



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# 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:

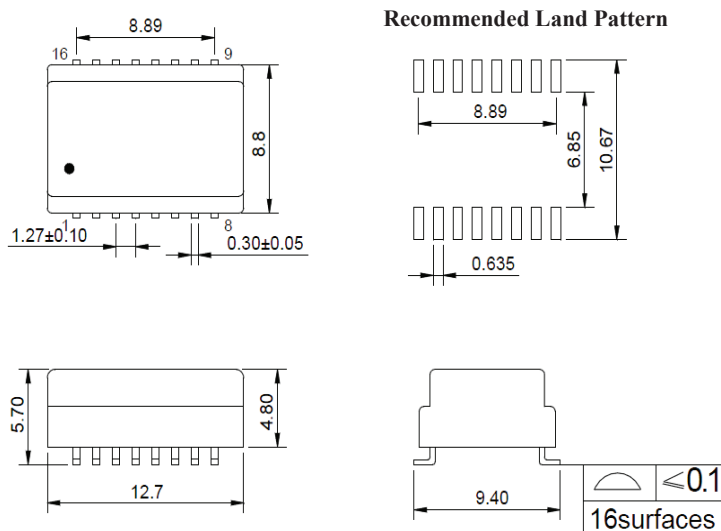
- Designed for most leading PHY IC manufacturers such as Broadcom, Marvell, Micrel, & Microsemi
- 10/100Base-T Ethernet-LAN
- VoIP/PoE+ Capabilities
- Symmetrical Tx & RX channels for Auto MDI/MDIX capability
- Provides signal conditioning, EMI suppression and signal isolation.
- Hubs/Switches/Routers/Servers/NIC 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			600	mA	
Hi-Pot	1500Vrms				

