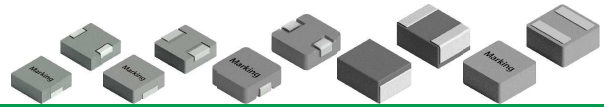


**MOLDING POWER INDUCTORS**  
**HIGH CURRENT INDUCTORS**  
**-EPIT04012 SERIES**



● FEATURE

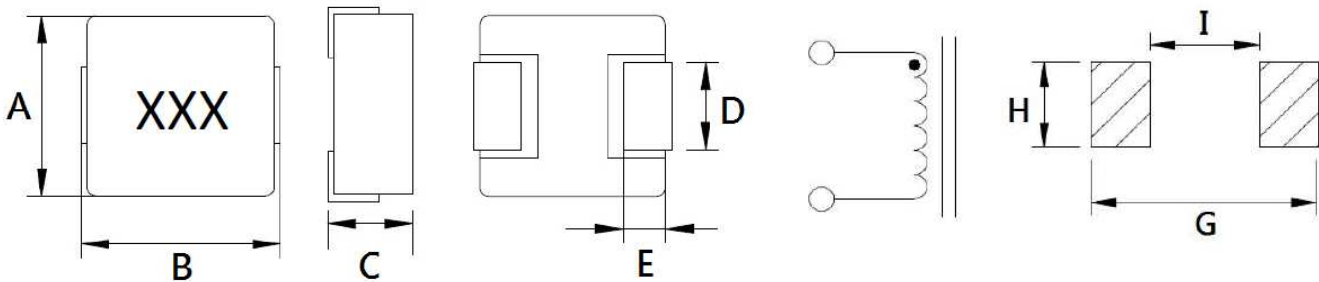
1. Shielded construction
2. Frequency range up to 5MHz, Low DCR( $\Omega$ ), Low Buzz Noise

● Applications

1. Notebook, server application, High current power supplier

● Shape and Dimension

● Schematics and Land Patterns(mm)



A=4.30mm Max ; B=4.70mm Max ; C=1.20mm Max. ; D=2.00±0.2mm ;  
 E=0.80mm Ref. ; G=5.20mm ; H=2.30mm ; I=2.20mm

● Specification

P/N	L ( $\mu$ H)	RDC (m $\Omega$ ) Typical	RDC (m $\Omega$ )Max	Isat (A)	Irms (A)
EPIT04012-R10M	0.10±20%	4.3	5.5	25	11.5
EPIT04012-R22M	0.22±20%	6.6	8.0	20	8.5
EPIT04012-R47M	0.47±20%	18	20	6.5	6.0
EPIT04012-1R0M	1.0±20%	41	47	6	4
EPIT04012-1R5M	1.5±20%	55	63	4	3
EPIT04012-2R2M	2.2±20%	69	80	3.5	2.8
EPIT04012-3R3M	3.3±20%	84	97	3	2.3
EPIT04012-4R7M	4.7±20%	128	145	2.5	2.0
EPIT04012-5R6M	5.6±20%	180	208	2.3	1.7
EPIT04012-6R8M	6.8±20%	300	360	1.7	1.5
EPIT04012-8R2M	8.2±20%	313	376	1.6	1.4
EPIT04012-100M	10±20%	410	463	1.4	1.3

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

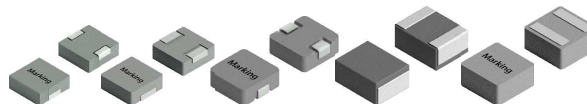
Note2. Measurement ambient temperature of L, DCR and IDC : at 25°C

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)

Note5. Inductance tolerance: M: ±20%

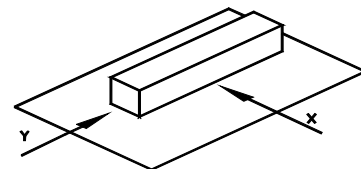
Note6. Packaging: Taping ; Quantity: 4000 Piece/reel



