10/100 Base-T Single Port LAN Transformer w/ PoE+ Extended Temperature 3 Cores Solution

ALAN-2202

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:

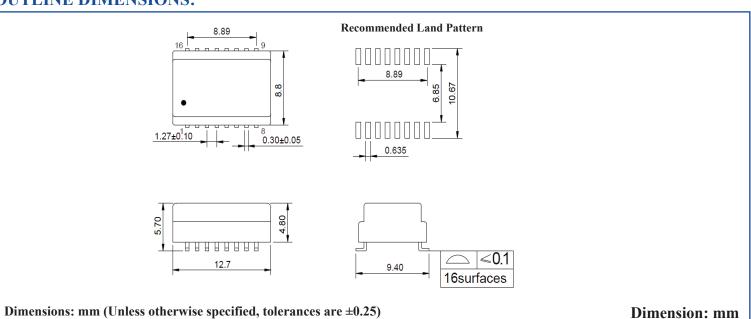
- Designed for most leading PHY IC manufacturers such as Broadcom, Marvell, Micrel, & Microsemi
- 10/100Base-T Ethernet-LAN
- VoIP/PoE+ Capabilities
- Symmetrical Tx & RX channles for Auto MDI/MDIX capability
- Provides signal conditioning, EMI suppression and signal isolation.
- Hubs/Switches/Routers/Servers/NIC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

> STANDARD SPECIFICATIONS:

Key Electrical Specifications @ 25°C

Parameters	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	-40		+85	°C	
Storage Temperature	-40		+85	°C	
Turn Ratio (± 5%)		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
Return Loss	-18			dB	1-30MHz
	-16				40MHz
	-13				50MHz
	-12				60-80MHz
Cross Talk		-30		dB	1-100MHz
Differential to Common Mode Rejection	-30			dB	1-100MHz
Common Mode Rejection	-30			dB	1-100MHz
PoE Current Capacity			720	mA	
Hi-Pot	1500Vrms			·	

DOUTLINE DIMENSIONS:





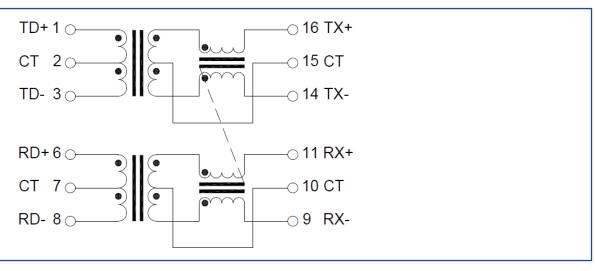
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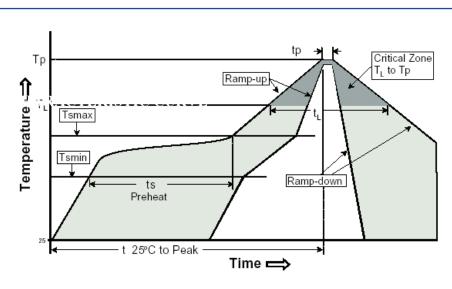
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> SCHEMATICS



> 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 _{max})	200°C		
-Time (ts min to ts max)	60-120 seconds		
Time maintained above:			
-Temperature (T _L)	217℃		
-Time (t_L)	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.		



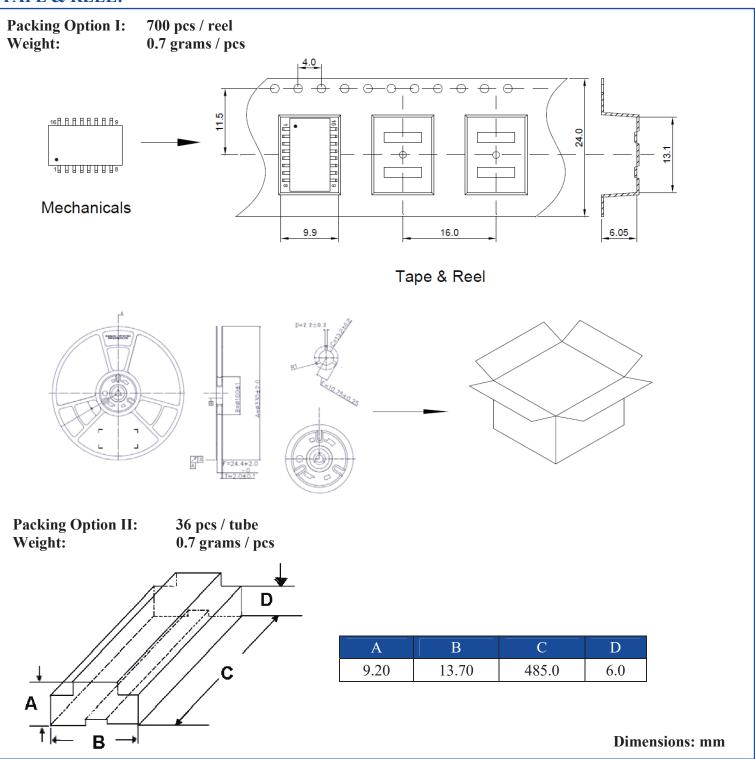
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> TAPE & REEL:



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