

100/1000 Base-T Single Port LAN Transformer w/ PoE+ Extended Temperature

ALAN-2301

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:

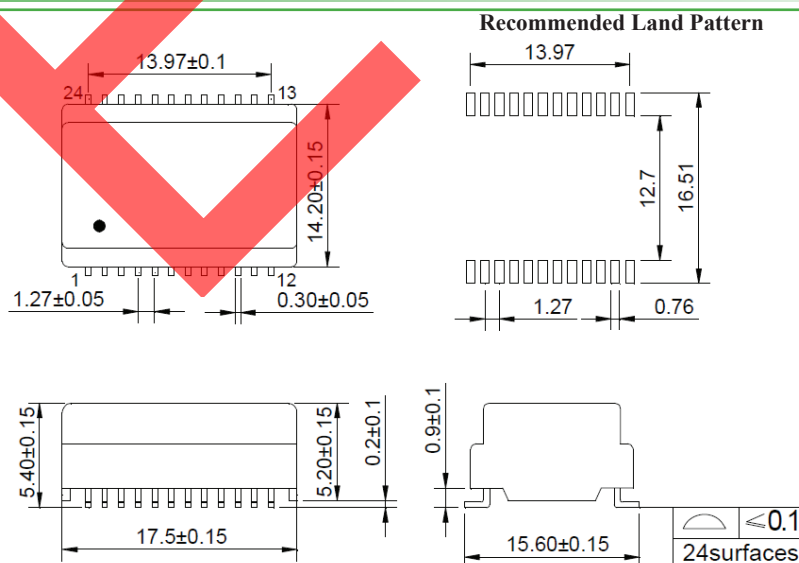
- Designed for most leading PHY IC manufacturers such as Broadcom, Marvell, Micrel, & Microsemi
- 1000Base-T Ethernet-LAN
- PoE+ Capabilities
- Symmetrical Tx & RX channles for Auto MDI/MDIX capability
- Provides signal conditioning, EMI suppression and signal isolation.
- Hubs/Switches/Routers/Servers/NIC 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			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	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			600	mA	
Hi-Pot		1500Vrms			

OUTLINE DIMENSIONS:



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

Dimension: mm

ABRACON IS
ISO 9001:2008
CERTIFIED

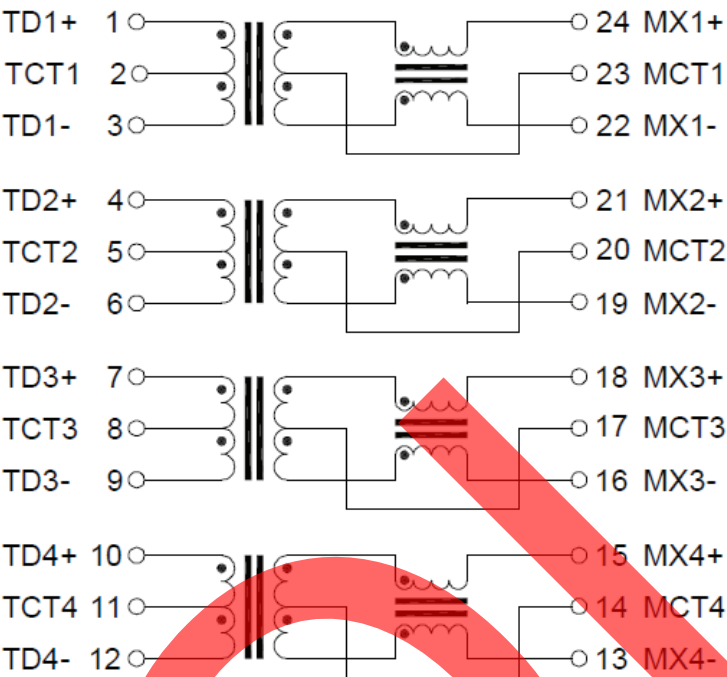
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The Power of Linking Together

