

# 10/100 Base-T Single Port LAN Transformer w/ PoE+ Extended Temperature 3 Cores Solution

ALAN-2202

RoHS/RoHS II Compliant



12.70 x 9.40 x 5.70mm

## FEATURES:

- Meet IEEE802.3 specification
- Power Over Ethernet(PoE+)IEEE802.3at compliant performance
- Extended Temperature (-40°C - +85°C)
- ROHS peak reflow temperature rating 245°C
- 1500Vrms Hi-Pot

## APPLICATIONS:

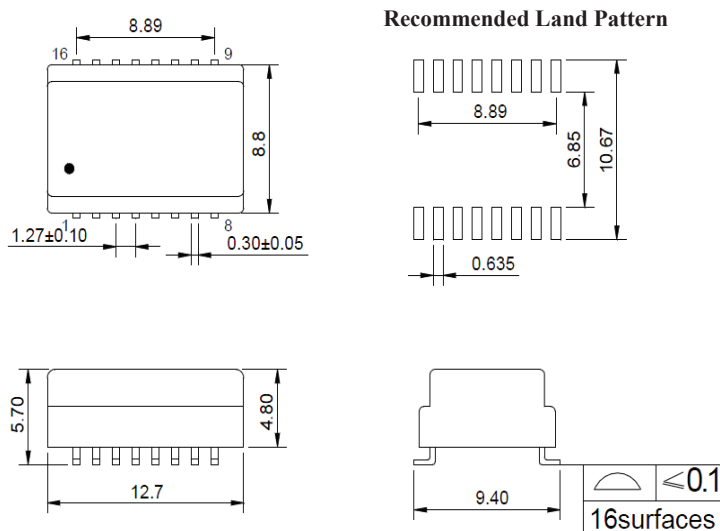
- Designed for most leading PHY IC manufacturers such as Broadcom, Marvell, Micrel, & Microsemi
- 10/100Base-T Ethernet-LAN
- VoIP/PoE+ Capabilities
- Symmetrical Tx & RX channels for Auto MDI/MDIX capability
- Provides signal conditioning, EMI suppression and signal isolation.
- Hubs/Switches/Routers/Servers/NIC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

## STANDARD SPECIFICATIONS:

### Key Electrical Specifications @ 25°C

Parameters	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	-40		+85	°C	
Storage Temperature	-40		+85	°C	
Turn Ratio ( $\pm 5\%$ )		1CT:1CT			
Inductance (OCL)	350			$\mu\text{H}$	100KHz/0.1V@8mA
Leakage Inductance (LL)			0.5	$\mu\text{H}$	100KHz/0.1V
Cw/w			30	pF	100KHz/0.1V
DC Resistance			1.2	$\Omega$	
Insertion Loss			-1.1	dB	1-100MHz
Return Loss	-18			dB	1-30MHz
	-16				40MHz
	-13				50MHz
	-12				60-80MHz
Cross Talk		-30		dB	1-100MHz
Differential to Common Mode Rejection	-30			dB	1-100MHz
Common Mode Rejection	-30			dB	1-100MHz
PoE Current Capacity			720	mA	
Hi-Pot	1500Vrms				

## OUTLINE DIMENSIONS:



Dimensions: mm (Unless otherwise specified, tolerances are  $\pm 0.25$ )

Dimension: mm



5101 Hidden Creek Ln Spicewood TX 78669  
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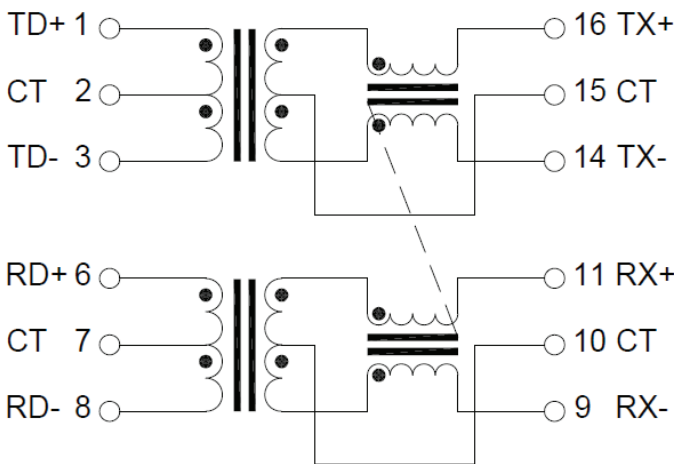
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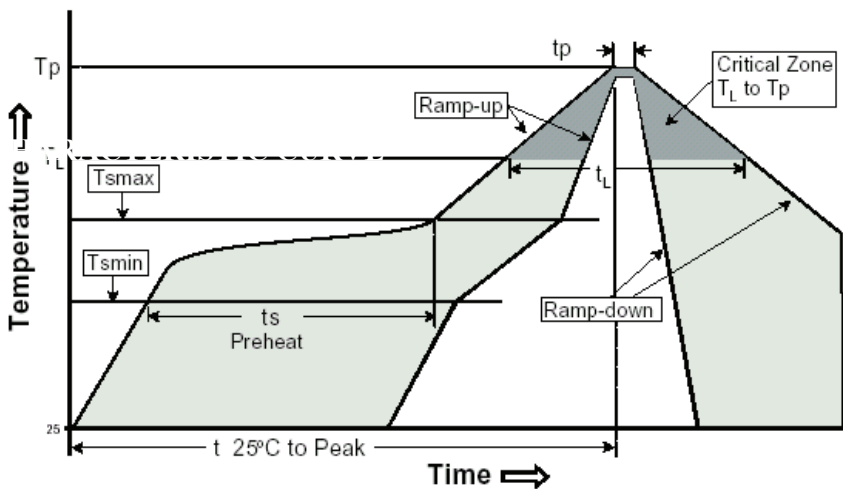


