)
EPIT05012-R10N	0.10±30%	4.3	5.2	14.5	14
EPIT05012-R22N	0.22±30%	5.5	6.7	14	10.7
EPIT05012-R33M	0.33±20%	7.8	9.4	13.5	8.5
EPIT05012-R47M	0.47±20%	13.6	15.8	11	7
EPIT05012-R68M	0.68±20%	21.5	24.5	9	6
EPIT05012-1R0M	1.0±20%	26	30	6	5
EPIT05012-1R2M	1.2±20%	33	40	5.5	4.5
EPIT05012-1R5M	1.5±20%	38	44	5	4
EPIT05012-2R2M	2.2±20%	65	75	4	3.5
EPIT05012-3R3M	3.3±20%	75	86	3.8	3
EPIT05012-4R7M	4.7±20%	100	115	3.2	2.5
EPIT05012-5R6M	5.6±20%	175	201	3.2	2.4
EPIT05012-6R8M	6.8±20%	193	222	3	2
EPIT05012-8R2M	8.2±20%	327	378	2.8	1.7
EPIT05012-100M	10±20%	335	385	1.8	1.5



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

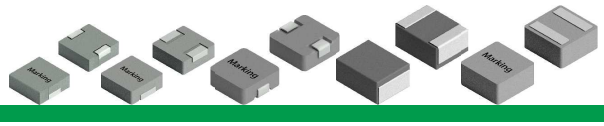
Note2. Measurement ambient temperature of L, DCR and IDC : at 25℃

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

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

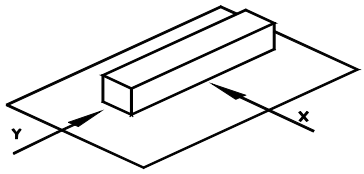
Note5. Inductance tolerance: M: ±20%

Note6. Packing: Reel ; Quantity: 4000 Piece



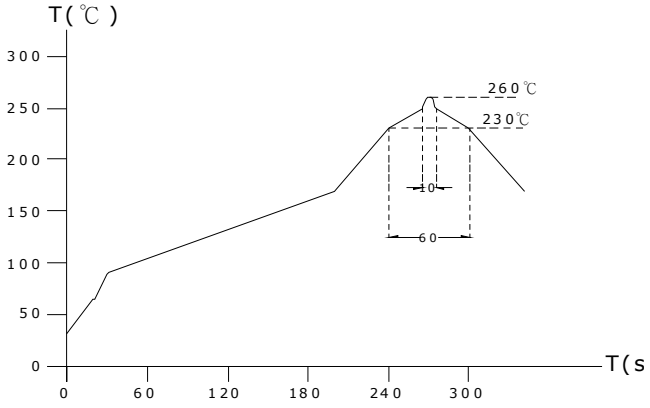
GENERAL CHARACTERISTICS

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.Y withstanding at below conditions.
   Terminal should not peel off. (refer to figure at right) 5. 0N 60 sec.

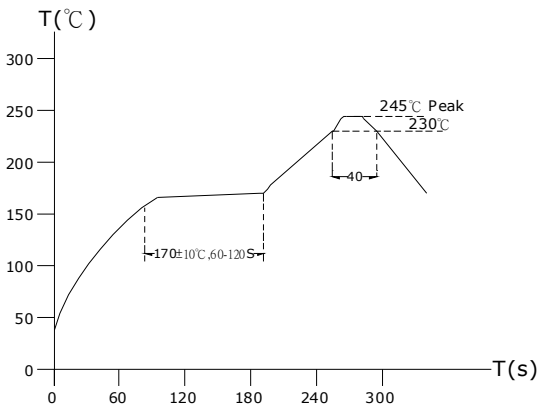


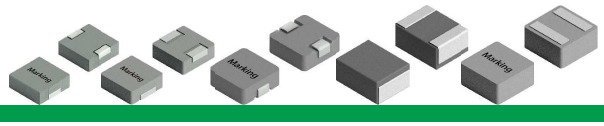
4. Insulating resistance: Over 100MΩ at 100V D.C. between coil and core.
5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
6. Temperature characteristics: Inductance coefficient (0~2,000)x10-6/℃(-25~+80℃ degree Celsius), inductance deviation within±5.0%, 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℃；-55℃ ~ 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



