

F4P4532EL TYPE

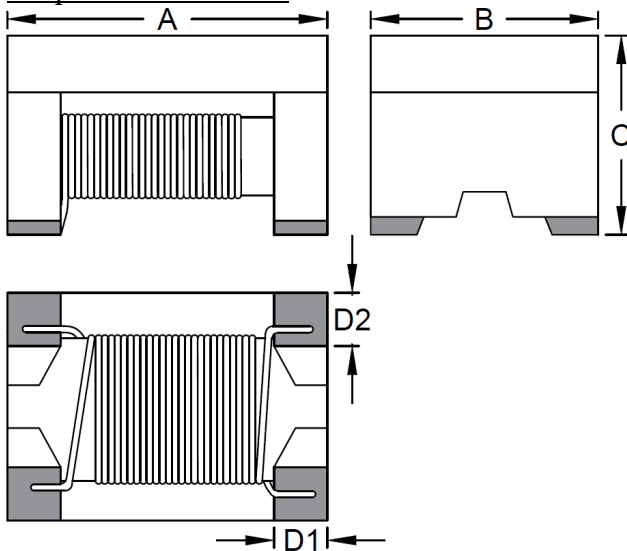
●FEATURE

1. For automobile signal line

●Applications

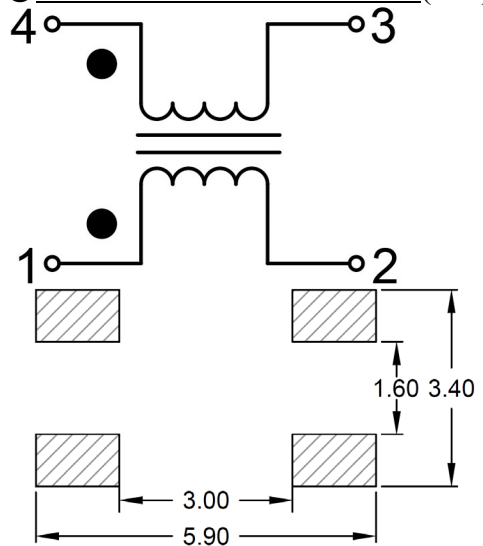
1. CAN-BUS

●Shape and Dimension



A=4.50±0.20mm ; B=3.20±0.20mm ; C=2.80±0.20mm ; D1=0.70mm Ref. ; D2=0.70mm Ref.

●Schematics and Land Patterns(mm)



●Specification

PART NO.	Common Mode Inductance		Common Mode Impedance		Rated Current (mA) Max.	Rated Voltage Withstand Voltage (Vdc)	Insulation Resistance (MΩ) Min.	DC Resistance (Ω) Max.
	(uH) at 100kHz	+50% -30%	(Ω) at 10MHz	Min. Typ.				
F4P4532EL-110	11	+50% -30%	300 600	Min. Typ.	250	50 125	10	0.6
F4P4532EL-220	22	+50% -30%	500 1200	Min. Typ.	200	50 125	10	1.0
F4P4532EL-510	51	+50% -30%	1000 2800	Min. Typ.	200	50 125	10	1.0
F4P4532EL-101	100	+50% -30%	2000 5800	Min. Typ.	150	50 125	10	2.0

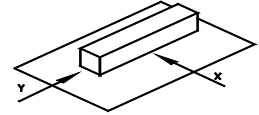
Note1. Measurement ambient temperature of electrical : at 20°C

Note2. Test equipment: HP4294A

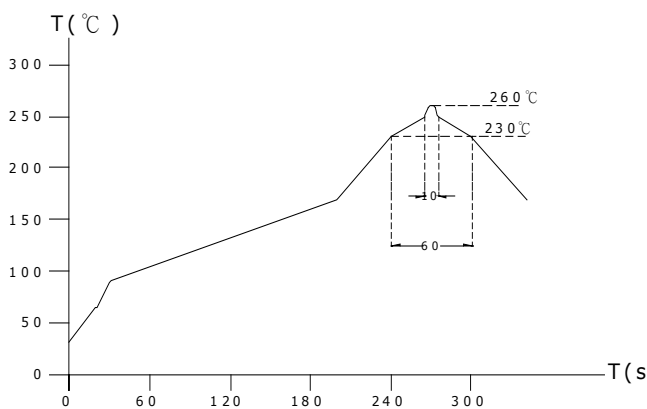
Note3. Packaging: Taping ; Quantity: 500 Pieces/Reel

