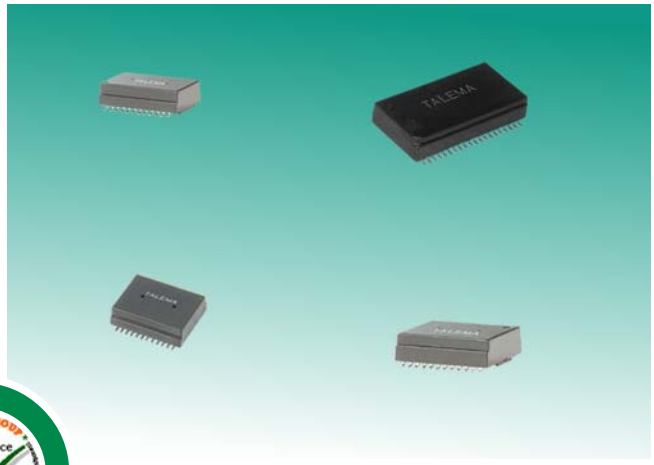
Dual Port SMD 10/100Base-T Isolation Transformer Modules



Features

- Low profile and light weight 10/100 BaseT modules facilitate pick and place compatability and speed of placement
- Meets requirements of IEEE 802.3u and ANSIX3.263
- 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
Leakage Inductance: 0.4µH @ 1MHz
$C_{W/W:}$ 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 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	60-200 MHz	
TED-100A	1ct:1ct	1ct:1ct	-1.2	-18	-16	-14	-12	-50	-42	-40	-35	-39	-33	A
TED-104A	2ct:1ct	1ct:1ct	-1.2	-18	-16	-14	-12	-50	-42	-40	-35	-39	-33	A
TED-100B	1ct:1ct	1ct:1ct	-1.1	-18	-16	-14	-12	-35	-35	-35	-35			B
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
TED-300A	1ct:1ct	1ct:1ct	-1.1	-18	-16	-14	-12	-50	-42	-38	-33	-39	-33	A
TED-300B	1ct:1ct	1ct:1ct	-1.1	-18	-16	-14	-12	-50	-44	-39	-35	-37	-30	B
TED-300C	1ct:1ct	1ct:1ct	-1.2	-18	-16	-14	-12	-60	-45	-40	-35	-45	-35	C
TED-300D	1ct:1ct	1ct:1ct	-1.2	-18	-16	-14	-12	-60	-45	-40	-35	-45	-35	D
TED-400D	1ct:1ct	1ct:1ct	-1.2	-16	-14	-13.5	-10	-55	-45	-40	-35	-30	-30	D

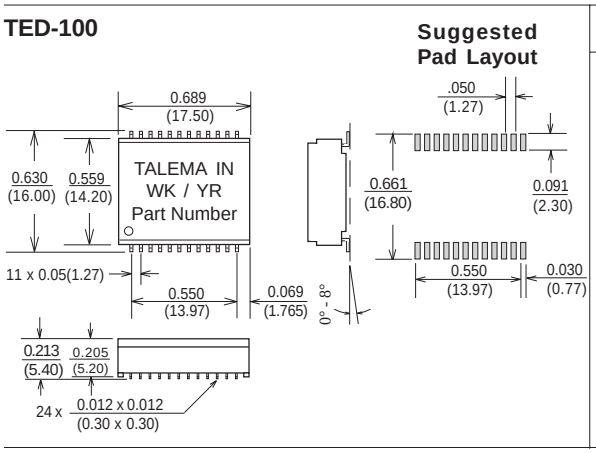
Dimensions and Schematics on following pages

