#### **●**FEATURE

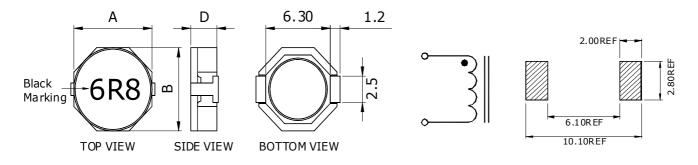
- 1. High current capacity and Low DCR
- 2. Magnetic shielded
- 3. Low core loss for high frequency power application

### Applications

- 1. Personal Computer
- 2. Set top box, and other electronic equipment

### Shape and Dimension

## Schematics and Land Patterns(mm)



A=8.30 m/m MAX; B=8.30 m/m MAX; D=3.00 m/m MAX

### Specification

P/N	L	Marking	RDC	Isat	Irms
	(µH)		(Ω)Max	(A)	(A)
ETPRH8D28-1R0	1.0	1R0	11.0m	6.50	7.50
ETPRH8D28-2R5	2.5	2R5	15.6m	4.50	6.40
ETPRH8D28-3R3	3.3	3R3	18.2m	4.00	6.00
ETPRH8D28-4R7	4.7	4R7	24.7m	3.40	4.50
ETPRH8D28-6R8	6.8	6R8	37.0m	2.85	4.00
ETPRH8D28-7R3	7.3	7R3	39.0m	2.80	3.40
ETPRH8D28-100	10	100	47.0m	2.50	3.20
ETPRH8D28-150	15	150	69.0m	1.90	2.35
ETPRH8D28-220	22	220	99.0m	1.60	1.85
ETPRH8D28-330	33	330	156m	1.30	1.45
ETPRH8D28-470	47	470	195m	1.15	1.30
ETPRH8D28-680	68	680	286m	920m	980m
ETRPH8D28-101	100	101	430m	750m	800m

Note1. Measurement frequency of Inductance value: at 100KHz

Note3. Isat: DC current at which the inductance drops 35%(typ.) from its value without current

Note4. Irms: Average current for  $40^{\circ}$ C temperature rise from  $25^{\circ}$ C ambient

Note5. Inductance tolerance: M: ±20%; N: ±30% Note6. Ordering Code: TYPE NAME: ETPRH8D28

Main Inductance: 100 (10uH)

Tolerance: M (±20%)

Note7.Packaging: Taping; Quantity: 1500 Pieces/reel

# **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 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/°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:  $0^\circ \sim 35^\circ \subset -40^\circ \subset \sim 105^\circ \subset (after PCB)$ , Humidity Range:  $50\% \sim 70\%$  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

