

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

ALAN-2204

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:

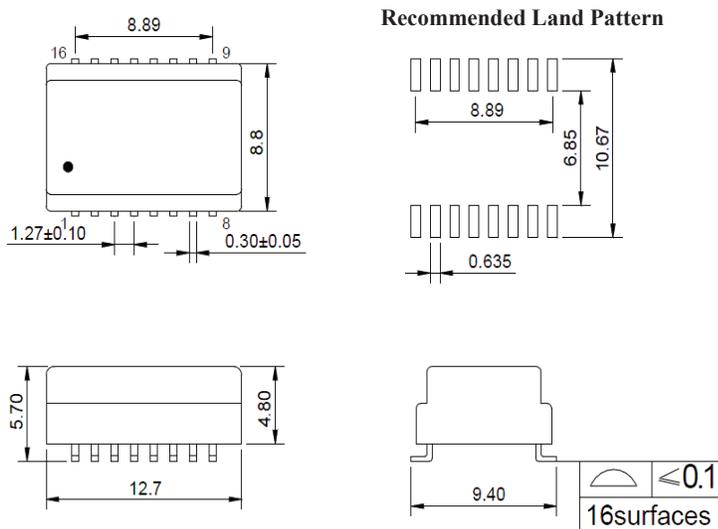
- Designed for most leading PHY IC manufacturers such as Broadcom, Marvell, Micrel, & Microsemi
- 10/100Base-T Ethernet-LAN
- VoIP/PoE+ Capabilities
- Symmetrical Tx & RX channels for Auto MDI/MDIX capability
- Provides signal conditioning, EMI suppression and signal isolation.
- Hubs/Switches/Routers/Servers/NIC 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 (± 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			-1.1	dB	1-100MHz
Return Loss	-18			dB	30MHz
	-15				50MHz
	-13				80MHz
Cross Talk		-35		dB	0.3-100MHz
Differential to Common Mode Rejection	-30			dB	1-100MHz
Common Mode Rejection		-30		dB	0.3-100MHz
PoE Current Capacity			720	mA	
Hi-Pot	1500Vrms				

## OUTLINE DIMENSIONS:



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

Dimension: mm



5101 Hidden Creek Ln Spicewood TX 78669  
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ISO9001-2015  
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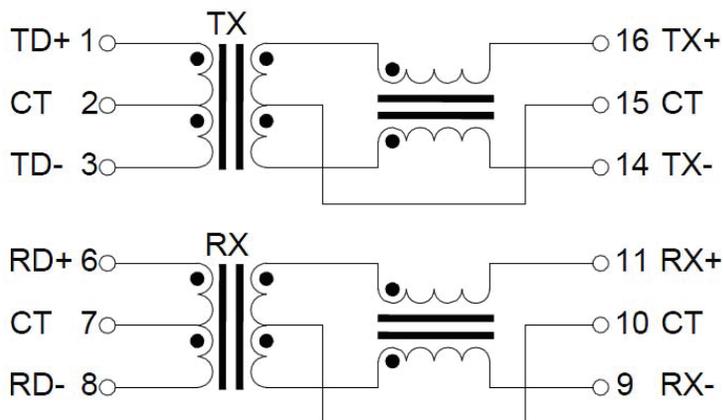
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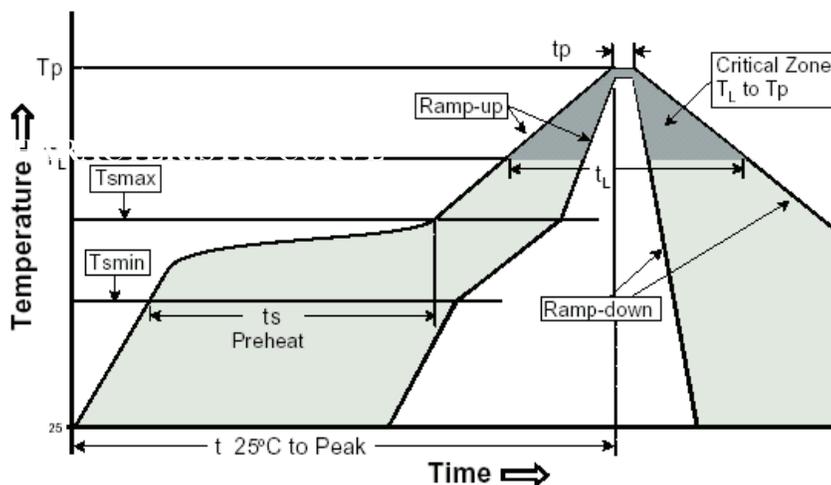


