

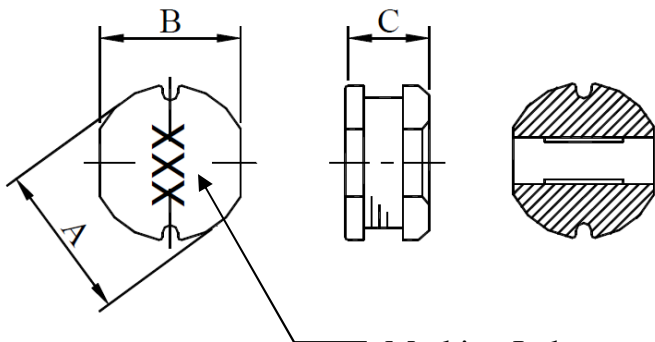
● **FEATURE**

1. High current capacity
2. Large terminal surface for good PCB bonding

● **Applications**

1. DC-DC converter or LCD TV
2. Digital Camera, Portable CDR-W and others

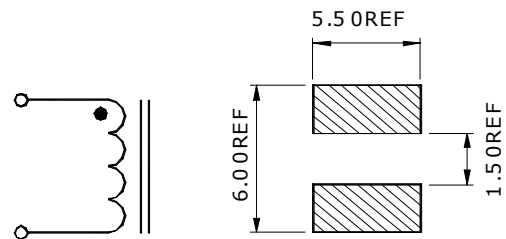
● **Shape and Dimension**



Marking Inductance

A=5.80±0.30m/m ; B=5.20±0.30m/m ; C=4.50±0.30m/m

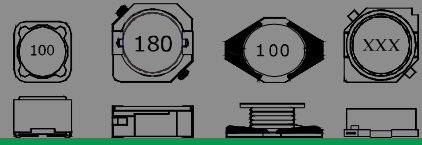
● **Schematics and Land Patterns(mm)**



● **Specification**

Part Number	L(uH)	Test Freq.(Hz)	Marking	DCR(ΩMax)	IDC(A)(Max)
ETP0504B-1R0□	1.0	7.96M	1R0	0.025	4.00
ETP0504B-2R2□	2.2	7.96M	2R2	0.035	3.50
ETP0504B-3R3□	3.3	7.96M	3R3	0.045	3.20
ETP0504B-4R7□	4.7	7.96M	4R7	0.054	2.50
ETP0504B-6R8□	6.8	7.96M	6R8	0.070	2.00
ETP0504B-8R2□	8.2	7.96M	8R2	0.080	1.50
ETP0504B-100□	10	2.52M	100	0.100	1.44
ETP0504B-120□	12	2.52M	120	0.120	1.40
ETP0504B-150□	15	2.52M	150	0.140	1.30
ETP0504B-180□	18	2.52M	180	0.150	1.23
ETP0504B-220□	22	2.52M	220	0.180	1.11
ETP0504B-270□	27	2.52M	270	0.200	0.97
ETP0504B-330□	33	2.52M	330	0.230	0.88
ETP0504B-390□	39	2.52M	390	0.320	0.80
ETP0504B-470□	47	2.52M	470	0.370	0.72
ETP0504B-560□	56	2.52M	560	0.420	0.68
ETP0504B-680□	68	2.52M	680	0.460	0.61
ETP0504B-820□	82	2.52M	820	0.600	0.58

**SMD POWER INDUCTOR  
– ETP0504B SERIES**



Part Number	L(uH)	Test Freq.(Hz)	Marking	DCR( $\Omega$ Max)	IDC(A)(Max)
ETP0504B-101□	100	1K	101	0.700	0.52
ETP0504B-121□	120	1K	121	0.930	0.48
ETP0504B-151□	150	1K	151	1.100	0.40
ETP0504B-181□	180	1K	181	1.380	0.38
ETP0504B-221□	220	1K	221	1.570	0.35
ETP0504B-271□	270	1K	271	1.650	0.32
ETP0504B-331□	330	1K	331	1.820	0.28
ETP0504B-471□	470	1K	471	2.760	0.23
ETP0504B-561□	560	1K	561	3.100	0.20
ETP0504B-681□	680	1K	681	4.500	0.19
ETP0504B-821□	820	1K	821	5.560	0.16
ETP0504B-102□	1000	1K	102	5.740	0.14

Note1. Measurement ambient temperature of L, DCR and IDC : at 25°C

Note2. The rated current indicates the current when the inductance decreases to 90% typical of it's nominal value or D.C. current when the temperature rising  $\Delta t=30^{\circ}\text{C}$  lower, whichever is lower

Note3. Inductance tolerance: M:  $\pm 20\%$  ; K:  $\pm 10\%$

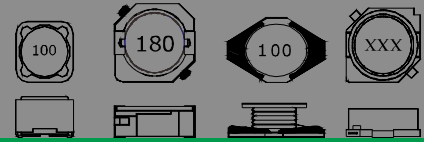
Note4. Ordering Code: TYPE NAME: ETP0504BB

Main Inductance: 100 (10uH)

Inductance Tolerance : K ( $\pm 10\%$ )

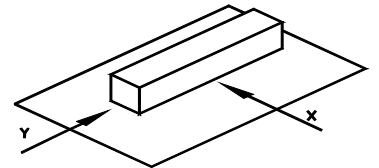
Note5. Packaging: Taping ; Quantity: ETP0504B: 1500 Pieces/reel

Note6. LCR Meter: CH3302 or HP4287A

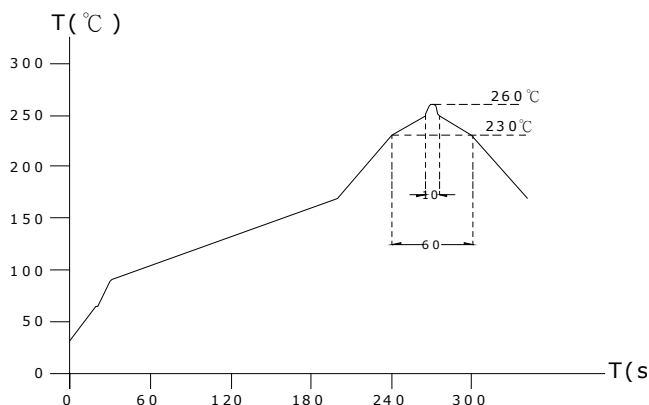


## GENERAL CHARACTERISTICS

- Operating temperature range: -40 TO + 105°C (Includes temperature when the coil is heated)
- 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.Ywithstanding at below conditions.  
Terminal should not peel off. (refer to figure at right) 10. 0N 10 sec.
- Insulating resistance: Over 100MΩ at 100V D.C. between coil and core.
- Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
- Temperature characteristics: Inductance coefficient  $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$  (-25~+80°C).
- 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.
- 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.
- 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.
- Resistance to Soldering Heat: 260°C, 10 seconds(See attached recommend reflow)
- 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
- Use components within 6 months. If 6 months or more have elapsed, check solderability before use.
- Reflow profile recommend:



Lead-free heat endurance test



Lead-free the recommended reflow condition

