

TPRH4D22HP TYPE

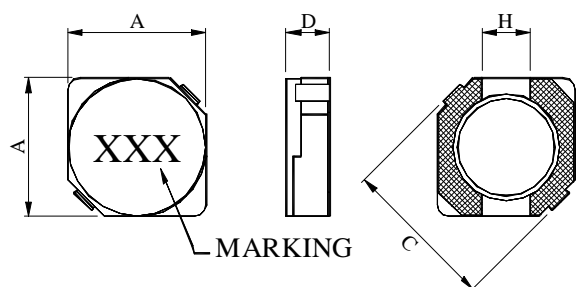
●FEATURE

1. Various high power inductors are superior to be high saturation for surface mounting

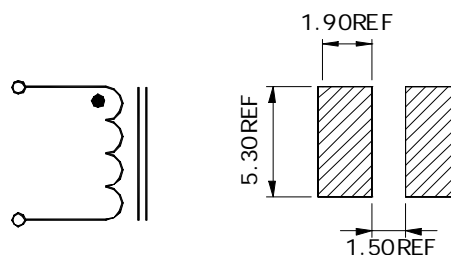
●Applications

1. DC-DC converter of portable equipment
2. Digital Camera, Notebook, Camcorder and others

●Shape and Dimension



●Schematics and Land Patterns(mm)



A=4.70±0.30mm ; D=2.40mm MAX; C=6.90mm TYP. ; H=1.50mm REF.

MARKING= Inductance value

●Specification

Part Number	L(uH)	Marking	DCR(mΩMax)	Isat(A)	Irms(A)
TPRH4D22HP-1R2□	1.2	1R2	26.5	4.20	3.20
TPRH4D22HP-1R5□	1.5	1R5	31.3	3.90	3.00
TPRH4D22HP-2R2□	2.2	2R2	44.3	3.20	2.40
TPRH4D22HP-2R7□	2.7	2R7	57.8	2.80	2.20
TPRH4D22HP-3R3□	3.3	3R3	65.1	2.50	2.00
TPRH4D22HP-4R7□	4.7	4R7	82.6	2.20	1.80
TPRH4D22HP-5R2□	5.2	5R2	92.8	2.00	1.70
TPRH4D22HP-6R3□	6.3	6R3	110.0	1.85	1.40
TPRH4D22HP-8R2□	8.2	8R2	128.3	1.65	1.35
TPRH4D22HP-100□	10	100	143.8	1.50	1.30
TPRH4D22HP-120□	12	120	187.2	1.30	1.10
TPRH4D22HP-150□	15	150	212.9	1.20	0.85
TPRH4D22HP-180□	18	180	238.7	1.10	0.80
TPRH4D22HP-220□	22	220	267.0	1.05	0.90
TPRH4D22HP-270□	27	270	393.9	0.90	0.70
TPRH4D22HP-330□	33	330	448.9	0.80	0.65
TPRH4D22HP-390□	39	390	667.9	0.75	0.52

Part Number	L(uH)	Marking	DCR(mΩMax)	Isat(A)	Irms(A)
TPRH4D22HP-470□	47	470	723.3	0.70	0.50
TPRH4D22HP-560□	56	560	810.0	0.65	0.48
TPRH4D22HP-680□	68	680	913.0	0.60	0.45
TPRH4D22HP-820□	82	820	1221	0.55	0.40
TPRH4D22HP-101□	100	101	1370	0.48	0.35

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: TPRH4D22HP

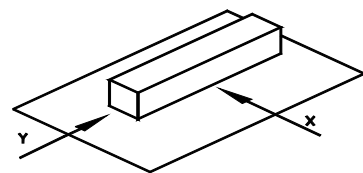
Main Inductance: 100 (10uH)

Tolerance : □ (see note 4)

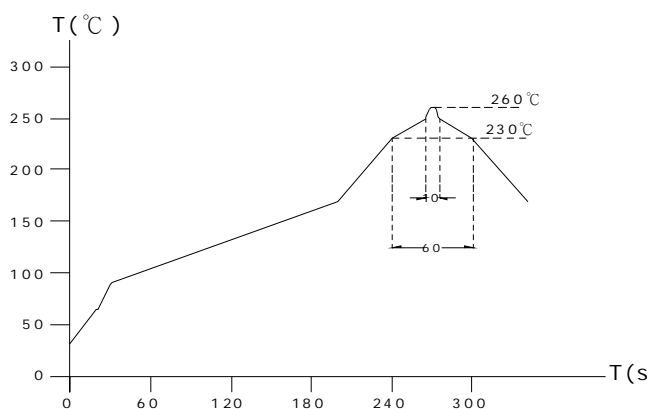
Note7. Packaging: Taping ; Quantity: 2000 Pieces/reel

GENERAL CHARACTERISTICS

1. Operating temperature range: -40°C TO $+105^{\circ}\text{C}$ (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 $100\text{M}\Omega$ 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.
6. Temperature characteristics: Inductance coefficient $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$ ($-25\sim +80^{\circ}\text{C}$).
7. Humidity characteristics(Moisture Resistance): Inductance deviation within $\pm 5\%$, after 96 hours in $90\sim 95\%$ 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 ($10\sim 55\sim 10\text{ Hz}$) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within $\pm 5\%$, after being dropped once with 981m/s^2 (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 environment: Storage condition: Temperature Range: $10^{\circ}\text{C} \sim 35^{\circ}\text{C}$ (Generally: $21^{\circ}\text{C} \sim 31^{\circ}\text{C}$) , Humidity Range: $50\% \sim 80\% \text{ RH}$ (Generally: $65\% \sim 75\%$) ; Transportation condition: Temperature Range: $-35^{\circ}\text{C} \sim 85^{\circ}\text{C}$, Humidity Range: $50\% \sim 95\% \text{ RH}$
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