## GENERAL CHARACTERISTICS

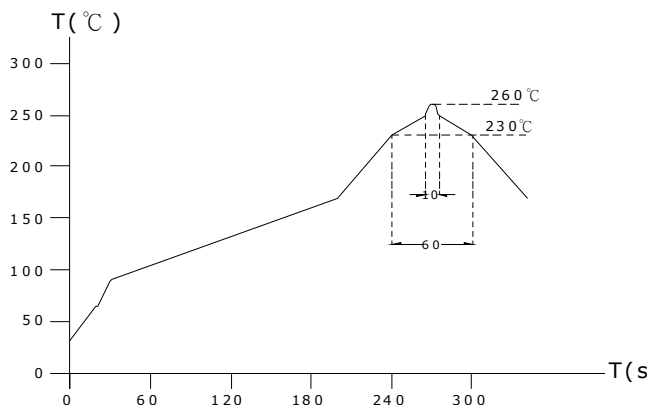
1. Operating temperature range: -40 TO + 125°C (Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has no external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y withstanding at below conditions.

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

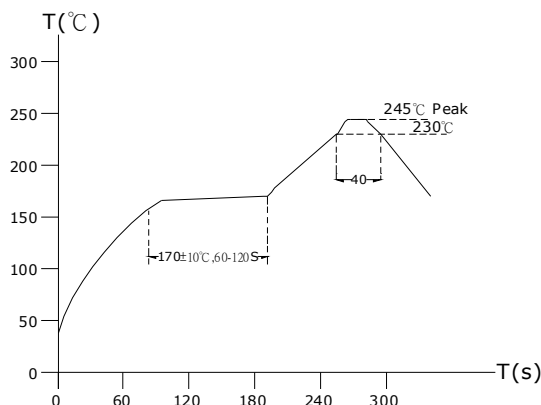


4. Insulating resistance: Over 100MΩ at 100V D.C. between coil and core.
5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
6. Temperature characteristics: Inductance coefficient  $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$  (-25~+80°C degree Celsius), 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/s<sup>2</sup> (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 ; -40°C ~ 105°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



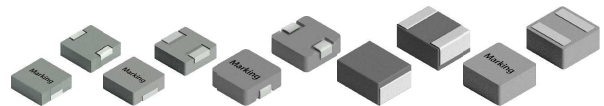


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# MOLDING POWER INDUCTORS

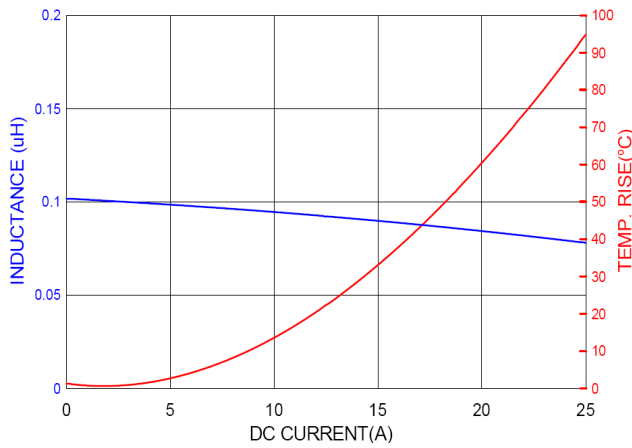
## HIGH CURRENT INDUCTORS

### -EPIT04012 SERIES

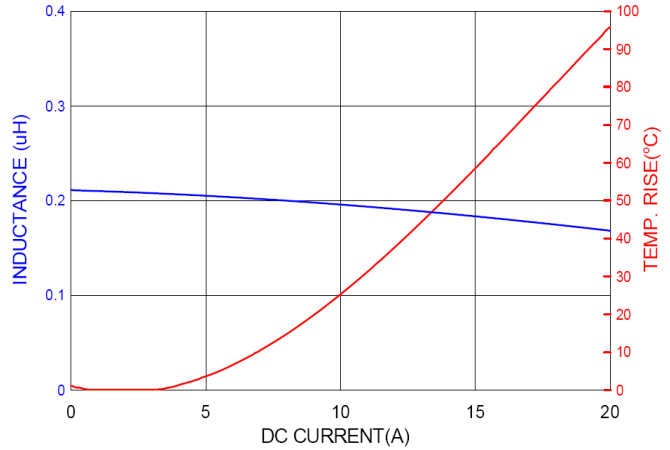


● Typical Electrical Curve: Inductance VS Isat , Irms VS TEMP.