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

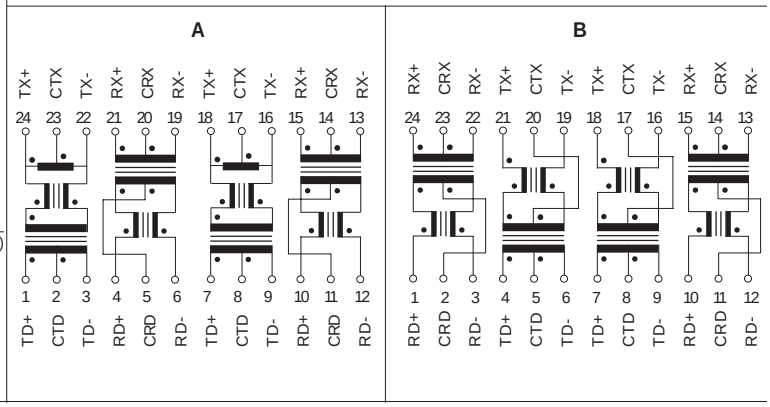
Dimensions: Inches (Millimeters)
Tolerance: ±0.010 (0.25) unless specified otherwise

Surface coplanarity will be 0.004 (0.01) maximum

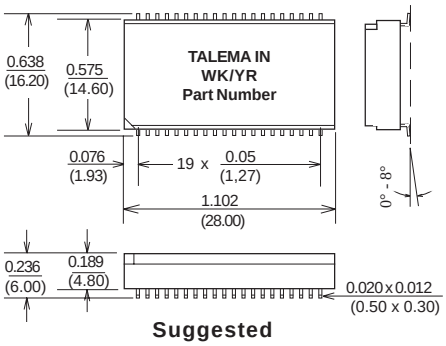
TED-100



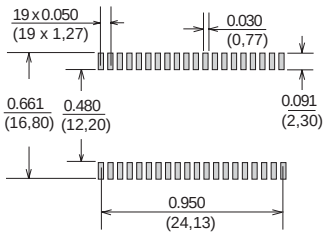
Schematic



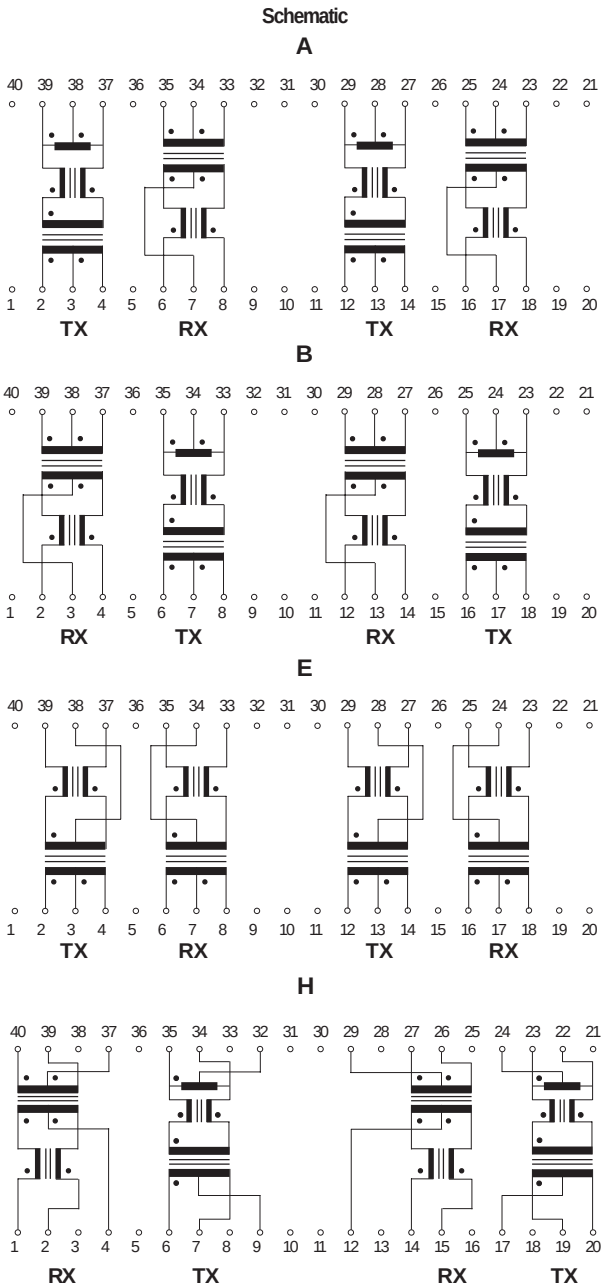
TED-200



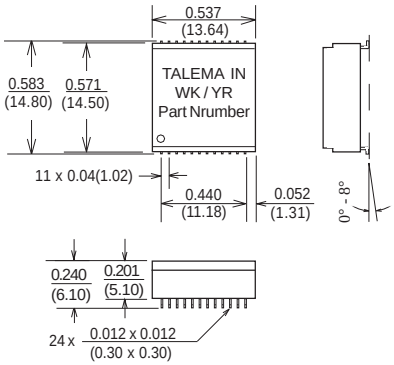
Suggested Pad Layout



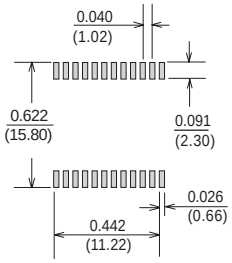
Schematic



TED-300

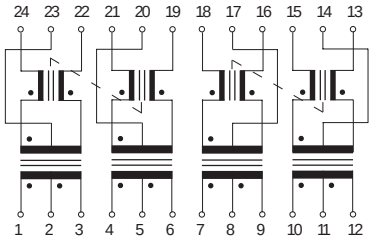