## OUTLINE DIMENSIONS:



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

Dimension: mm

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ISO 9001:2008  
CERTIFIED

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

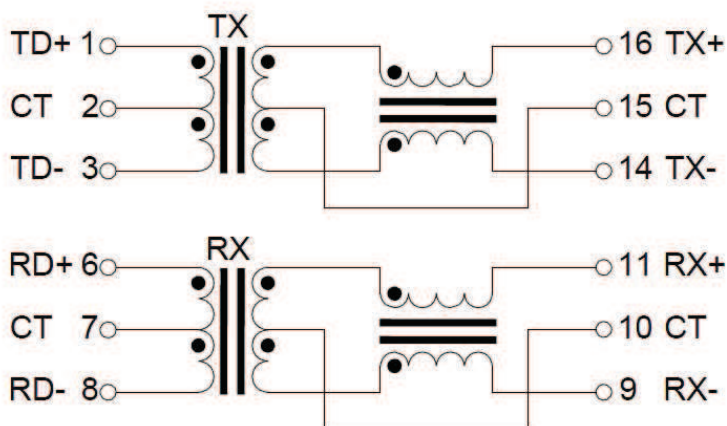


12.70 x 9.40 x 5.70mm

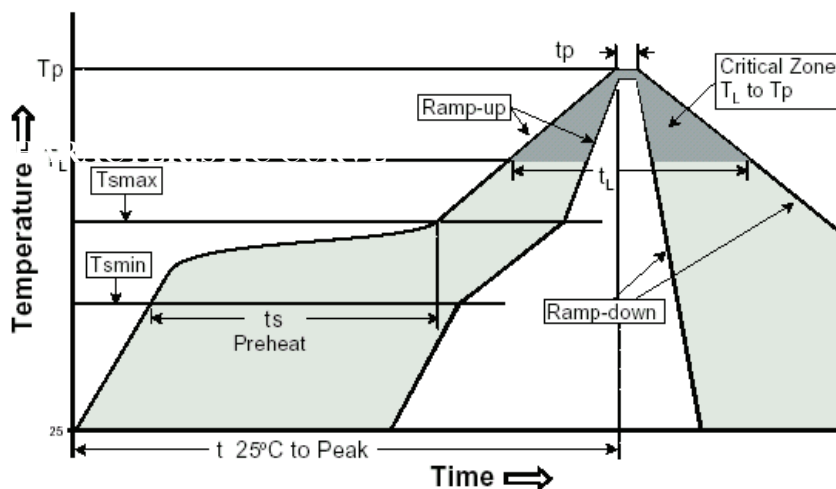
ALAN-2204

RoHS/RoHS II Compliant

## 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.

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



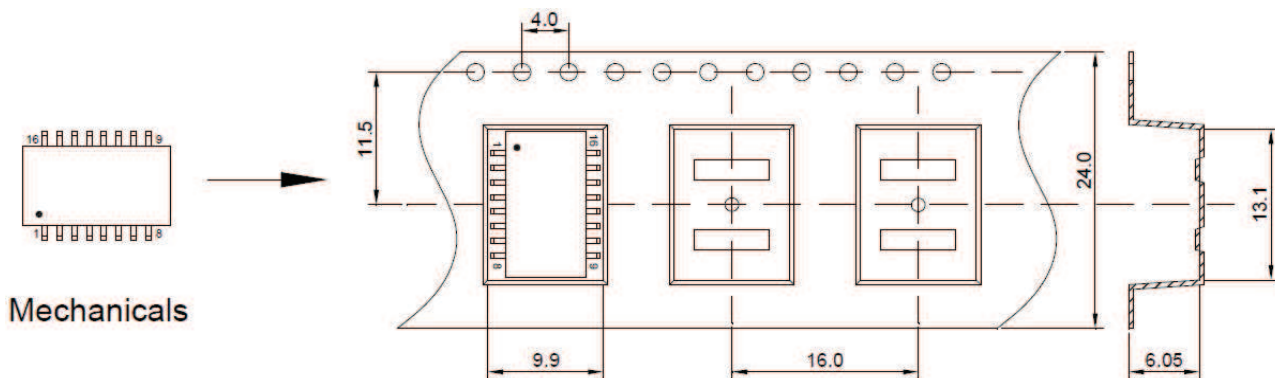
12.70 x 9.40 x 5.70mm

**ALAN-2204**

**RoHS/RoHS II Compliant**

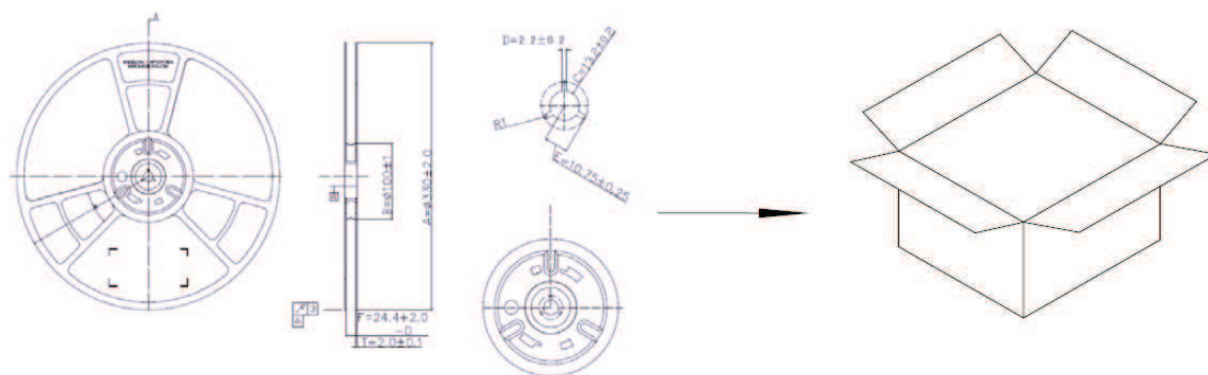
## TAPE & REEL:

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

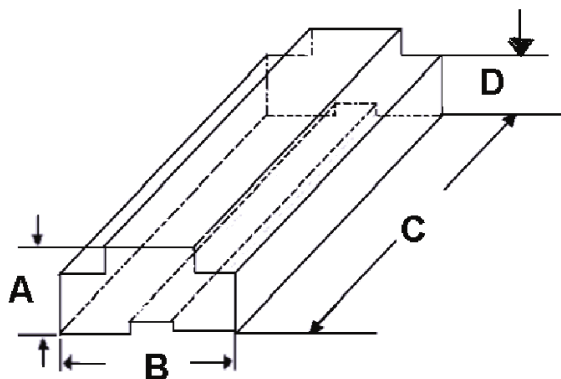


Mechanicals

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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