12.70 x 9.40 x 5.70mm

## SCHEMATICS



## REFLOW PROFILE:



Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate ( $T_{smax}$ to $T_p$ )	3°C /second max.
Preheat -Temperature Min ( $T_{smin}$ ) -Temperature Max ( $T_{smax}$ ) -Time ( $t_{smin}$ to $t_{smax}$ )	150°C 200°C 60-120 seconds
<b>Time maintained above:</b> -Temperature ( $T_L$ ) -Time ( $t_L$ )	217°C 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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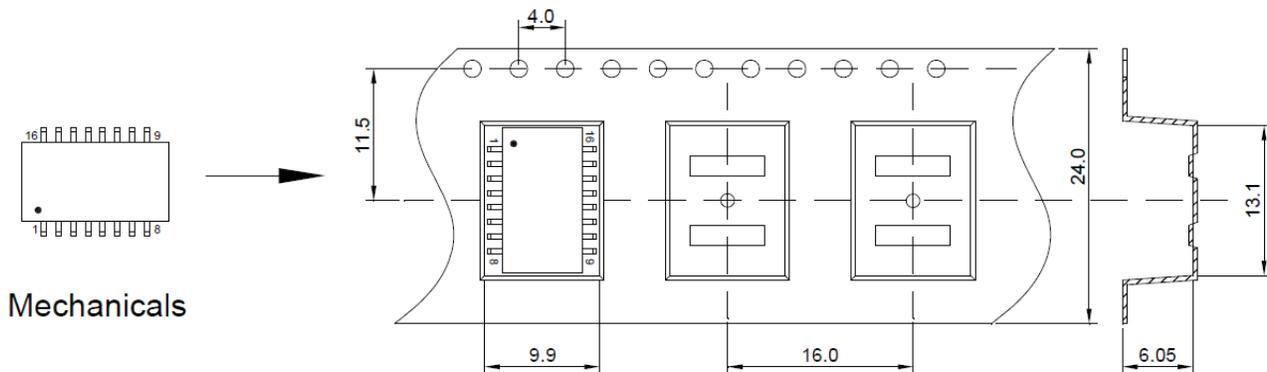
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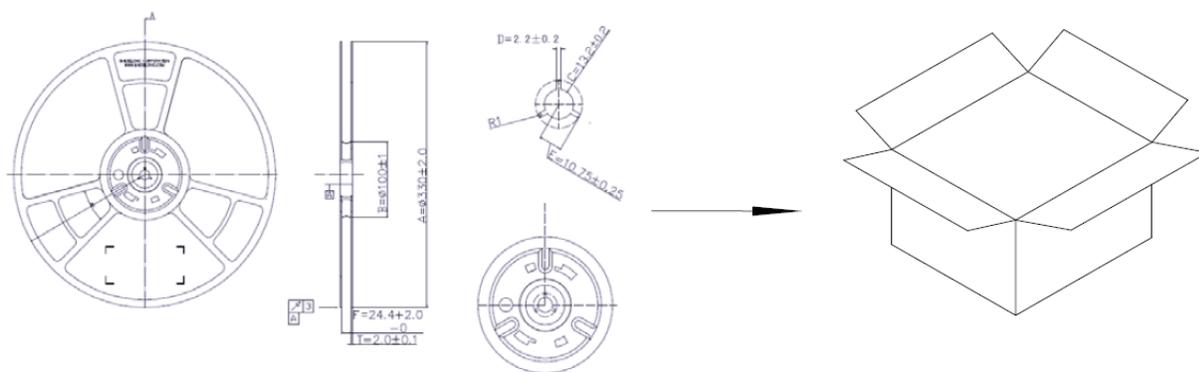
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## TAPE & REEL:

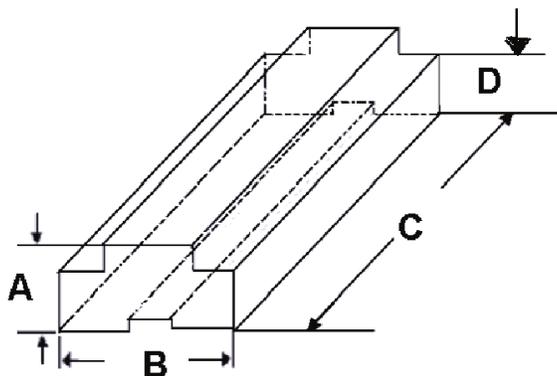
**Packing Option I:** 700 pcs / reel  
**Weight:** 0.7 grams / pcs



Tape & Reel



**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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