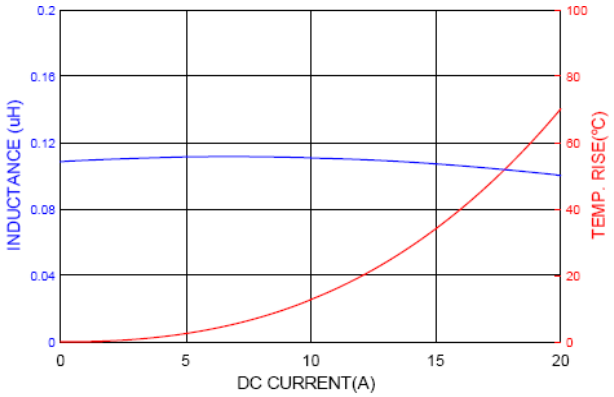
Lead-free the recommended reflow condition



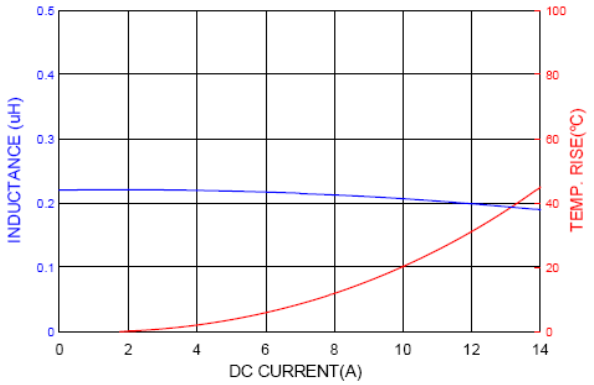


●Typical Electrical Curve: Inductance VS Isat , Irms VS TEMP.

