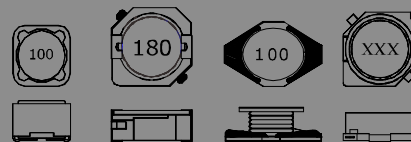


# SMD POWER INDUCTOR – ETPRH5D28R SERIES



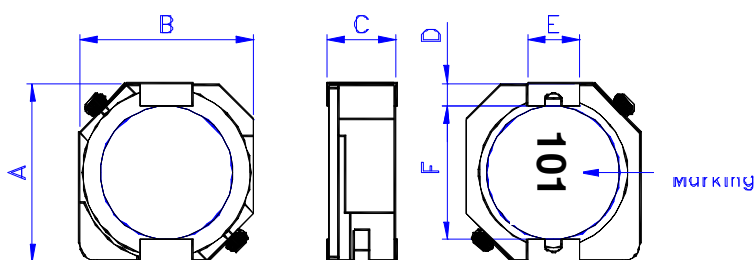
## ●FEATURE

1. High current capacity and Low DCR
2. Magnetic shielded

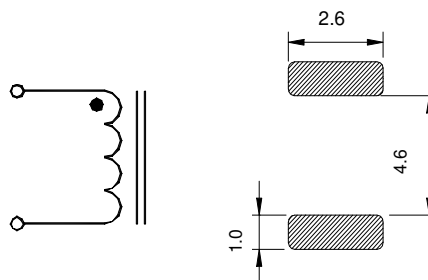
## ●Applications

1. Portable telephone, Personal Computer
2. Notebook, and other electronic equipment

## ●Shape and Dimension



## ●Schematics and Land Patterns(mm)

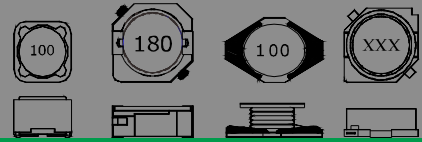


A=6.30mm MAX ; B=6.20mm MAX ; C=3.00mm MAX ; D=0.60mm REF. ;  
E=2.00mm REF ; F=4.70mm MAX

## ●Specification

Part Number	L(uH)	Marking	DCR(ΩMax)	Rated Current(A)
ETPRH5D28R-2R5□	2.5	2R5	17.6m	2.60
ETPRH5D28R-3R3□	3.3	3R3	20.3m	2.30
ETPRH5D28R-4R0□	4.0	4R0	27.0m	2.10
ETPRH5D28R-4R7□	4.7	4R7	30m	1.95
ETPRH5D28R-5R0□	5.0	5R0	31.1m	1.85
ETPRH5D28R-6R0□	6.0	6R0	41.9m	1.70
ETPRH5D28R-8R0□	8.0	8R0	49.9m	1.50
ETPRH5D28R-100□	10	100	54.0m	1.30
ETPRH5D28R-120□	12	120	71.6m	1.20
ETPRH5D28R-150□	15	150	82.4m	1.10
ETPRH5D28R-180□	18	180	102m	1.05
ETPRH5D28R-220□	22	220	119m	0.95
ETPRH5D28R-270□	27	270	146m	0.85
ETPRH5D28R-330□	33	330	183m	0.76
ETPRH5D28R-390□	39	390	210m	0.68
ETPRH5D28R-470□	47	470	230m	0.60
ETPRH5D28R-560□	56	560	305m	0.55

**SMD POWER INDUCTOR  
– ETPRH5D28R SERIES**



Part Number	L(uH)	Marking	DCR(ΩMax)	Rated Current(A)
ETPRH5D28R-680□	68	680	351m	0.48
ETPRH5D28R-820□	82	820	419m	0.45
ETPRH5D28R-101□	100	101	520m	0.40

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

Note2. Measurement ambient temperature of L, DCR and IDC : at 20°C

Note3. Rated Current: The rated current indicates the current when the inductance decreases to 65% over of it's nominal value or D.C. current when the temperature rising  $\Delta t=40^{\circ}\text{C}$  lower, whichever is lower( $T_a=20^{\circ}\text{C}$ )

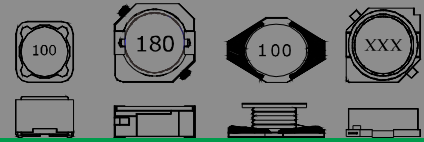
Note4. Part no identification: TYPE NAME: ETPRH5D28R

INDUCTANCE: 100(10uH)

TOLERANCE: N ( $\pm 30\%$ )

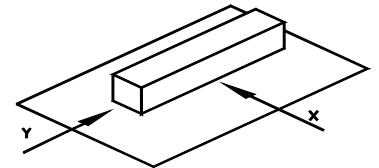
Note5. Inductance tolerance: N:  $\pm 30\%$  ; M:  $\pm 20\%$

Note6. Packaging: Taping ; Quantity: 1500PCS/REEL

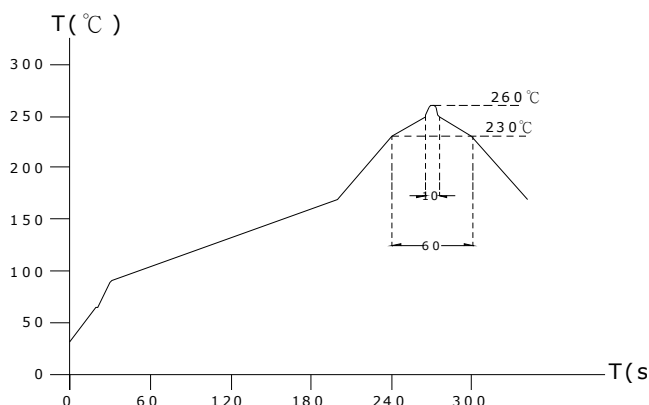


## GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO + 85°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.Y withstanding 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 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