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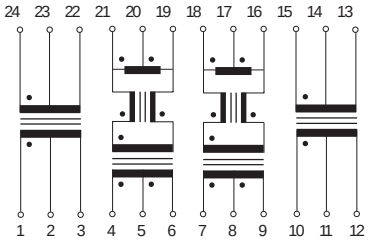


Schematics

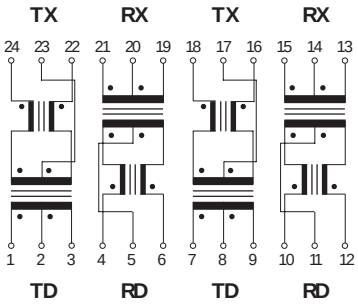
A



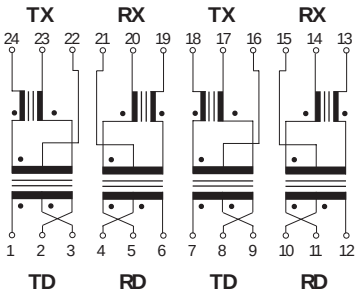
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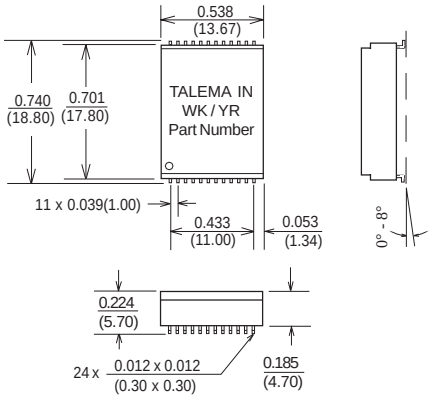
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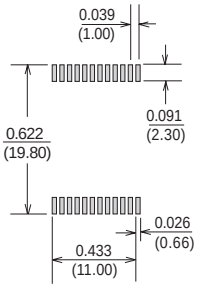
D



TED-400

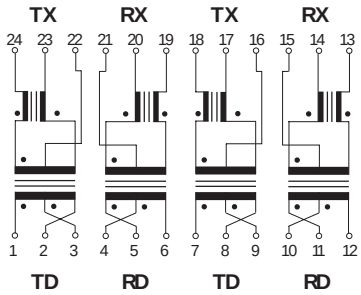


Suggested Pad Layout



Schematic

D



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