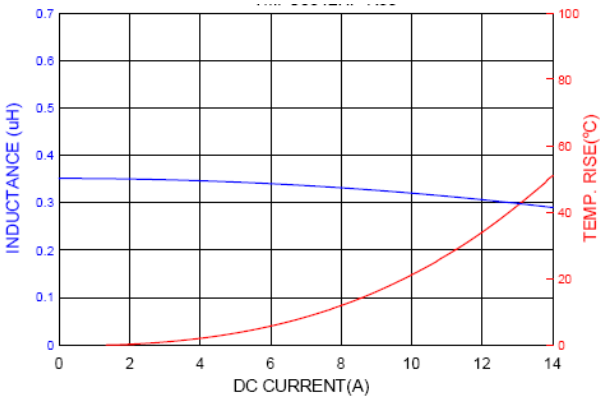
EPIT05012-R10N



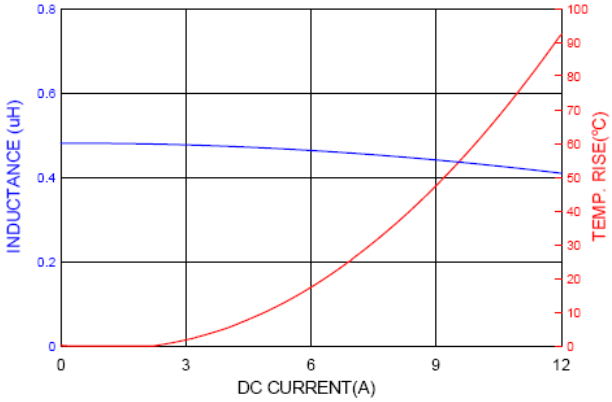
EPIT05012-R22N



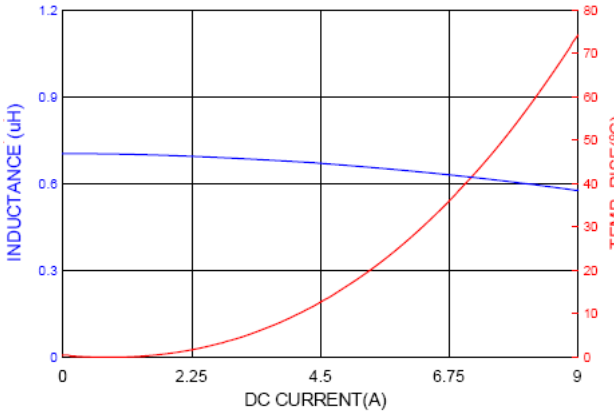
EPIT05012-R33M



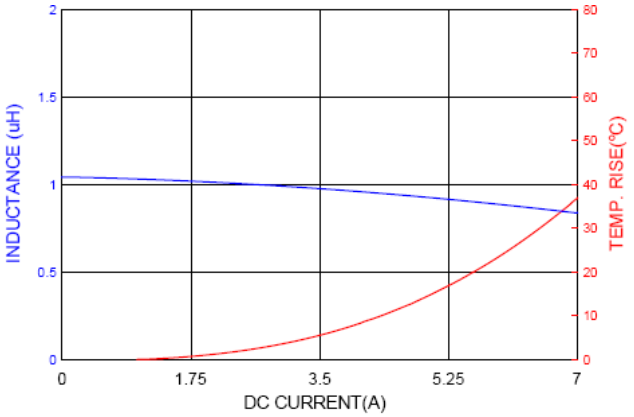
EPIT05012-R47M



EPIT05012-R68M



EPIT05012-1R0M



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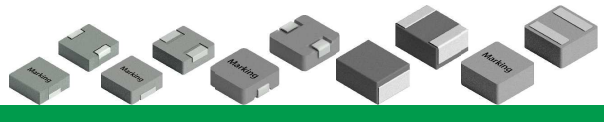
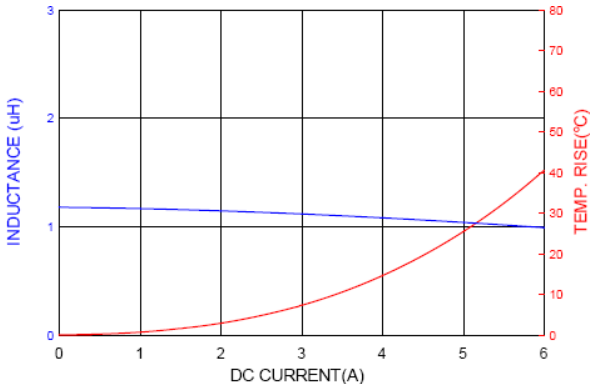
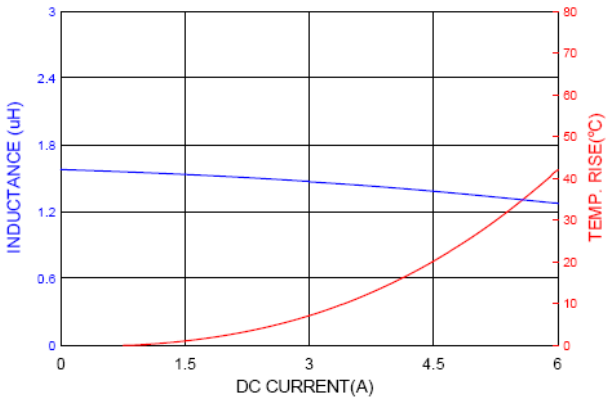