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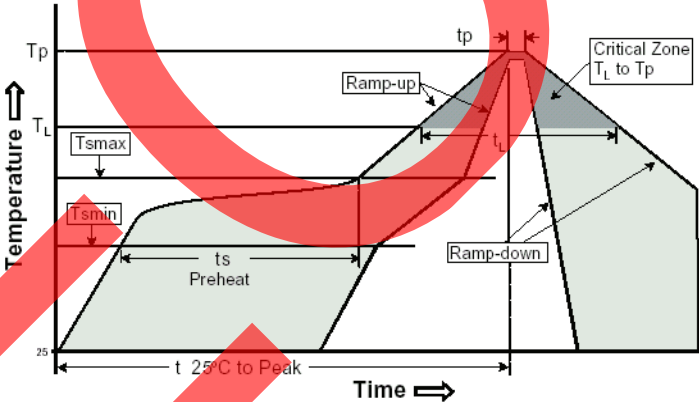


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SCHEMATICS



REFLOW PROFILE:



Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate (Ts _{max} to Tp)	3°C /second max.
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°C
-Time (t _L)	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.

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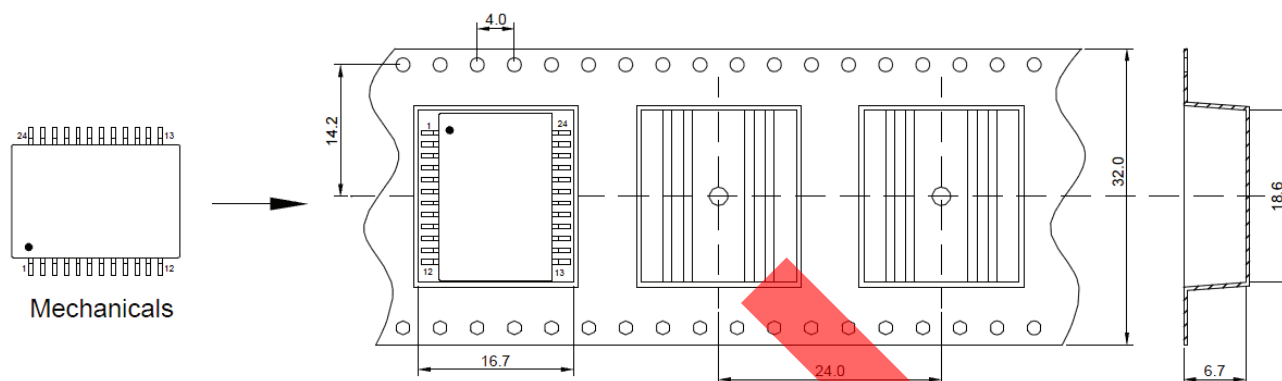
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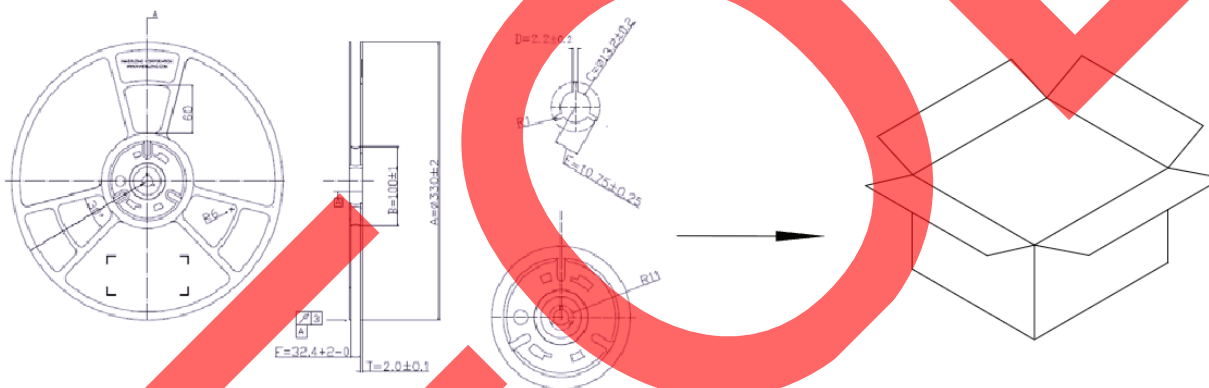
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TAPE & REEL:

Packing : 400 pcs / reel
Weight 2.1 grams / pcs



Tape & Reel



Dimensions: mm

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