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

## **ALAN-2204**

#### **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:

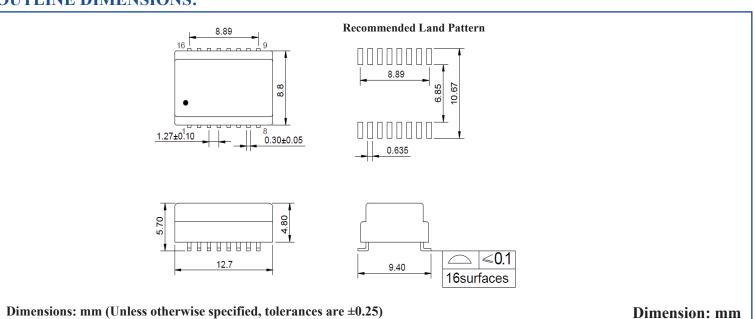
- Designed for most leading PHY IC manufacturers such as Broadcom, Marvell, Micrel, & Microsemi
- 10/100Base-T Ethernet-LAN
- VoIP/PoE+ Capabilities
- Symmetrical Tx & RX channles for Auto MDI/MDIX capability
- Provides signal conditioning, EMI suppression and signal isolation.
- Hubs/Switches/Routers/Servers/NIC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

#### > STANDARD SPECIFICATIONS:

Key Electrical Specifications @ 25°C

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Parameters	Minimum	Typical	_Maximum_	Units	Notes
Operating Temperature	-40		+85	°C	
Storage Temperature	-40		+85	°C	
Turn Ratio (± 2%)		1CT:1CT			
Inductance (OCL)	350			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			-1.1	dB	1-100MHz
	-18				30MHz
Return Loss	-15			dB	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:**





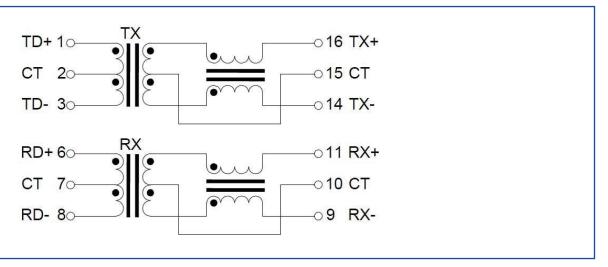
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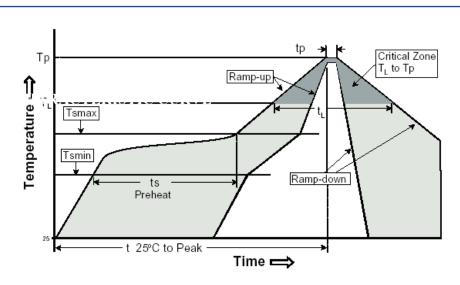
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### > SCHEMATICS



#### > 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℃		
-Time (t <sub>L</sub> )	60-150 seconds		
Peak/Classification Temperature (Tp)	245±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.		



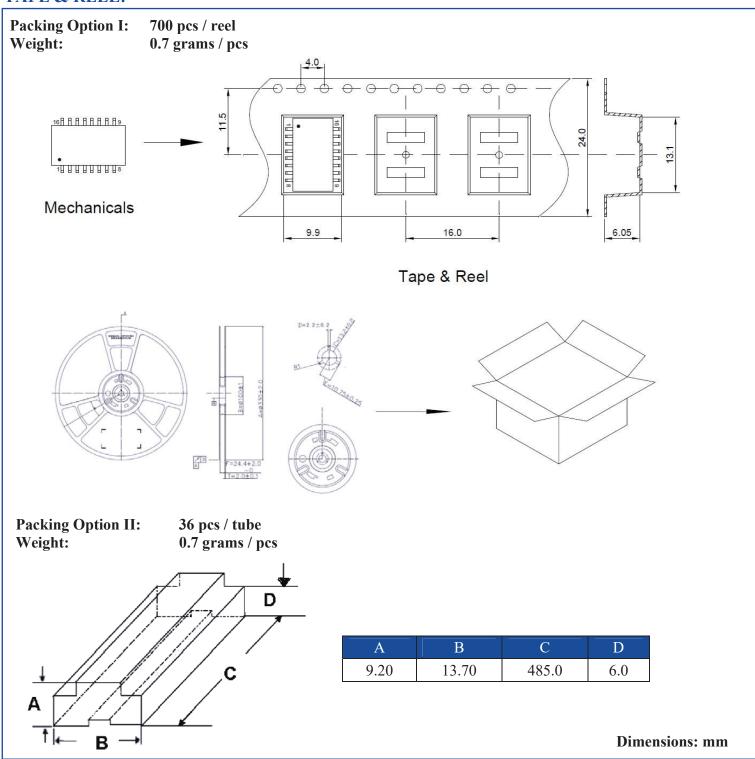
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#### > TAPE & REEL:



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