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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.

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# 10G Base-T, Single, LAN Transformer, w/ PoE, 3 Wires

ALAN-2401

RoHS/RoHS II Compliant



17.50 x 15.60 x 5.40mm

## 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
- 10G Ethernet-LAN
- PoE Capabilities
- 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	0		+70	°C	
Storage Temperature	-40		+85	°C	
Turn Ratio (± 3%)		1CT:1CT			
Inductance (OCL)	120			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			-1.2	dB	1- 400MHz
Return Loss	-18			dB	1- 40MHz
	-17+10log(F/40MHz)				40-500MHz
Cross Talk		-40		dB	1-100MHz
		-30			100-500MHz
CM-DM Rejection Ratio		-30			1-250MHz
		-22			250-500MHz
Differential to Common Mode Rejection	-30			dB	1-100MHz
Common Mode Rejection	-30			dB	1-100MHz
PoE Current Capacity			350	mA	
Hi-Pot	1500Vrms/0.5mA/60Sec or 1650Vrms/0.5mA/2Sec				

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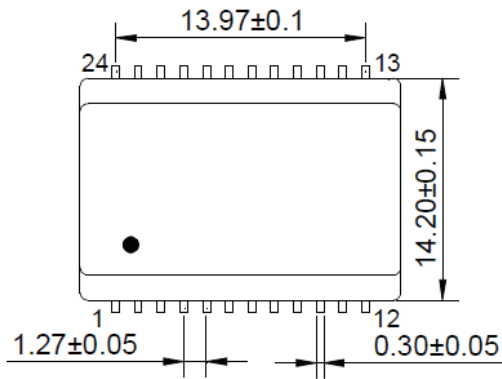
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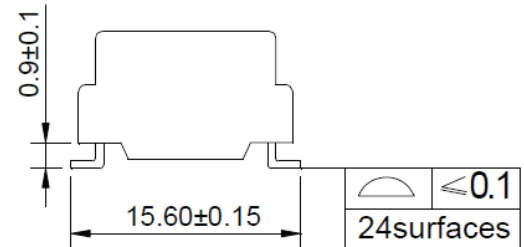
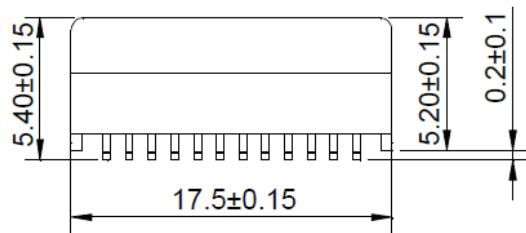
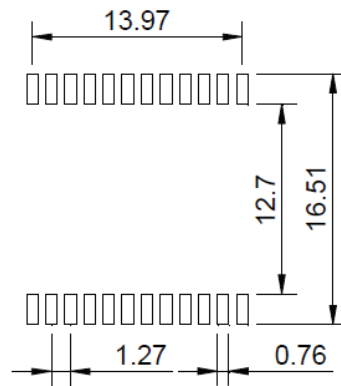


