



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

### Features

- Low profile (5.8mm) and light weight (4.0 g) 10/100Base-T Dual Port isolation transformer modules facilitate pick and place compatability and speed of placement
- SMD package for high density board placement
- Dual port modules meet requirements of IEEE 802.3u and ANSI X3.263
- Consistent and reliable coplanarity
- Excellent quality at extremely competitive price due to high volume production
- Manufactured in ISO-9001 approved Talema facility

### Electrical Specifications

Ratings@ 25°C ambient

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

Leakage Inductance: 0.4µH @ 1MHz

C<sub>www</sub>: 20pF Typical

Minimum Isolation Voltage: 1500 Vrms



Operating Temperature: 0° to +70°C  
 Storage Temperature: -25°C to +105°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.

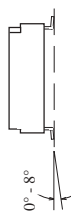
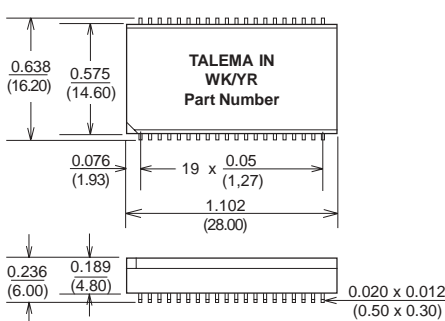
### Applications

Talema 10/100BaseT Dual transformer modules contain transmit and receive isolation transformers to maintain consistant 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.

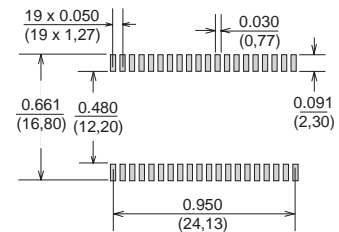
### TED Series - SMD Dual Port 10/100Base-T Isolation Transformer Modules

Part Number	Turns Ratio ±2%		Insertion Loss (dB Typ)	Return Loss (dB Min)				Crosstalk (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	1-60 MHz	
TED-200A-J	1ct:1ct	1ct:1ct	-1.2	-16	-14	-13	-12	-50	-45	-40	-35	-37	-33	A
TED-200B-J	1ct:1ct	1ct:1ct	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-45	-35	B
TED-200C-J	1ct:1ct	1ct:1ct	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-40	-30	C
TED-200E-J	1ct:1ct	1ct:1ct	-1.0	-16	-14.4	-13	-12	-50	-45	-40	-35	-37	-33	E
TED-200G-J	1ct:1ct	1ct:1ct	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-53	-40	G
TED-200H-J	1ct:1ct	1ct:1ct	-0.5	-21	-17	-14.5	-12	-65	-55	-45	-35	-45	-35	H

### Dimensions



### Suggested Pad Layout



Surface coplanarity will be <0.004 (0.10)

Dimensions: Inches (Millimeters)

Tolerance: ±0.010 (0.25) unless specified otherwise

# Schematics • SMD Dual Port 10/100Base-T Isolation Transformer Modules

