



TFG • 10/100 Base-T Single Port Transformer Module

Features

- Low profile and light weight 10/100 BaseT modules facilitate pick and place compatibility and speed of placement
- Meets requirements of IEEE 802.3u and ANSI X3.263
- Consistent and reliable coplanarity
- Footprint compatible with Gigabit Ethernet layout
- 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

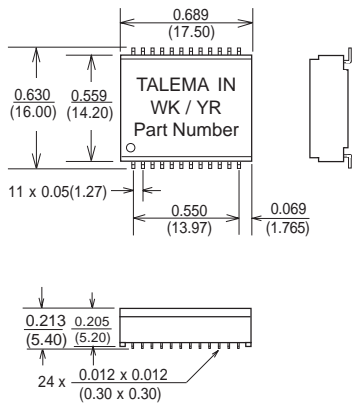
Inductance: 350µH minimum @ 100kHz, 100mV, 8mA
 Minimum isolation voltage: 1500 Vrms
 Operating Temperature Range: -40°C to +85°C
 Storage Temperature: -40°C to +125°C
 Standard Packing: Tape and Reel



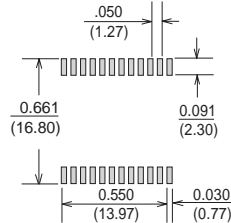
Quality and consistency is guaranteed through 100% testing of the specified parameters for primary inductance, leakage inductance, turns ratio, DC resistance and interwinding capacitance. This ensures that the return loss and pulse wave shape requirements can be fully maintained. Additionally, all parts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

TFG - 10/100Base-T Single Port Isolation Transformer Modules														
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 - 100 MHz	1-30 MHz	40 MHz	50 MHz	80 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	
TFG-100A	1ct:1ct	1ct:1ct	-1.2	-18	-16	-14	-12	-42	-36	-33	-42	-40	-33	A
TFG-100B	1ct:1ct	1ct:1ct	-1.2	-18	-16	-14	-12	-42	-36	-33	-42	-40	-33	B

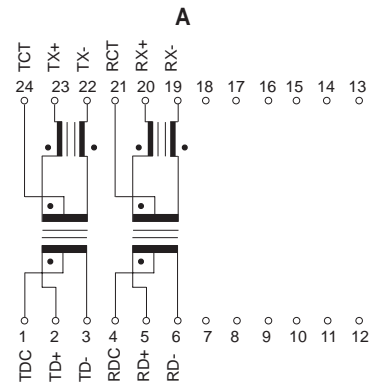
TFG-100



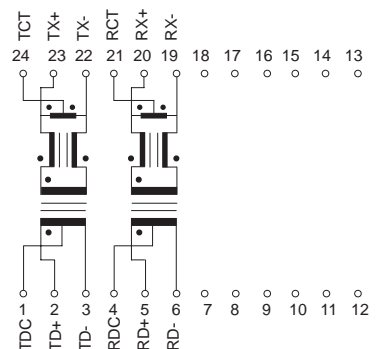
Suggested Pad Layout



Schematic



B



Surface coplanarity will be 0.004 (0.10) maximum

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