12.70 x 9.40 x 5.70mm

SCHEMATICS



REFLOW PROFILE:

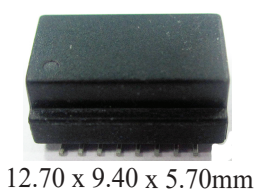


Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate (Ts <sub>max</sub> to Tp)	3°C /second max.
Preheat -Temperature Min (Ts <sub>min</sub> ) -Temperature Max (Ts <sub>max</sub> ) -Time (ts <sub>min</sub> to ts <sub>max</sub> )	150°C 200°C 60-120 seconds
<b>Time maintained above:</b> -Temperature (T <sub>L</sub> ) -Time (t <sub>L</sub> )	217°C 60-150 seconds
Peak/Classification Temperature (Tp)	245±5°C
Time within 5°C of actual Peak Temperature (tp)	20-40 seconds
Ramp-Down Rate	6°C /seconds max
Time 25°C to Peak Temperature	8 minutes max.

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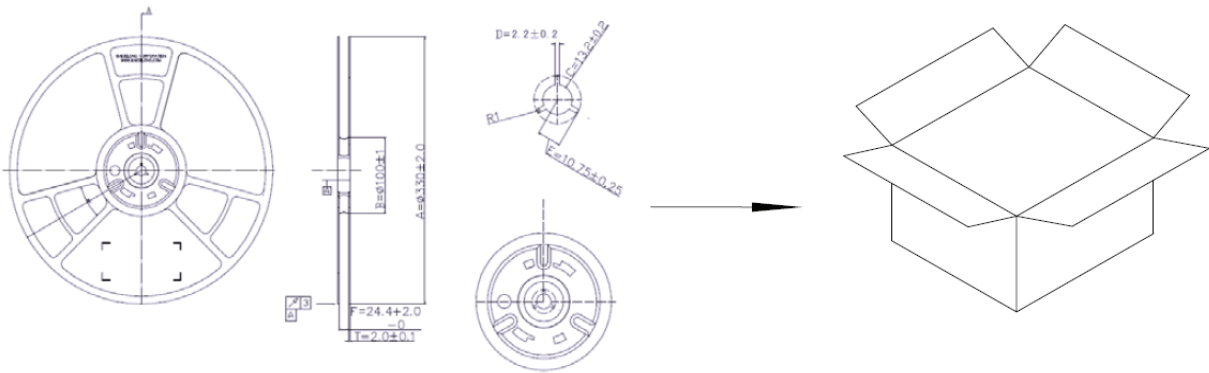
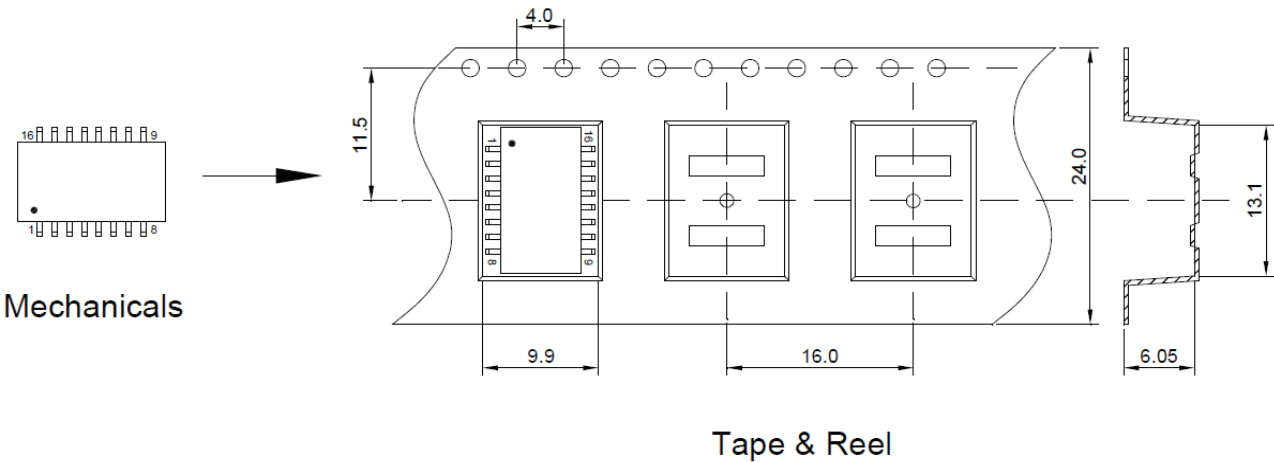
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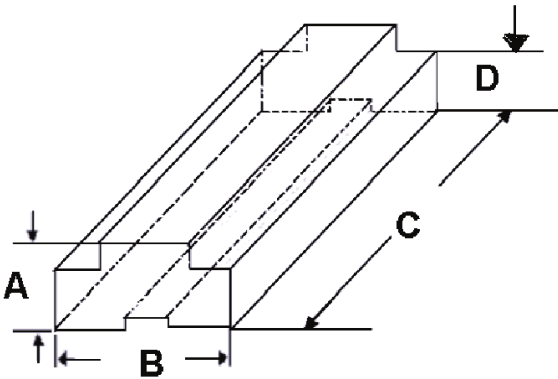
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TAPE & REEL:

Packing Option I: 700 pcs / reel  
Weight: 0.7 grams / pcs



Packing Option II: 36 pcs / tube  
Weight: 0.7 grams / pcs



A	B	C	D
9.20	13.70	485.0	6.0

Dimensions: mm

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