

F4P2012 TYPE

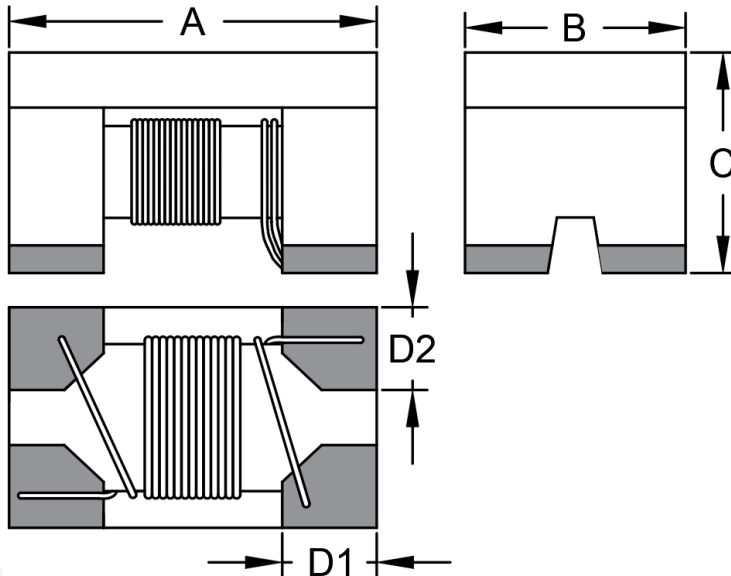
●FEATURE

1. High common mode impedance at high frequency effects excel noise suppression performance
2. Suitable for differential signal line like USB2.0, IEEE 1394 and LVDS

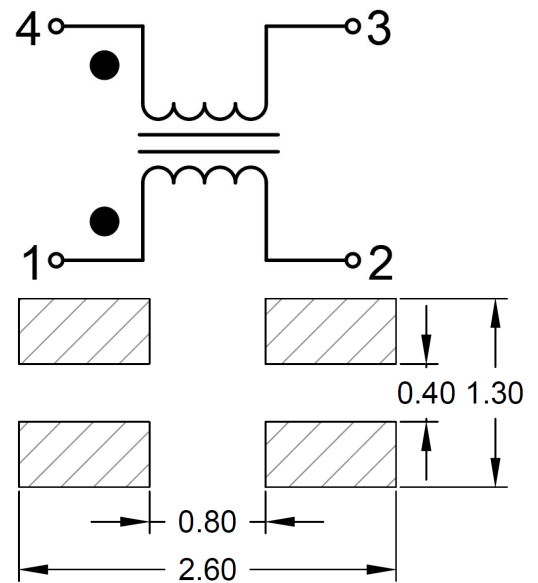
●Applications

1. Ideal for use as common-mode chokes for USB1.1/USB2.0/IEEE 1394 interface

●Shape and Dimension



●Schematics and Land Patterns(mm)



A=2.00±0.20mm ; B=1.20±0.20mm ; C=1.20±0.20mm ; D1=0.50mm Ref. ; D2=0.45mm Ref.

●Specification

PART NO.	Common Mode Impedance (Ω) at 100MHz	Rated Current (mA) Max.	Rated Voltage (Vdc)	Insulation Resistance (MΩ) Min.	Withstand Voltage (Vdc)	DC Resistance (Ω) Max.
F4P2012-670	67±25%	400	50	10	125	0.25
F4P2012-900	90±25%	330	50	10	125	0.35
F4P2012-121	120±25%	370	50	10	125	0.30
F4P2012-161	160±25%	330	50	10	125	0.33
F4P2012-181	180±25%	330	50	10	125	0.35
F4P2012-221	220±25%	310	50	10	125	0.35
F4P2012-261	260±25%	300	50	10	125	0.40
F4P2012-371	370±25%	280	50	10	125	0.40
F4P2012-671	670±25%	250	50	10	125	0.40

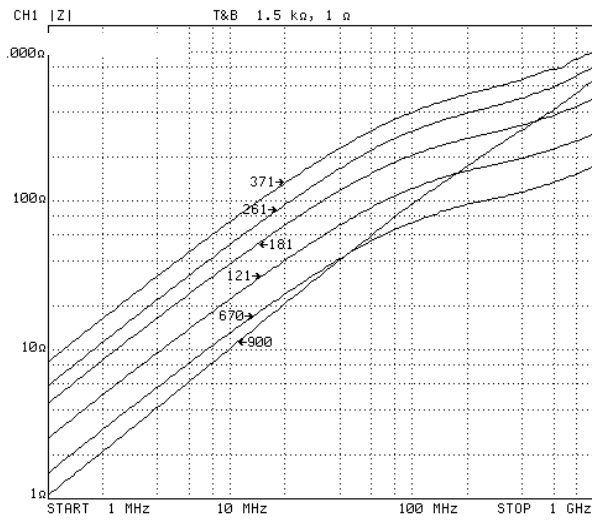
Note1. Measurement ambient temperature of electrical : at 20°C

Note2. Test equipment: HP4294A

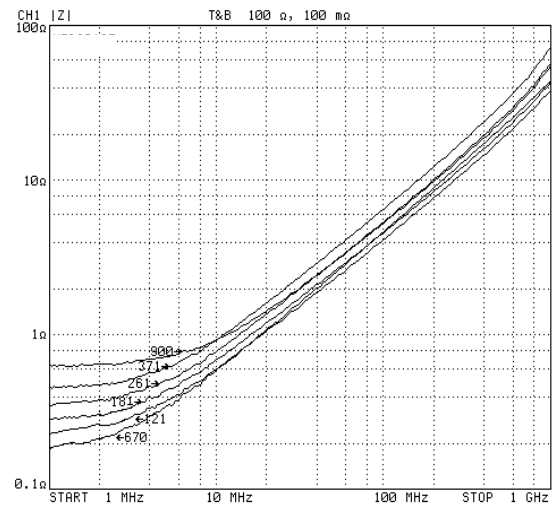
Note3. Packaging: Taping ; Quantity: 2000 Pieces/Reel

● Performance Curves

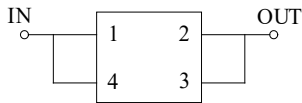
Common mode curve



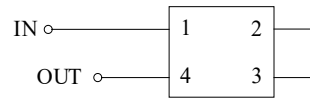
Normal mode curve



● Test circuit



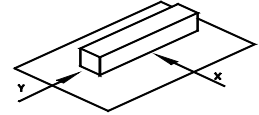
COMMON MODE



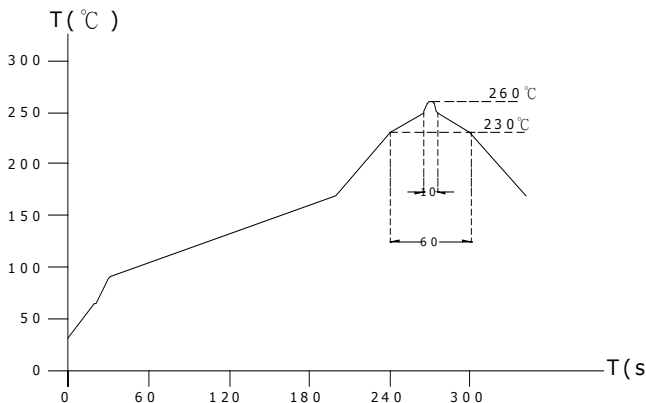
NORMAL MODE

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) 0.5kg Min –F4P4532EL.
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 $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$ (-25~+80°C). , 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°Cand 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°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
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

