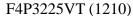
#### F4P3225VT **TYPE**

#### **FEATURE**

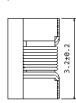
- 1. For automobile signal line
- 2. Same as TDK ADL3225VT type

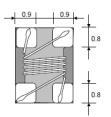
## Applications

- 1. Inductor for use with separate signal and power lines in in-vehicle PoC (Power Over Coax), etc
- Shape and Dimension and Schematics and Land Patterns(mm)

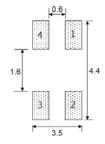












# Specification

Dimension in m/m

PART NO.	INDUCTANCE (uH) ±20%	Isat Current (mA) typ.	Irms Current (mA) typ.	DC Resistance (max.) (ohm)
F4P3225VT-4R7	4.7uH at 100KHz	720	1500	0.1
F4P3225VT-100	10uH at 100KHz	450	1300	0.15

Note1. Measurement ambient temperature of electrical : at 20°C

Note2. Isat: DC current at which the inductance drops 30%(typ) from its value without current

Note3. Irms: Average current for 40°C temperature rise from 25°C ambient(typical)

Note4. Test equipment: HP4291A

## **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) 0.5kg Min -F4P3225VT.
- 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.
- 6. Temperature characteristics: Inductance coefficient (0~2,000)x10-6/°C (-25~+80°C).
- 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 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:  $50\% \sim 80\%$  RH (Generally:  $65\% \sim 75\%$ ); Transportation condition: Temperature Range:  $-35^{\circ}\text{C} \sim 85^{\circ}\text{C}$ , Humidity Range:  $50\% \sim 95\%$  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