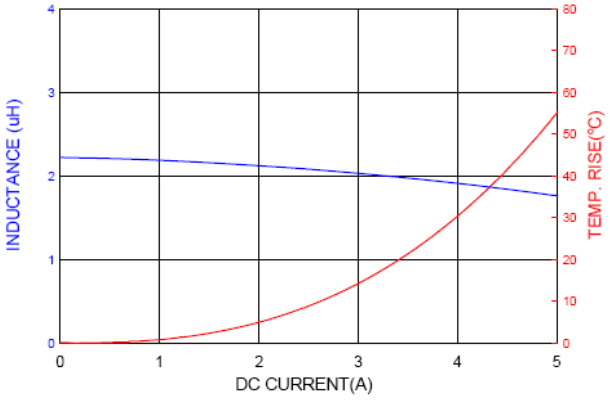
EPIT05012-1R2M



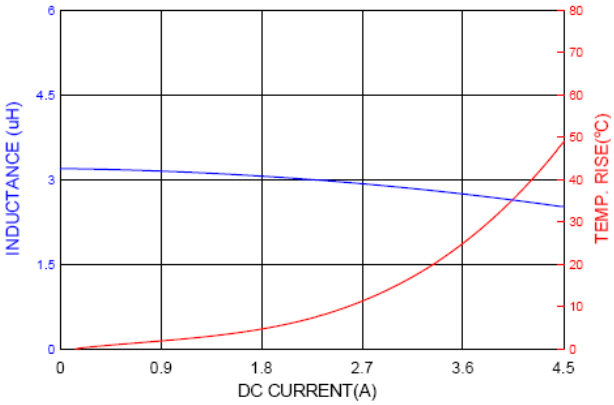
EPIT05012-1R5M



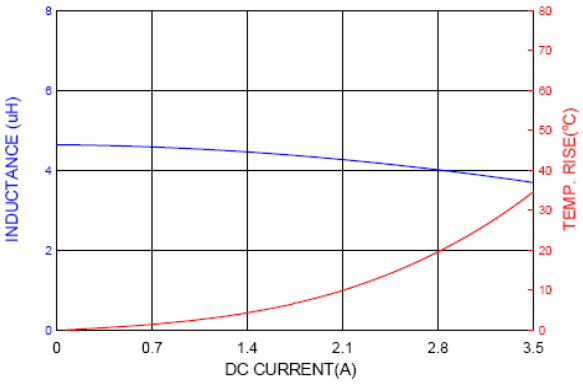
EPIT05012-2R2M



EPIT05012-3R3M



EPIT05012-4R7M



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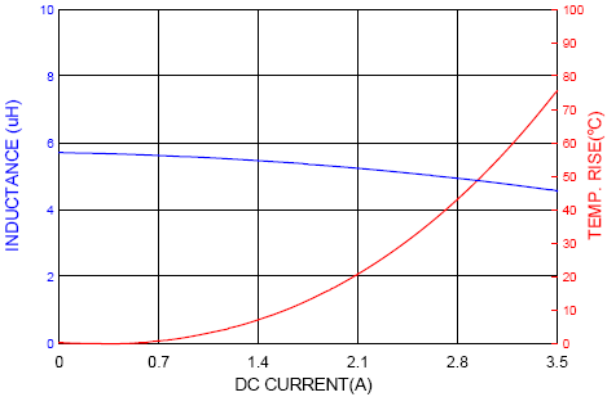

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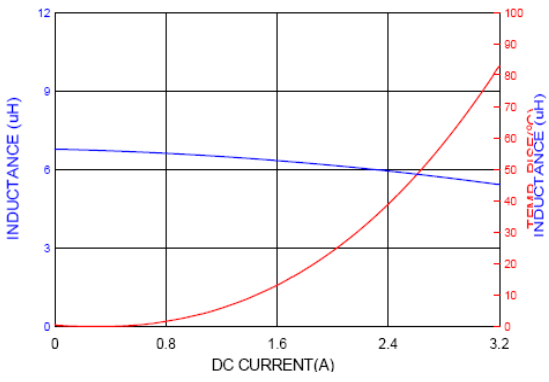
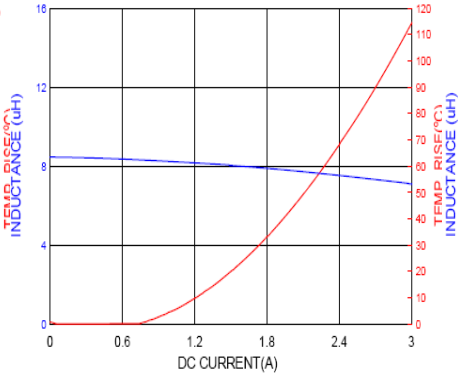


EPIT05012-8R2M



EPIT05012-100M