



Quad Port Auto MDI/MDIX 10/100Base-T Transformer Isolation Modules

Features

- Designed for Broadcom BCM5226/5228, Level One LXT9784/9785 and Kendin KS8995/8995E chipsets
- Low profile (5.8mm) and light weight (4.5 g) 10/100Base-T Quad Port isolation transformer modules designed for Auto MDI/MDIX applications
- Modules meet requirements of IEEE 802.3u and ANSI X3.263
- SMD packages facilitate pick and place compatibility and speed of placement while providing consistent and reliable coplanarity
- 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

Leakage Inductance: 0.4µH @ 1MHz

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

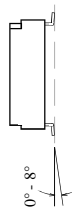
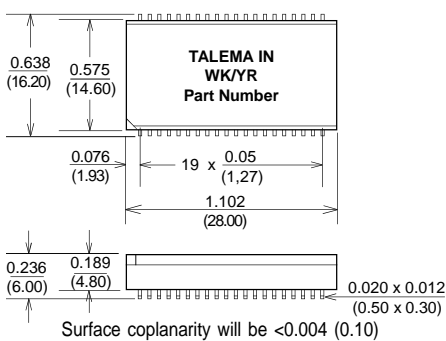
Quality and consistency is guaranteed through 100% testing of the specified parameters for primary inductance, leakage inductance, turns ratio, DC resistance and interwinding capacitance. This ensures that the return loss and pulse wave shape requirements can be fully maintained. Additionally, all parts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

Applications

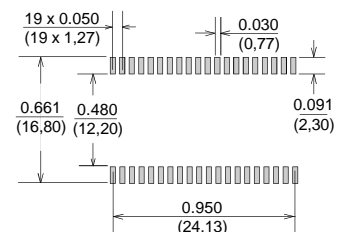
Talema 10/100BaseT Quad transformer modules contain transmit and receive isolation transformers to maintain consistent wave shape and suppression of common mode noise while providing equipment isolation per IEEE 802.3. High impedance common mode quad chokes for additional EMI suppression have been added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

TEXQ Series - Quad Port MDI/MDIX 10/100Base-T Isolation Transformer Modules

Part Number	Turns Ratio ±2%		Insertion Loss (dB Typ) 0.1 - 100 MHz	Return Loss (dB Min)				Crosstalk (dB Typ)				Differential to Common Mode Rejection (dB Typ)		Schematic
	Tx	Rx		0.5-30 MHz	40 MHz	50 MHz	60-80 MHz	1 MHz	30 MHz	60 MHz	100 MHz	1-60 MHz	60-200 MHz	
TEXQ-400M-J	1 : 1	1 : 1	-1.0	-18	-14.6	-13.1	-10	-65	-50	-40	-35	-40	-36	M
TEXQ-400N-J	1ct : 1ct	1ct : 1ct	-1.0	-18	-14.6	-13.1	-10	-55	-45	-40	-33	-36	-24	N
TEXQ-400N1-J	1ct : 1ct	1ct : 1ct	-1.0	-18	-14.6	-13.1	-10	-55	-45	-40	-33	-36	-24	N1
TEXQ-405N-J	1.89ct:1ct	1ct:1ct	-1.0	-18	-16	-14	-12	-32	-32	-32	-32	-40	-40	N



Suggested Pad Layout

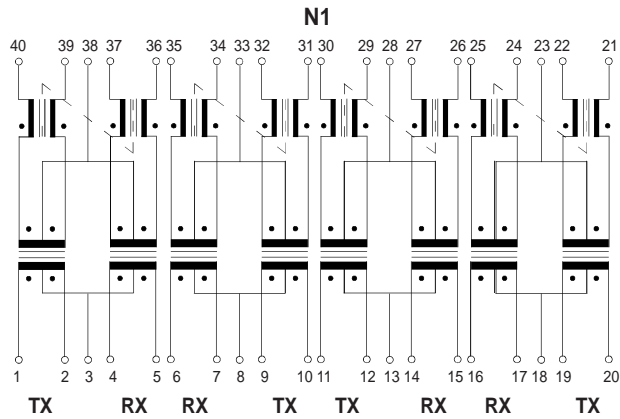
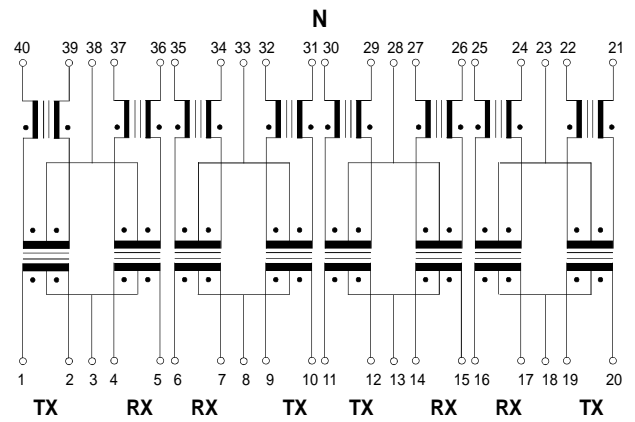
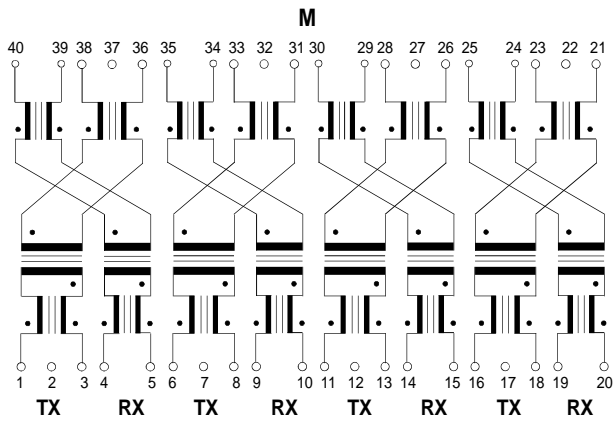


D imensions: Inches (Millimeters)
Tolerance: ±0.010 (0.25) unless specified otherwise

Schematics on following page

Schematics • Quad Port Auto MDI/MDIX 10/100Base-T Transformer Modules

Schematics



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