GENERAL CHARACTERISTICS

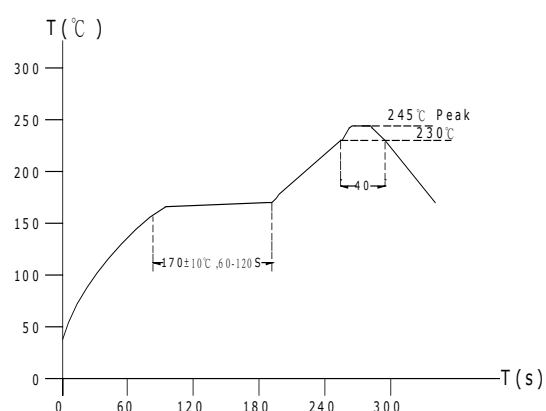
- Operating temperature range: -40 TO + 125°C(Includes temperature when the coil is heated)
- External appearance: On visual inspection, the coil has no external defects.
- Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y withstanding at below conditions.
Terminal should not peel off. (refer to figure at right) 0.5kg Min –F4P4532EL.
- Insulating resistance: Over 100MΩ at 100V D.C. between coil and core.
- Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
- Temperature characteristics: Inductance coefficient $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$ (-25~+80°C). , inductance deviation within±5.0%, after 96 hours.
- Humidity characteristics(Moisture Resistance): Inductance deviation within ±5%, after 96 hours in 90~95% relative humidity at 40 ±2°Cand 1 hour drying under normal condition.
- 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.
- 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.
- Resistance to Soldering Heat: 260°C, 10 seconds(See attached recommend reflow)
- Storage environment: Storage condition: Temperature Range: 10°C ~ 35°C (Generally: 21°C ~ 31°C) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%) ; Transportation condition: Temperature Range: -35°C ~ 85°C , Humidity Range: 50% ~ 95% RH
- Use components within 12 months. If 12 months or more have elapsed, check solderability before use.
- Reflow profile recommend:



Lead-free heat endurance test

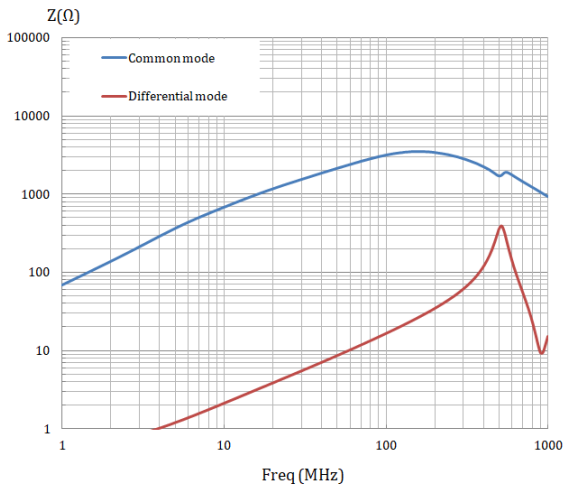


Lead-free the recommended reflow condition

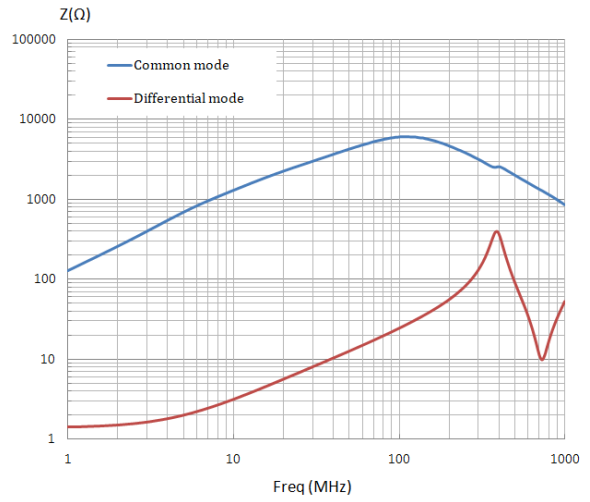


● Performance Curves(Impedance VS Frequency)

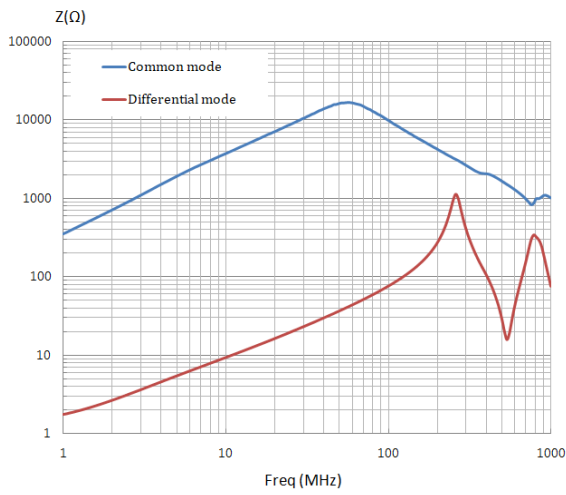
F4P4532EL-110



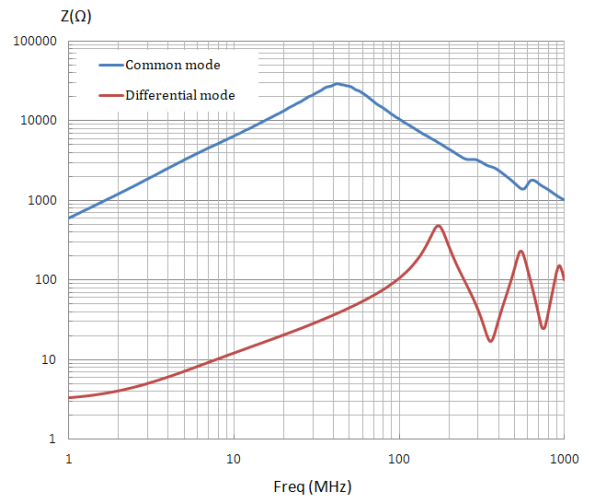
F4P4532EL-220



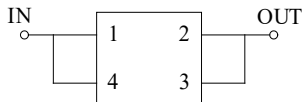
F4P4532EL-510



F4P4532EL-101



● Test circuit



COMMON MODE



NORMAL MODE