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

**ALAN-2401** 

**RoHS/RoHS II Compliant** 



#### **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			μН	100KHz/0.1V@8mA
Leakage Inductance (LL)			0.5	μН	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			dВ	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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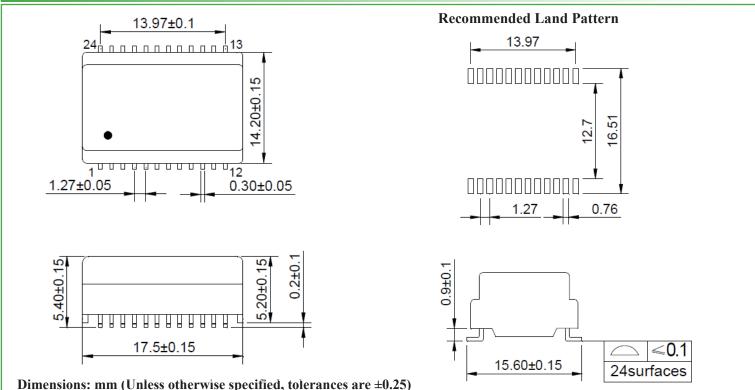
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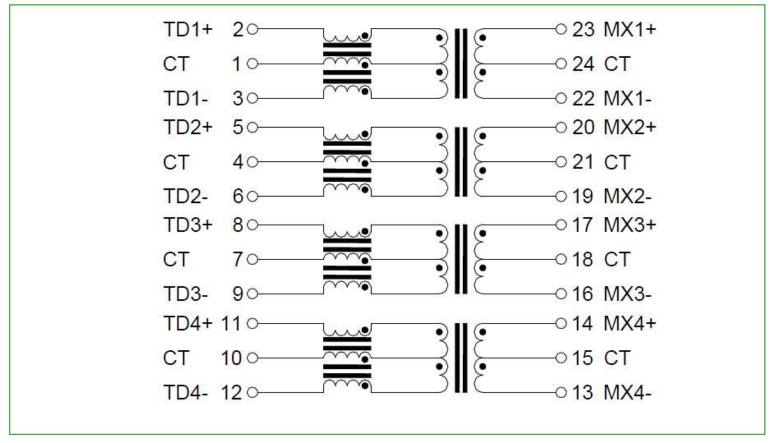
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### **OUTLINE DIMENSIONS:**



### > SCHEMATICS







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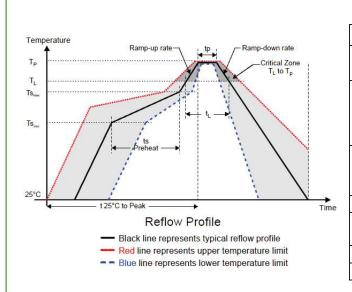
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#### REFLOW PROFILE:



Profile Feature	Pb-Free Assembly		
Average Ramp-Up Rate	3°C /second max.		
$(Ts_{max} to Tp)$			
Preheat			
-Temperature Min (Ts min)	150°C		
-Temperature Max (Ts <sub>max</sub> )	200°C		
-Time (ts <sub>min</sub> to ts <sub>max</sub> )	60-120 seconds		
Time maintained above:			
-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	20-40 seconds		
Temperature (tp)			
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

Tape & Reel

Dimensions: mm

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