



PCL Series • 10/100 Base-T Single Port Transformer Modules for PC Cards

Features

- Low profile (2.16 mm max) for PC card and cardbus applications
- Consistent and reliable coplanarity
- Excellent quality at extremely competitive price due to high volume production
- Manufactured in an ISO-9001:2000, TS-16949:2002 and ISO-14001:2004 certified Talema facility
- Fully RoHS compliant and meets lead free reflow level J-STD-020C

Electrical Specifications @ 25°C

Inductance: 350μH minimum @ 100kHz, 100mV, 8mA

Minimum isolation voltage: 1500 Vrms

Operating Temperature Range: -40°C to +85°C

Storage Temperature: -40°C to +125°C

Standard Packing: Tape and Reel



Quality and consistency is guaranteed through 100% testing of the specified parameters for primary inductance, leakage inductance, turns ratio, DC resistance and interwinding capacitance. This ensures that the return loss and pulse wave shape requirements can be fully maintained. Additionally, all parts are tested for 1500V minimum isolation.

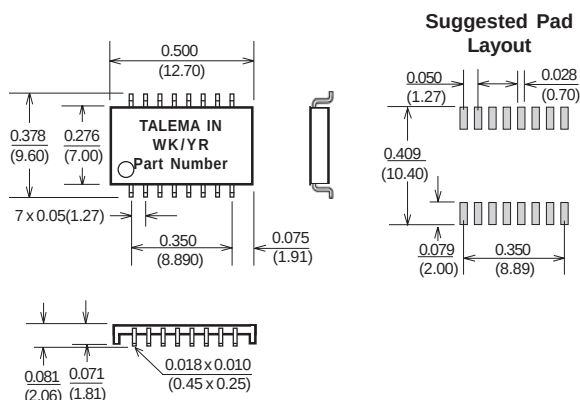
Applications

Talema 10/100Base-T transformer modules contain transmit and receive isolation transformers to maintain consistent wave shape and suppression of common mode noise while providing equipment isolation per IEEE 802.3. High impedance common mode quad chokes for additional EMI suppression have been added on some models as required for FCC and CISPR 22 Class B certification.

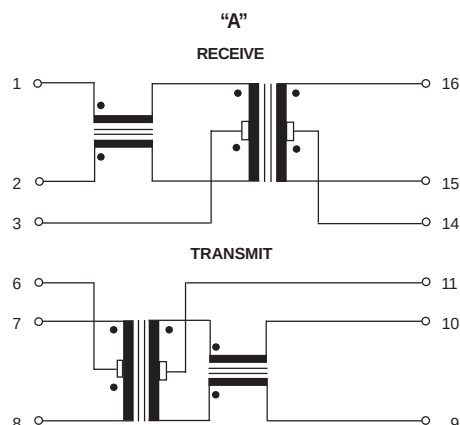
PCL Series - 10/100Base-T Single Port Isolation Transformer Modules for PC Cards

Part Number	Turns Ratio (Pri:Sec)		Insertion Loss (dB Max)	Return Loss (dB Min @ 100 Ohm)			Differential to Common Mode Rejection (dB Min)			Crosstalk (dB Typ)			Schematic
	Tx	Rx	0.1 - 100MHz	30MHz	60MHz	80MHz	30MHz	60MHz	100MHz	30MHz	60MHz	100MHz	
PCL-100A	1:1	1:1	-0.9	-16	-12	-11	-35	-33	-20	-50	-45	-40	A
PCL-200A	1:1	1:1	-0.9	-16	-12	-11	-35	-33	-20	-50	-45	-40	A
PCL-300A	1:1	1:1	-1.0	-16	-12	-12	-42	-37	-33	-45	-40	-35	A
PCL-300B	1:1	1:1	-2.0	-18	-14	-12	-40	-35	-30	-50	-45	-40	B
PCL-300C	1:1	1:1	-2.0	-18	-12	-12	-40	-35	-30	-45	-45	-37	C

PCL-100



Schematic



Surface coplanarity will be 0.004 (0.10) maximum

Dimensions: Inches (Millimeters)

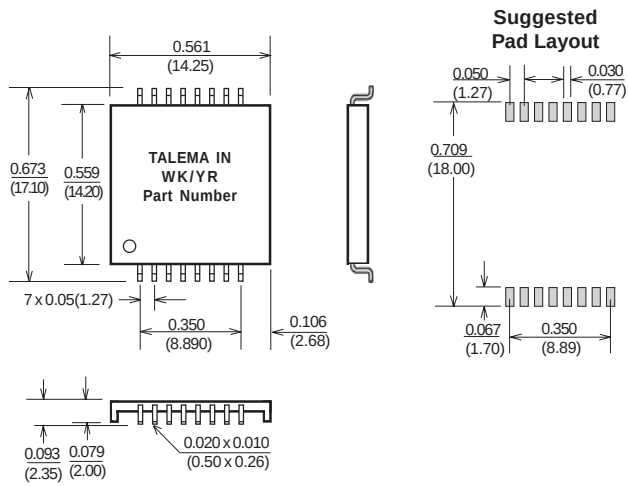
Tolerance: ±0.010 (0.25) unless specified otherwise

Packaging & Schematics • PLC Series 10/100Base-T Single Port Modules for PC Cards

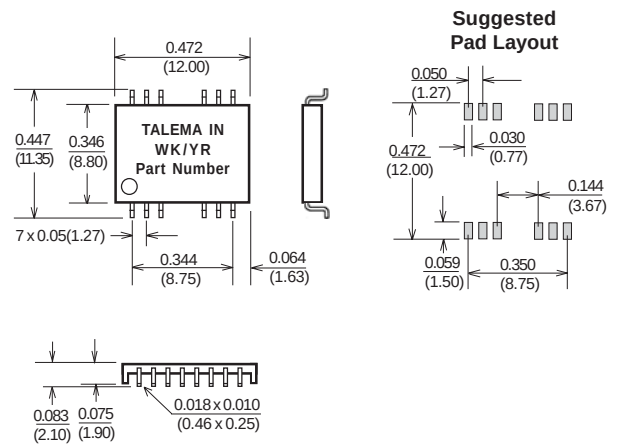
Surface coplanarity will be 0.004 (0.10) maximum

Dimensions: Inches (Millimeters)
Tolerance: ± 0.010 (0.25) unless specified otherwise

PCL-200



PCL-300



Schematics