17.50 x 15.60 x 5.40mm

## OUTLINE DIMENSIONS:

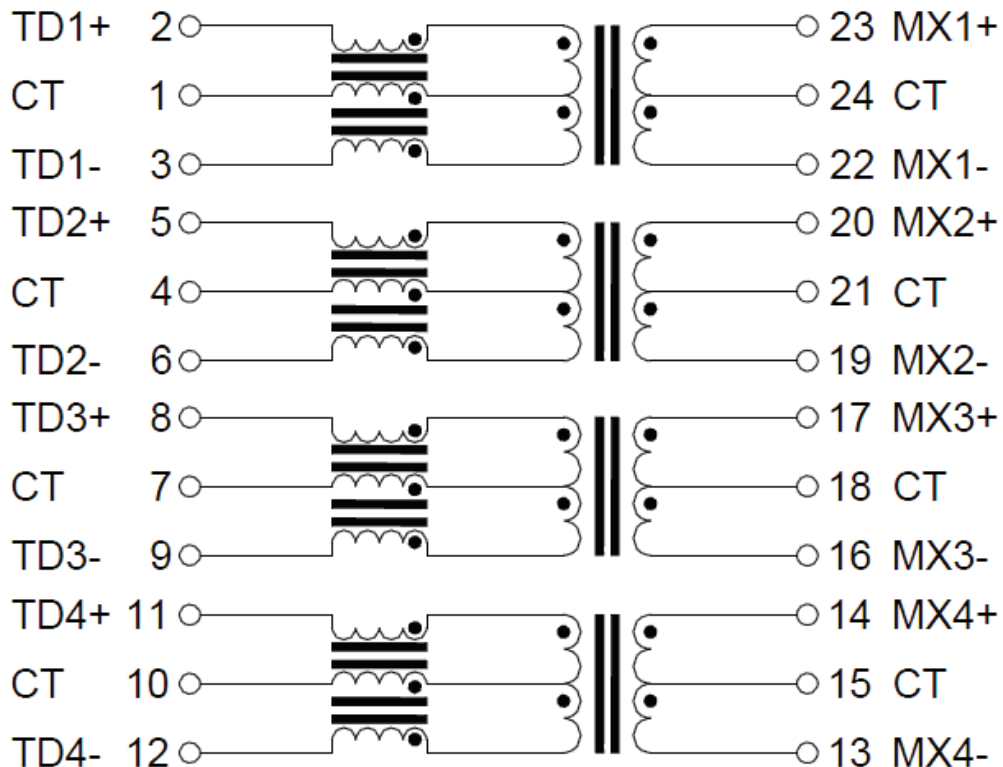


## Recommended Land Pattern



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

## SCHEMATICS





# 10G Base-T, Single, LAN Transformer, w/ PoE, 3 Wires

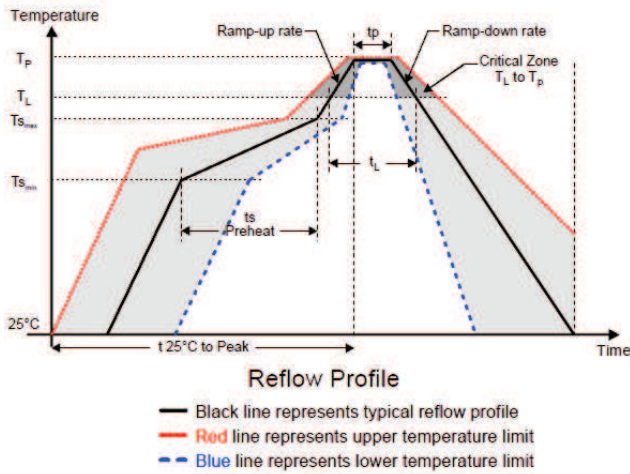
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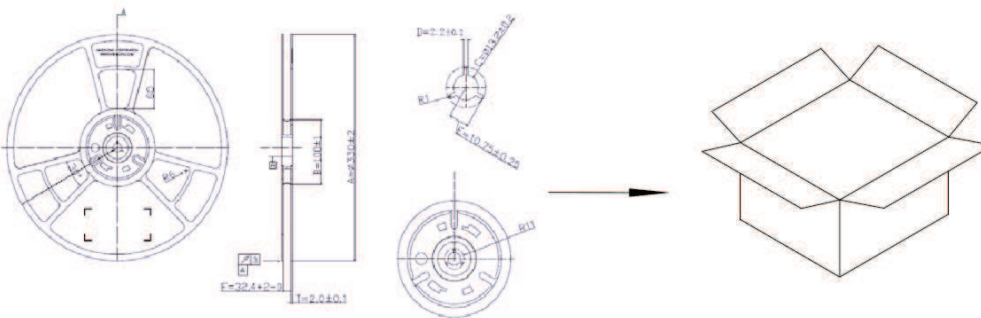
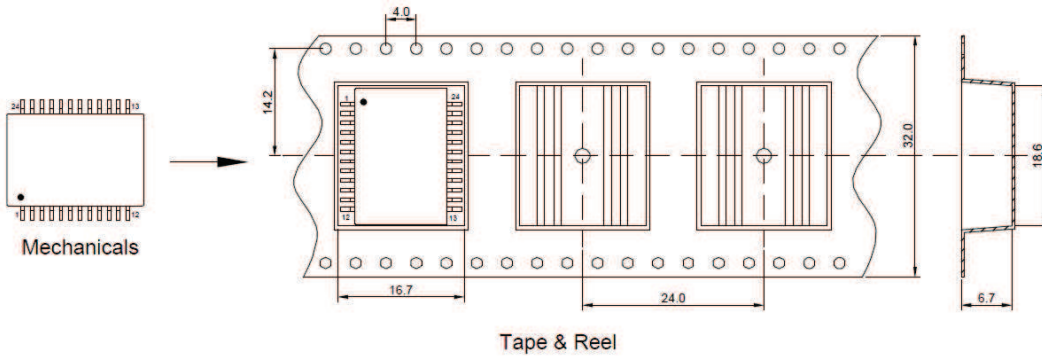
## REFLOW PROFILE:



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> )	150°C
-Temperature Max (Ts <sub>max</sub> )	200°C
-Time (ts <sub>min</sub> to ts <sub>max</sub> )	60-120 seconds
<b>Time maintained above:</b>	
-Temperature (T <sub>L</sub> )	217°C
-Time (t <sub>L</sub> )	60-150 seconds
Peak/Classification Temperature (Tp)	245+0/-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.

## TAPE & REEL:

**Packing :** 400 pcs / reel  
**Weight** 2.1 grams / pcs



**Dimensions: mm**

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