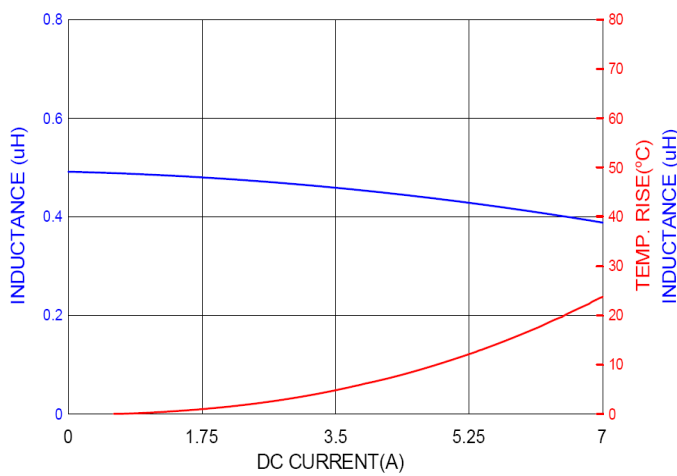
#### EPIT04012-R10M



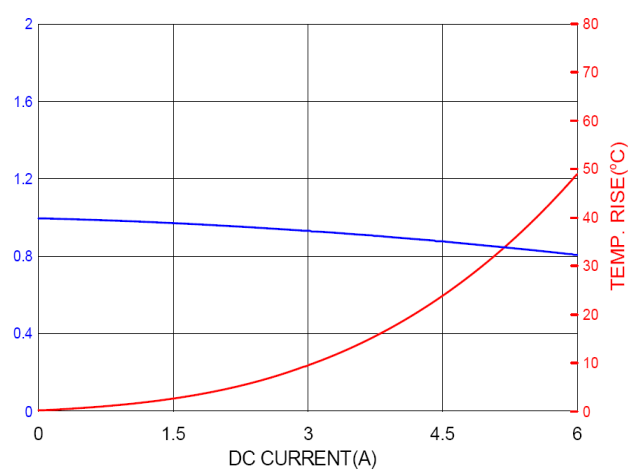
#### EPIT04012-R22M



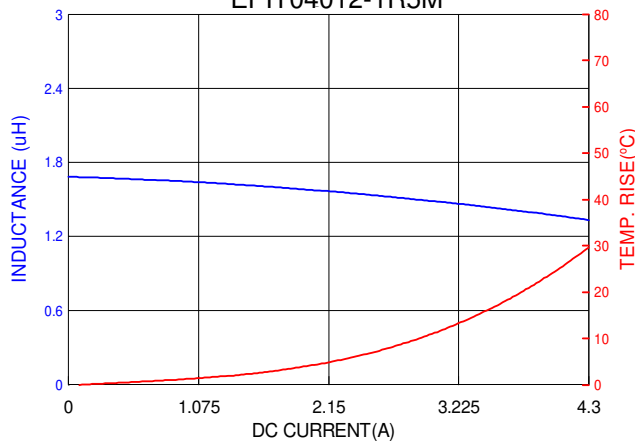
#### EPIT04012-R47M



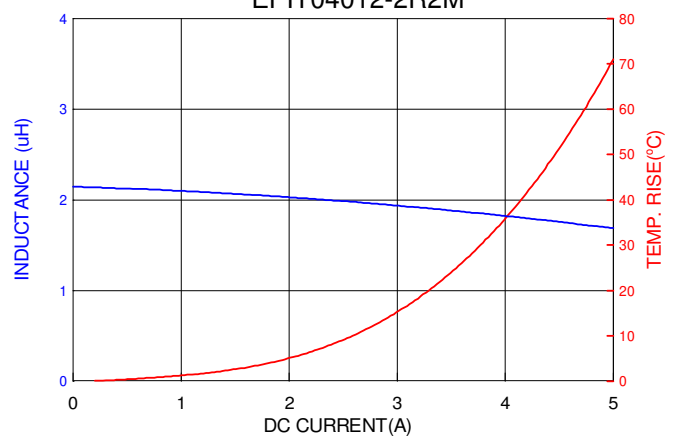
#### EPIT04012-1R0M



#### EPIT04012-1R5M



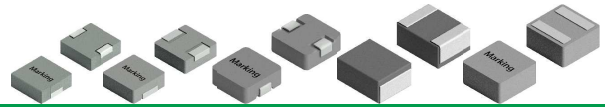
#### EPIT04012-2R2M



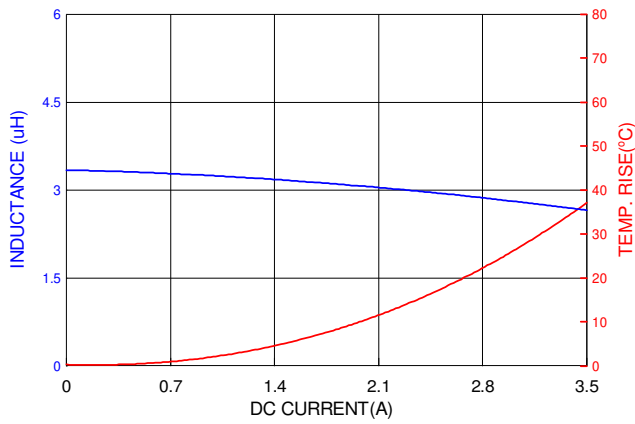


