

# F4P2012U3 TYPE

## ●FEATURE

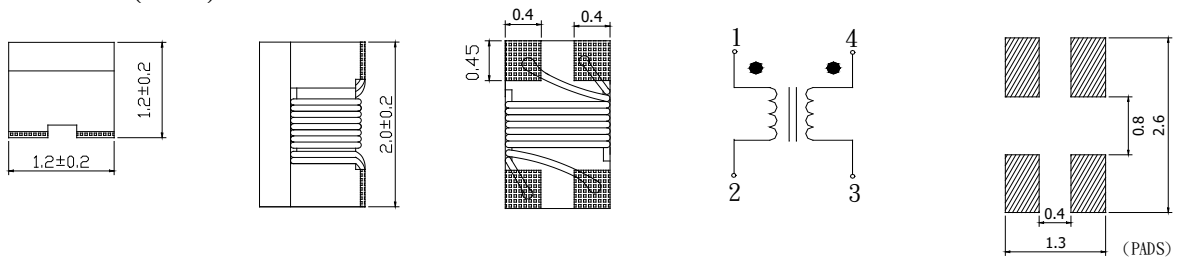
1. High common mode impedance at high frequency effects excel noise suppression performance
2. Suitable for differential signal line like USB3.0, IEEE 1394 and HDMI 2.0

## ●Applications

1. Ideal for use as common-mode chokes for PoC/USB3.0/IEEE 1394 interface

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

F4P2012U3 (0805)



Dimension in m/m

## ●Specification

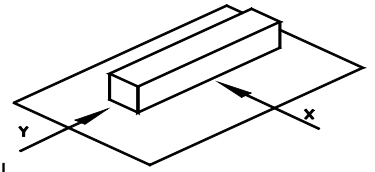
PART NO.	Common Mode at 100MHz		Rated Current (mA)	Rated Voltage (Vdc)	Insulation Resistance (MΩ)	Withstand Voltage (Vdc)	DC Resistance (max.) (Ω)
	Impedance	INDUCTANCE					
F4P2012U3-300	30Ω(±25%)	-	500	50	10 min	125	0.20
F4P2012U3-420	42Ω(±25%)	23nH min	500	50	10 min	125	0.12
F4P2012U3-600	60Ω(±25%)	-	500	50	10 min	125	0.15
F4P2012U3-670	67Ω(±25%)	-	500	50	10 min	125	0.15
F4P2012U3-900	90Ω(±25%)	47nH min	500	50	10 min	125	0.17
F4P2012U3-121	120Ω(±25%)	-	500	50	10 min	125	0.24
F4P2012U3-161	160Ω(±25%)	-	500	50	10 min	125	0.35
F4P2012U3-171	170Ω(±25%)	84nH min	500	50	10 min	125	0.25
F4P2012U3-181	180Ω(±25%)	-	500	50	10 min	125	0.25
F4P2012U3-201	200Ω(±25%)	-	500	50	10 min	125	0.25
F4P2012U3-221	221Ω(±25%)	-	500	50	10 min	125	0.40
F4P2012U3-261	260Ω(±25%)	147nH min	500	50	10 min	125	0.26
F4P2012U3-361	360Ω(±25%)	-	500	50	10 min	125	0.50
F4P2012U3-371	370Ω(±25%)	189nH min	500	50	10 min	125	0.32
F4P2012U3-501	500Ω(±25%)	273nH min	500	50	10 min	125	0.37
F4P2012U3-671	670Ω(±25%)	322nH min	500	50	10 min	125	0.45
F4P2012U3-901	900Ω(±25%)	413nH min	400	50	10 min	125	0.65

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

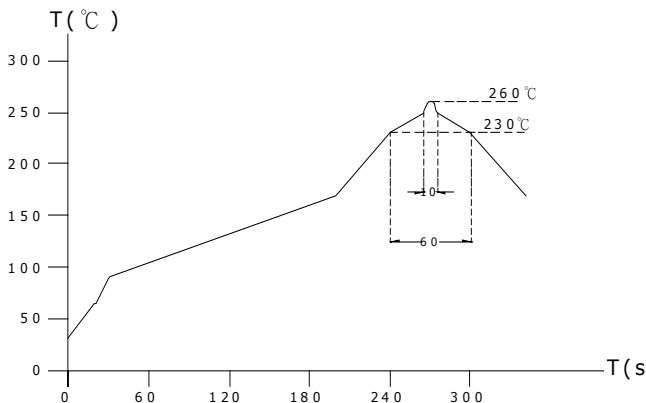
Note2. Test equipment: HP4291A

## 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.
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 –F4P2012U3.
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  $\pm 5.0\%$ , after 96 hours.
7. Humidity characteristics(Moisture Resistance): Inductance deviation within  $\pm 5\%$ , after 96 hours in 90~95% 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 (10~55~10 Hz) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within  $\pm 5\%$ , after being dropped once with 981m/s<sup>2</sup> (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 condition: Temperature Range: 0°C ~ 35°C ; -40°C ~ 125°C (after PCB) · Humidity Range: 50% ~ 70% 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

