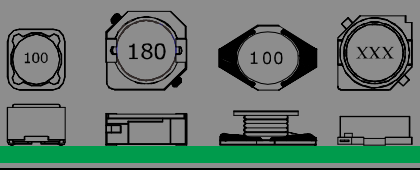
An ISO 9001 Company

SMD POWER INDUCTOR
– ETP0503B SERIES



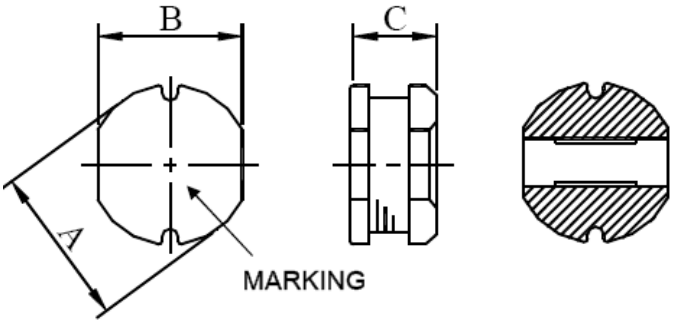
●FEATURE

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

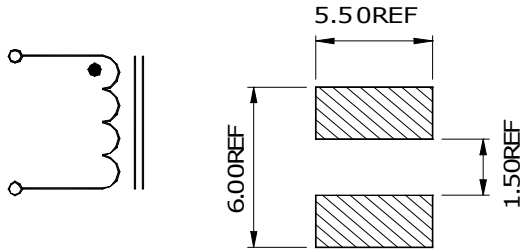
●Applications

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

●Shape and Dimension



●Schematics and Land Patterns(mm)



A=5.80±0.30m/m ; B=5.20±0.30m/m ; C=3.00±0.30m/m

●Specification

Part Number	L(uH)	Test Freq.(Hz)	Marking	DCR(ΩMax)	IDC(A)(Max)
ETP0503B-1R0□	1.0	7.96M	1R0	0.03	4.50
ETP0503B-1R5□	1.5	7.96M	1R5	0.03	4.10
ETP0503B-1R8□	1.8	7.96M	1R8	0.03	3.70
ETP0503B-2R2□	2.2	7.96M	2R2	0.03	3.50
ETP0503B-2R7□	2.7	7.96M	2R7	0.04	3.20
ETP0503B-3R3□	3.3	7.96M	3R3	0.05	2.80
ETP0503B-3R9□	3.9	7.96M	3R9	0.06	2.60
ETP0503B-4R7□	4.7	7.96M	4R7	0.07	2.50
ETP0503B-5R6□	5.6	7.96M	5R6	0.08	2.40
ETP0503B-6R8□	6.8	7.96M	6R8	0.09	2.20
ETP0503B-8R2□	8.2	7.96M	8R2	0.10	2.00
ETP0503B-100□	10	2.52M	100	0.12	1.80
ETP0503B-120□	12	2.52M	120	0.13	1.75
ETP0503B-150□	15	2.52M	150	0.15	1.70
ETP0503B-180□	18	2.52M	180	0.18	1.60
ETP0503B-220□	22	2.52M	220	0.22	1.50
ETP0503B-270□	27	2.52M	270	0.26	1.40

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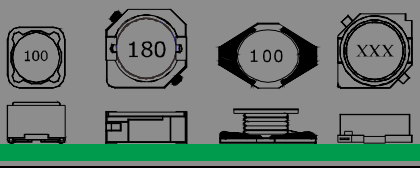


Part Number	L(uH)	Test Freq.(Hz)	Marking	DCR(ΩMax)	IDC(A)(Max)
ETP0503B-330□	33	2.52M	330	0.33	1.10
ETP0503B-390□	39	2.52M	390	0.42	1.00
ETP0503B-470□	47	2.52M	470	0.50	0.90
ETP0503B-560□	56	2.52M	560	0.55	0.85
ETP0503B-680□	68	2.52M	680	0.65	0.80
ETP0503B-820□	82	2.52M	820	0.80	0.65

Note1. Measurement frequency of Inductance value : at 0.25V

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

Note3. The rated current indicates the current when the inductance decreases to 90% over of it's nominal value or D.C. current when the temperature rising Δt=30℃ lower, whichever is lower

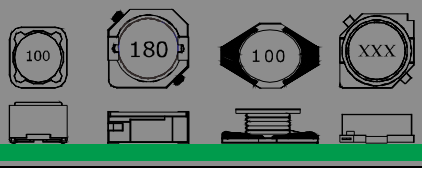
Note4. Inductance tolerance: M: ±20% ; K: ±10%

Note5. Ordering Code: TYPE NAME: ETP0503B

Main Inductance: 100 (10uH)

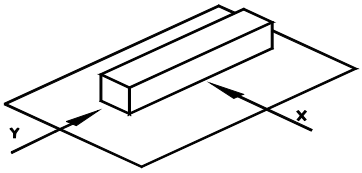
Inductance Tolerance : K (±10%)

Note6. Packaging: Taping ; Quantity: ETP0503B: 2000 Pieces/reel



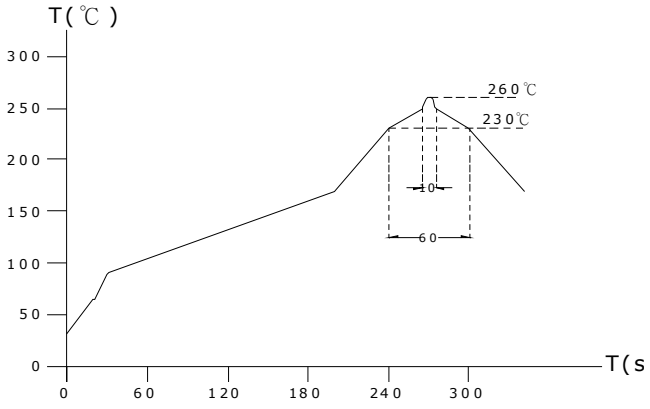
GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO + 105℃(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) 10. 0N 10 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℃).
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 environment: Storage condition: Temperature Range: 10℃ ~ 35℃ (Generally: 21℃ ~ 31℃) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%) ; Transportation condition: Temperature Range: -35℃ ~ 85℃ , Humidity Range: 50% ~ 95% 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