

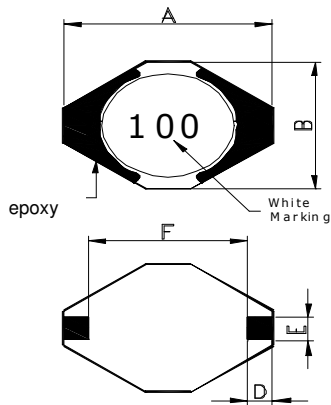
● FEATURE

1. High current capacity and Low DCR
2. High heat resistance, ideal for reflow soldering
3. High reliability

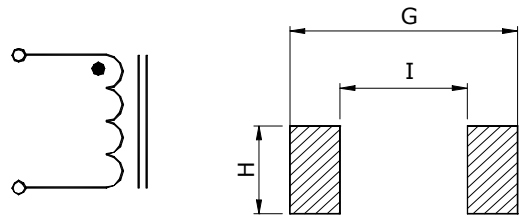
● Applications

1. DC-DC converter
2. Set top box and Notebook and Server,etc

● Shape and Dimension



● Schematics and Land Patterns(mm)



● Specification

Dimension in m/m

TYPE	A	B	C	D	E	F	G	I	H
EANB1807	18.6 Max	15.3 Max	7.11 Max	2.54	2.54	12.7	18.7	12.7	3.0

Note1. Measurement frequency of Inductance value : at 100KHz, 0.1V

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

Note3. Isat: DC current at which the inductance drops 10%(typ) from its value without current

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

Note5. Inductance tolerance: M: ±20%

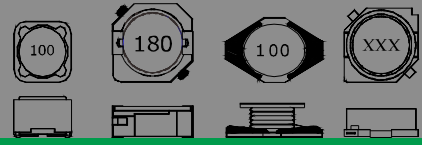
Note6. Ordering Code: TYPE NAME: EANB1807

Main Inductance: 100 (10uH)

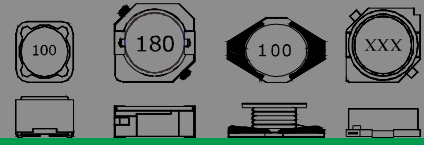
Tolerance : M (±20%)

Note7.Packaging: Taping ; Quantity: 300 Pieces/reel

# SMD POWER INDUCTOR – EANB1807 SERIES



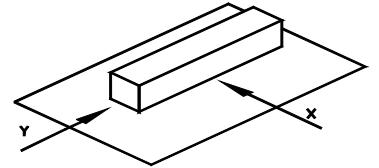
P/N	L ( $\mu$ H)	SRF (MHz) typ	RDC ( $\Omega$ )Max	Isat (A)	Irms (A)
EANB1807-1R0M	1.0 $\pm$ 20%	80	0.009	20	8.60
EANB1807-2R2M	2.2 $\pm$ 20%	80	0.014	16	7.10
EANB1807-3R3M	3.3 $\pm$ 20%	60	0.018	14	6.20
EANB1807-5R6M	5.6 $\pm$ 20%	40	0.020	12	5.30
EANB1807-8R2M	8.2 $\pm$ 20%	30	0.029	10	4.80
EANB1807-100M	10 $\pm$ 20%	30	0.031	10	4.30
EANB1807-150M	15 $\pm$ 20%	22	0.036	8.0	4.00
EANB1807-220M	22 $\pm$ 20%	20	0.047	7.0	3.50
EANB1807-330M	33 $\pm$ 20%	15	0.066	5.5	3.00
EANB1807-470M	47 $\pm$ 20%	9	0.086	4.5	2.60
EANB1807-680M	68 $\pm$ 20%	8	0.130	3.5	2.30
EANB1807-101M	100 $\pm$ 20%	7	0.190	3.0	1.80
EANB1807-151M	150 $\pm$ 20%	6	0.250	2.6	1.50
EANB1807-221M	220 $\pm$ 20%	5	0.380	2.4	1.20
EANB1807-331M	330 $\pm$ 20%	4	0.560	1.9	1.00
EANB1807-471M	470 $\pm$ 20%	3	0.850	1.4	0.82
EANB1807-681M	680 $\pm$ 20%	2.5	1.100	1.2	0.72
EANB1807-102M	1000 $\pm$ 20%	2	1.800	1.0	0.56



## GENERAL CHARACTERISTICS

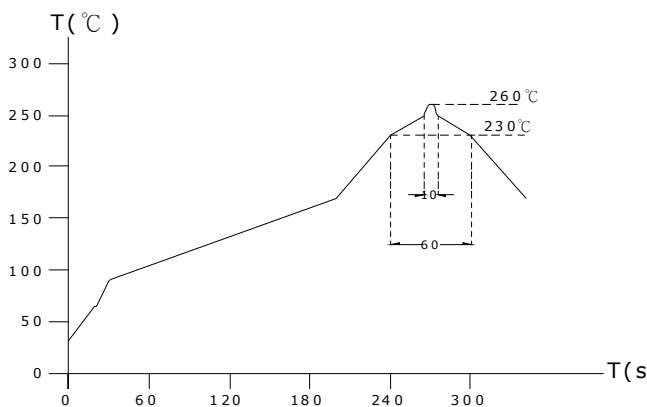
1. Operating temperature range: -40 TO + 105°C (Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Ywithstanding at below conditions.

Terminal should not peel off. (refer to figure at right) 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).
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 environment: Storage condition: Temperature Range: 10°C ~ 35°C (Generally: 21°C ~ 31°C) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%) ; Transportation condition: Temperature Range: -35°C ~ 85°C , Humidity Range: 50% ~ 95% RH
12. Use components within 6 months. If 6 months or more have elapsed, check soldarability before use.
13. Reflow profile recommend:

Lead-free heat endurance test



Lead-free the recommended reflow condition

