

10/100Base-T Single Port LAN Transformer w/ PoE



12.70 x 9.40 x 5.70mm

ALAN-505

RoHS/RoHS II Compliant

FEATURES:

- Meet IEEE802.3 specification
- Power Over Ethernet(PoE)IEEE802.3at compliant performance
- RoHS peak reflow temperature rating 245°C
- 1500Vrms Hi-Pot

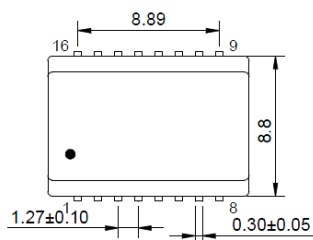
APPLICATIONS:

- Designed for most leading PHY IC manufacturers such as Broadcom, Marvell, Micrel, & Microsemi
- 10/100Base-T Ethernet-LAN
- VoIP/PoE Capabilities
- Symmetrical Tx & RX channels for Auto MDI/MDIX capability
- Provides signal conditioning, EMI suppression and signal isolation.
- Hubs/Switches/Routers/Servers/NIC Cards

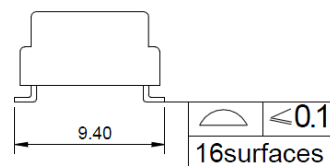
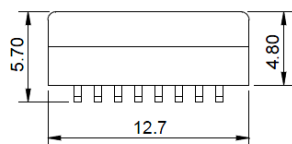
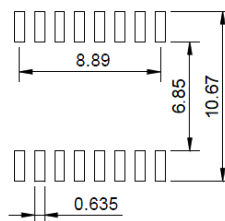
STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	0		+70	°C	
Storage Temperature	-40		+85	°C	
Turn Ratio (± 2%)		1CT:1CT			
Inductance (OCL)	350			μH	100KHz/0.1V@8mA
Leakage Inductance (LL)			0.5	μH	100KHz/0.1V
Cw/w			30	pF	100KHz/0.1V
DC Resistance			1.2	Ω	
Insertion Loss			-1.0	dB	0.1-100MHz
Return Loss		-16		dB	30MHz
		-12			60MHz
		-11			80MHz
Cross Talk		-50		dB	30MHz
		-45			62MHz
		-40			100MHz
Differential to Common Mode Rejection	-30			dB	1-100MHz
Common Mode Rejection		-35		dB	30MHz
		-33			50MHz
		-20			100MHz
		-20			150MHz
PoE Current Capacity			350	mA	
Hi-Pot	1500Vrms/0.5mA/60Sec or 1650Vrms/0.5mA/2Sec				

OUTLINE DIMENSIONS:



Recommended Land Pattern



Dimensions: mm (Unless otherwise specified, tolerances are ±0.25)

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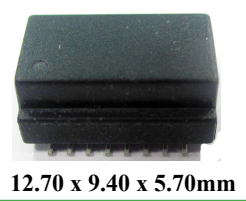
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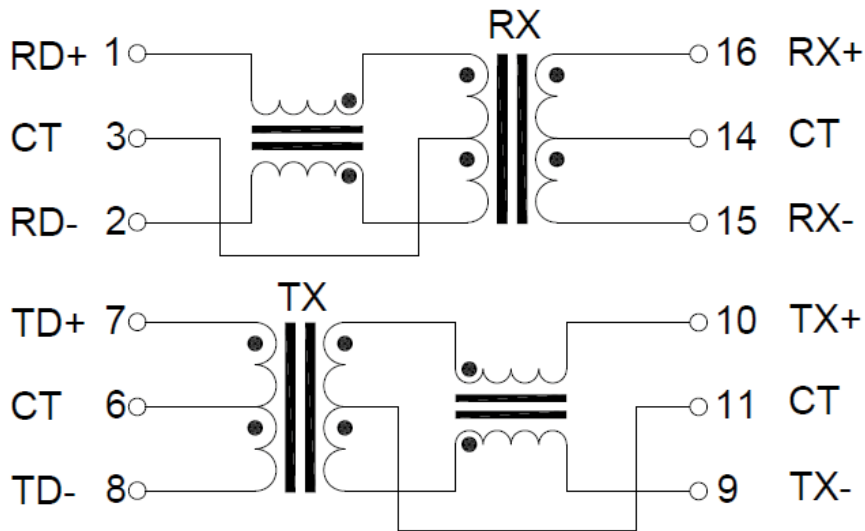
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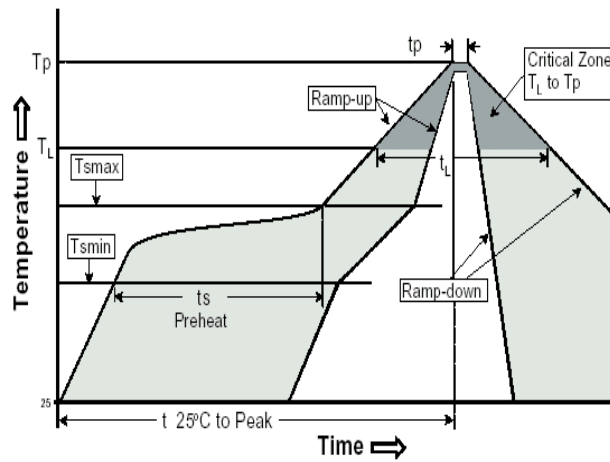
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SCHEMATIC:



REFLOW PROFILE:



Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate (T_{smax} to T_p)	3°C /second max.
Preheat	
-Temperature Min (T_{smin})	150°C
-Temperature Max (T_{smax})	200°C
-Time (t_{smin} to t_{smax})	60-120 seconds
Time maintained above:	
-Temperature (T_L)	217°C
-Time (t_L)	60-150 seconds
Peak/Classification Temperature (T_p)	245±5°C
Time within 5°C of actual Peak Temperature (t_p)	20-40 seconds
Ramp-Down Rate	6°C /seconds max
Time 25°C to Peak Temperature	8 minutes max.

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