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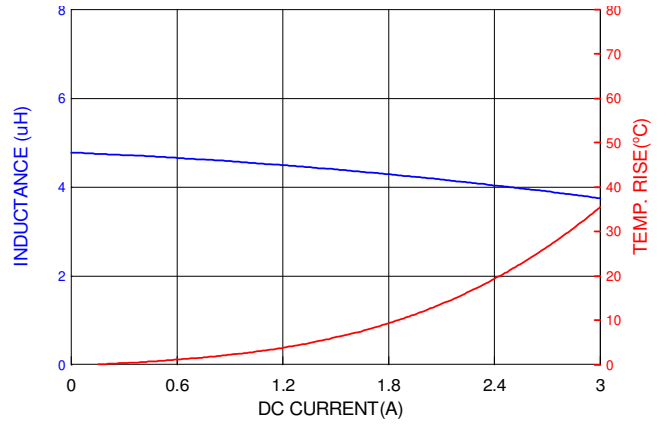
# MOLDING POWER INDUCTORS HIGH CURRENT INDUCTORS -EPIT04012 SERIES



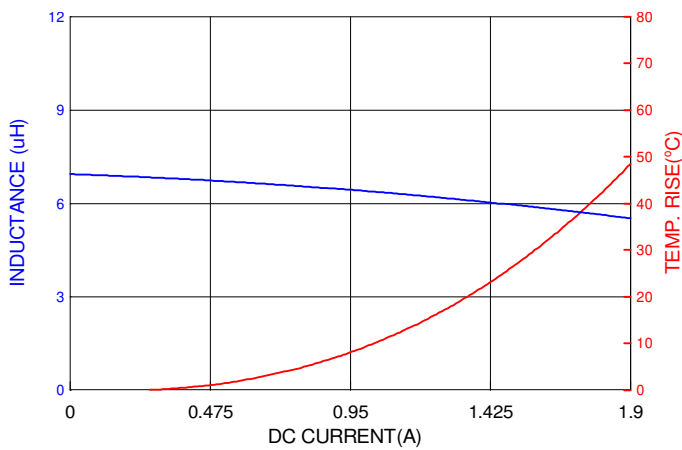
EPIT04012-3R3M



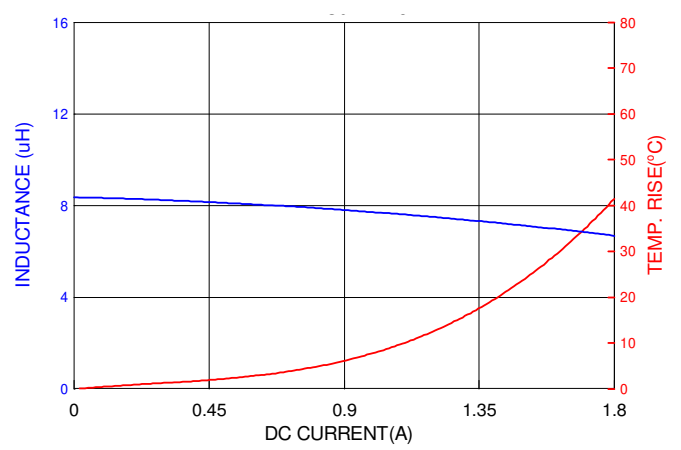
EPIT04012-4R7M



EPIT04012-6R8M



EPIT04012-8R2M



EPIT04012-100M

