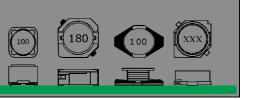
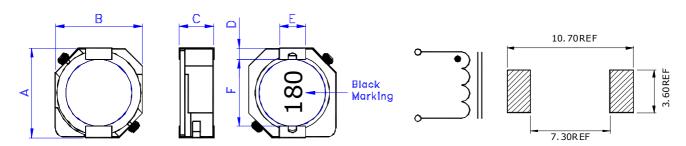
# An ISO 9001 Company SMD POWER INDUCTOR – ETPRH10D40 SERIES



### •<u>FEATURE</u>

- 1. High current capacity ,Low DCR and magnetic shielded
- Applications
- 1. Portable telephone, Notebook, and other electronic equipment
- Shape and Dimension

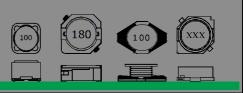
Schematics and Land Patterns(mm)



A= 10.10±0.30 m/m ; B=10.0±0.30m/m ; C=3.80±0.20m/m ; D=1.20m/m REF. ; E=3.00m/m REF ; F=7.70±0.30m/m

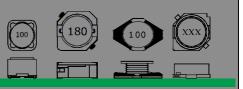
● <u>Specification</u>					
Part Number	L	Marking	DCR	Isat	Irms
	(uH)		(Ω Max)	(A)	(A)
ETPRH10D40-1R5	1.5	1R5	8.1m	10.0	6.50
ETPRH10D40-2R2	2.2	2R2	10.0m	8.00	6.20
ETPRH10D40-2R5	2.5	2R5	10.5m	7.50	6.10
ETPRH10D40-3R3	3.3	3R3	13m	6.10	5.60
ETPRH10D40-4R7	4.7	4R7	25m	5.70	5.40
ETPRH10D40-5R2	5.2	5R2	22m	5.50	5.40
ETPRH10D40-7R0	7.0	7R0	27m	4.80	4.50
ETPRH10D40-100	10	100	35m	4.40	3.80
ETPRH10D40-150	15	150	50m	3.60	3.10
ETPRH10D40-220	22	220	73m	2.90	2.50
ETPRH10D40-330	33	330	93m	2.30	2.20
ETPRH10D40-470	47	470	0.128	2.10	1.90
ETPRH10D40-680	68	680	0.213	1.50	1.42
ETPRH10D40-101	100	101	0.304	1.35	1.25
ETPRH10D40-151	150	151	0.506	1.15	0.85
ETPRH10D40-221	220	221	0.756	0.92	0.70
ETPRH10D40-331	330	331	1.090	0.70	0.52





Note1. Measurement frequency of Inductance value : at 100KHz, 0.25V Note2. Measurement ambient temperature of L, DCR and IDC : at 25°C Note3. Isat: DC current at which the inductance drops 35%(max) from its value without current Note4. Irms: Average current for 40°C temperature rise from 25°C ambient Note5. Inductance tolerance: N: ±30% ; M: ±20% Note6. Ordering Code: TYPE NAME: ETPRH10D40 Main Inductance: 100 (10uH) Tolerance : M (±20%) Note7.Packaging: Taping ; Quantity: ETPRH10D40:1000 Pieces/reel

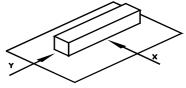




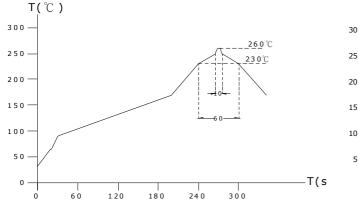
# **GENERAL CHARACTERISTICS**

- 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.
- 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  $100M\Omega$  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.
- Temperature characteristics: Inductance coefficient (0~2,000)x10-6/℃ (-25~+80℃ degree Celsius), inductance deviation within±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  $\pm 2^{\circ}$ 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:  $0^{\circ}$ C ~  $35^{\circ}$ C ;  $-40^{\circ}$ C ~  $105^{\circ}$ 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

