F4P2012 TYPE

●FEATURE

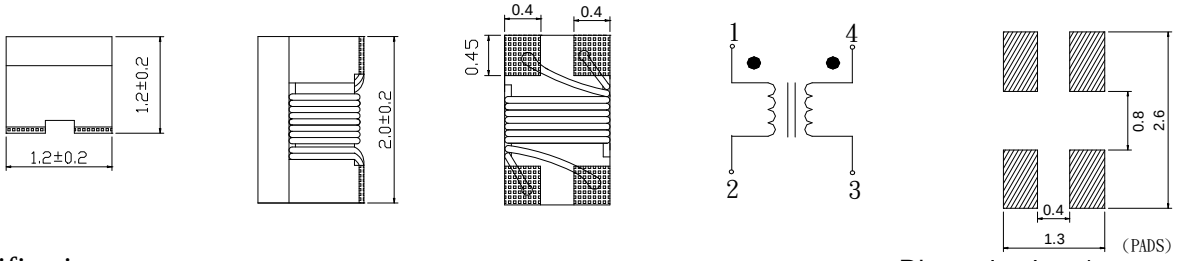
1. High common mode impedance at high frequency effects excel noise suppression performance
2. Suitable for differential signal line like USB2.0, IEEE 1394 and LVDS

●Applications

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

●Shape and Dimension and Schematics and Land Patterns(mm)

F4P 2012 (0805)



●Specification

Dimension in m/m

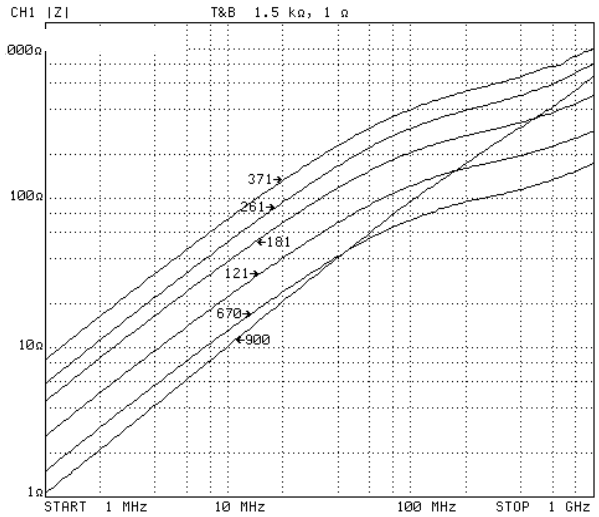
PART NO.	Common Mode Impedance (ohm) (tolerance±25%)	Rated Current (mA)	Rated Voltage (Vdc)	Insulation Resistance (M ohm)	Withstand Voltage (Vdc)	DC Resistance (max.) (ohm)
F4P 2012-670	67 (Typ.) at 100MHz	400	50	10 min	125	0.25
F4P 2012-900	90 (Typ.) at 100MHz	330	50	10 min	125	0.35
F4P 2012-121	120 (Typ.) at 100MHz	370	50	10 min	125	0.30
F4P 2012-161	160 (Typ.) at 100MHz	330	50	10 min	125	0.33
F4P 2012-181	180 (Typ.) at 100MHz	330	50	10 min	125	0.35
F4P 2012-221	220 (Typ.) at 100MHz	310	50	10 min	125	0.35
F4P 2012-261	260 (Typ.) at 100MHz	300	50	10 min	125	0.40
F4P 2012-371	370 (Typ.) at 100MHz	280	50	10 min	125	0.40
F4P 2012-671	670 (Typ.) at 100MHz	250	50	10 min	125	0.40

Note1. Measurement ambient temperature of electrical : at 20℃

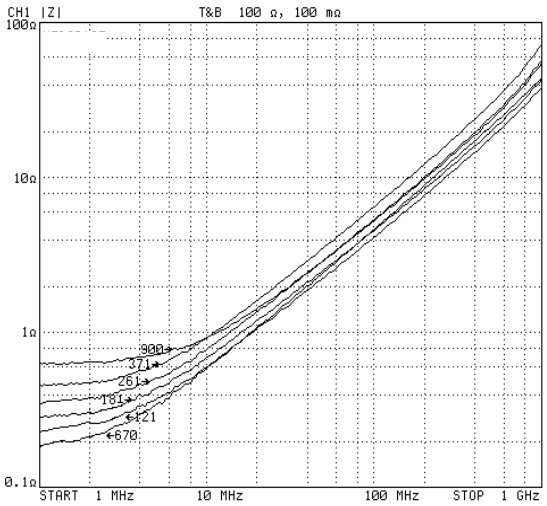
Note2. Test equipment: HP4291A

●F4P 2012

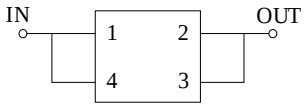
Common mode curve



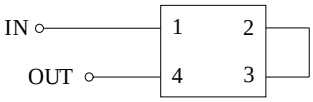
Normal mode curve



●Test circuit



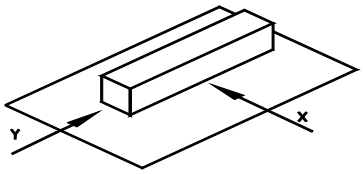
COMMON MODE



NORMAL MODE

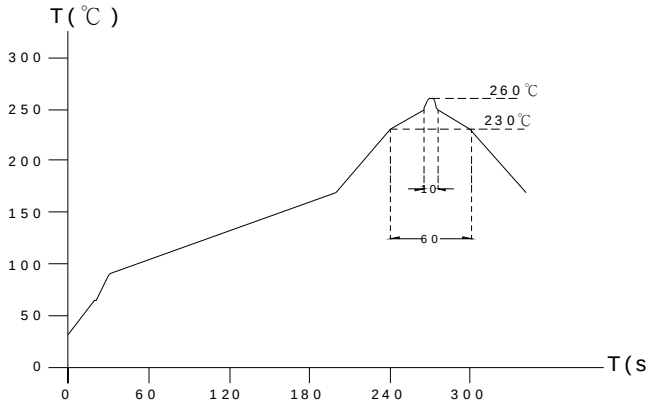
GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO + 125℃(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.Ywithstanding at below conditions.
   Terminal should not peel off. (refer to figure at right) 0.5kg Min –F4P2012.



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 (0~2,000)x10-6/℃(-25~+80℃). , 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℃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℃, 10 seconds(See attached recommend reflow)
11. Storage environment: Storage condition: Temperature Range: 10℃ ~ 35℃ (Generally: 21℃ ~ 31℃) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%) ; Transportation condition: Temperature Range: -35℃ ~ 85℃ , Humidity Range: 50% ~ 95% RH
12. Use components within 12 months. If 12 months or more have elapsed, check soldarability before use.
13. Reflow profile recommend:

Lead-free heat endurance test



Lead-free the recommended reflow condition

