

MOLDING POWER INDUCTORS HIGH CURRENT INDUCTORS

-EPIT23013A SERIES ■



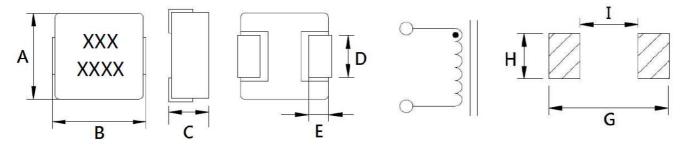
●FEATURE

- 1. Shielded construction
- 2. Low Buzz Noise

Applications

- 1. Server, high current power supplies, DC/DC converters
- 2. Equipment used for automotive
- Shape and Dimension

Schematics and Land Patterns(mm)



 $A=22.0\pm0.3$ m/m ; $B=23.5\pm0.5$ m/m ; C=13.0m/m Max. ; $D=19.0\pm0.3$ m/m ; $E=5.0\pm0.4$ m/m ; G=24m/m Ref. ; H=19.6m/m Ref. ; I=12.5m/m Ref.

Specification

P/N	L	RDC	Isat(A)		Irms(A)	
	(µH)	(mΩ) Max	MAX	TYP.	MAX	TYP.
EPIT23013A-1R5M	1.5±20%	1.15	48.0	52.0	57.0	62.0
EPIT23013A-2R2M	2.2±20%	1.25	43.0	48.0	52.0	58.0
EPIT23013A-3R3M	3.3±20%	1.75	37.0	41.0	47.0	49.0
EPIT23013A-4R7M	4.7±20%	2.20	34.0	38.0	44.0	47.0
EPIT23013A-6R8M	6.8±20%	3.10	32.0	36.0	36.0	40.0
EPIT23013A-100M	10±20%	4.15	20.0	28.0	30.0	33.0
EPIT23013A-150M	15±20%	6.12	18.0	23.0	23.0	26.0
EPIT23013A-220M	22±20%	11.0	14.0	15.0	18.0	22.0
EPIT23013A-230M	23±20%	11.0	14.0	15.0	18.0	22.0
EPIT23013A-330M	33±20%	15.4	10.5	12.0	16.0	19.0
EPIT23013A-470M	47±20%	20.8	10.0	12.0	14.0	17.0
EPIT23013A-680M	68±20%	29.5	9.00	12.0	12.0	14.0
EPIT23013A-750M	75±20%	31.6	8.50	10.5	11.0	13.0
EPIT23013A-820M	82±20%	34.2	7.70	9.0	10.0	12.0
EPIT23013A-101M	100±20%	40.0	7.50	9.0	9.5	11.0



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Note1. Measurement frequency of Inductance value: at 100KHz, 1.0V

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

Note3. Isat: DC current at which the inductance drops 30%(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:80 pcs/reel

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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.
- 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 $100M\Omega$ 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/°C (-25~+80°C 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°C 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°C, 10 seconds(See attached recommend reflow)
- 11. Storage condition: Temperature Range: 0° C ~ 35° C ; -40 $^{\circ}$ C ~ 125 $^{\circ}$ 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

