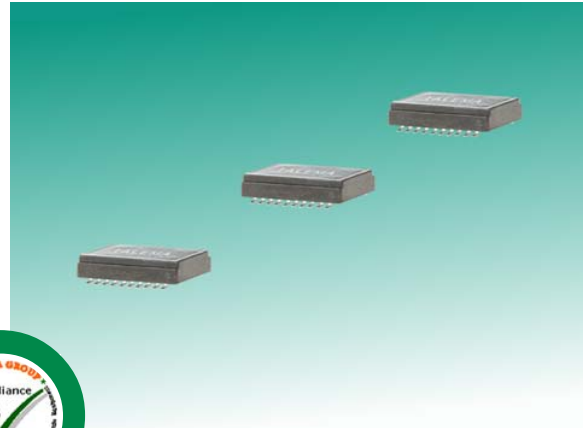




# Dual Port SMD Auto MDI/MDIX 10/100Base-T Isolation Transformer Modules

## Features

- Low profile (6.0mm) and light weight (3.0 g) 10/100Base-T Dual Port isolation transformer modules facilitate pick and place compatibility and speed of placement
- Dual port modules meet requirements of IEEE 802.3u and ANSI X3.263
- 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

C<sub>w/w</sub>: 20pF typical

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.

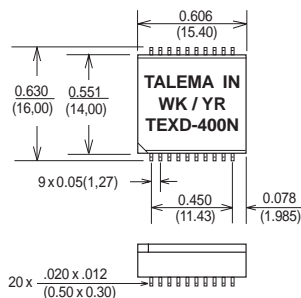
## Applications

Talema 10/100BaseT Dual 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.

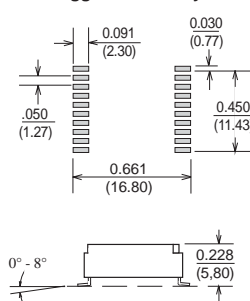
## TEXD - Dual Port SMD MDI/MDIX 10/100Base-T Isolation Transformer Module

Part Number	Turns Ratio ±2%		Insertion Loss (dB Typ)	Return Loss (dB Min)				Crosstalk (dB Typ)				Common to Common Rejection Ratio 0.1-60MHz (dB Typ)		Differential to Common Mode Rejection (dB Typ)		Schematic
	Tx	Rx		0.1 - 100 MHz	2-30 MHz	40 MHz	50 MHz	60-80 MHz	1 MHz	30 MHz	60 MHz	100 MHz	Transmit	Receive	1-60 MHz	
TEXD-400N-J	1ct:1ct	1ct:1ct	-1.0	-18	-14.6	-13.1	-10	-55	-45	-40	-33	-40	-30	-36	-24	N

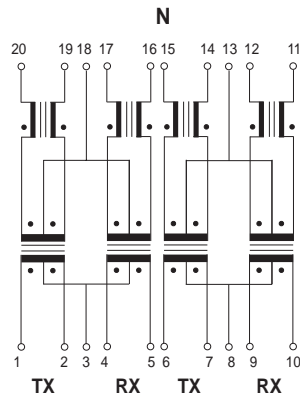
## Dimensions



## Suggested Pad Layout



## Schematic



Surface coplanarity will be 0.004 (0.01) maximum

Dimensions: Inches (Millimeters)

Tolerance: ±0.010 (0.25) unless specified otherwise