

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

ALAN-2202

RoHS/RoHS II Compliant



12.70 x 9.40 x 5.70mm

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:

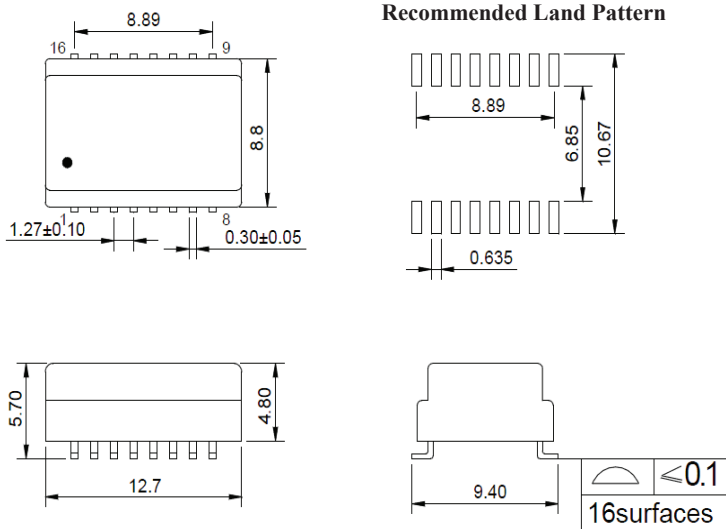
- Designed for most leading PHY IC manufacturers such as Broadcom, Marvell, Micrel, & Microsemi
- 10/100Base-T Ethernet-LAN
- VoIP/PoE+ Capabilities
- Symmetrical Tx & RX channles for Auto MDI/MDIX capability
- Provides signal conditioning, EMI suppression and signal isolation.
- Hubs/Switches/Routers/Servers/NIC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



2 Faraday, Suite# B | Irvine | CA 92618 Revised: 03.13.15
Ph. 949.546.8000 | Fax. 949.546.8001
Visit www.abracon.com for Terms and Conditions of Sale

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

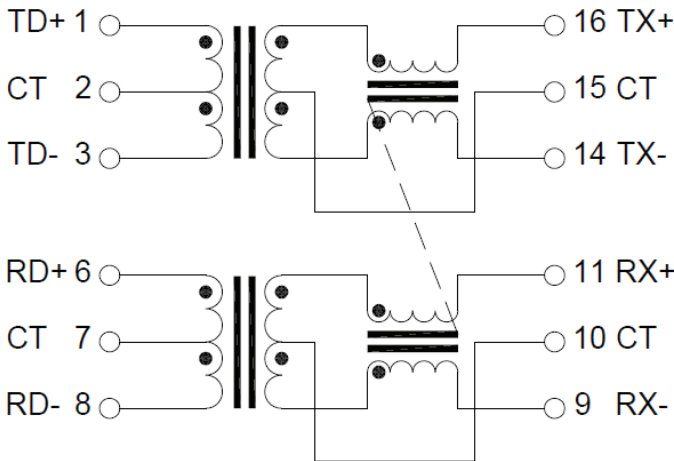
ALAN-2202

RoHS/RoHS II Compliant

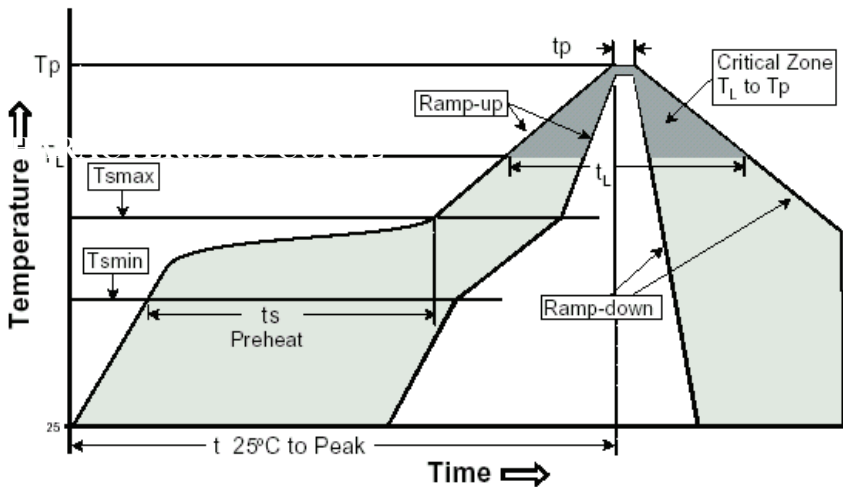


12.70 x 9.40 x 5.70mm

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) -Temperature Max (Ts max) -Time (ts min to ts max)	150°C 200°C 60-120 seconds
Time maintained above: -Temperature (Tl) -Time (tl)	217°C 60-150 seconds
Peak/Classification Temperature (Tp)	245±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.

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

ALAN-2202

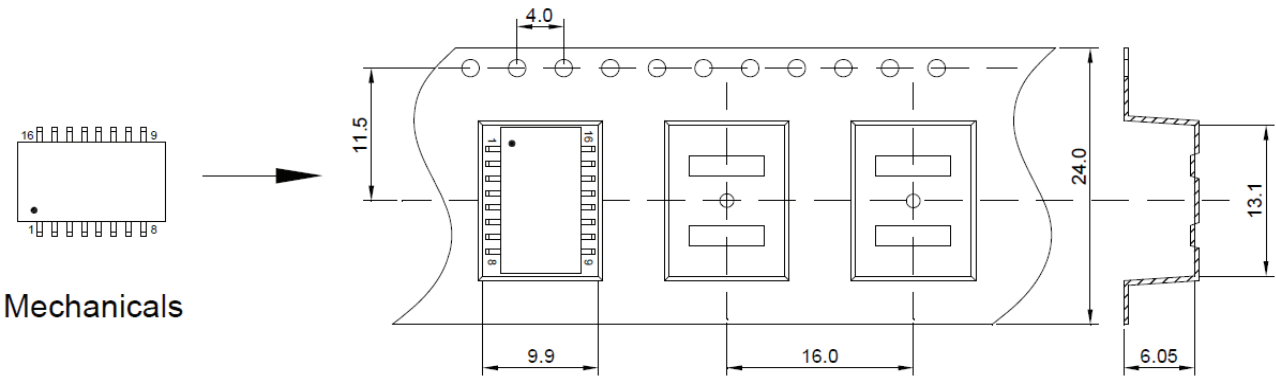
RoHS/RoHS II Compliant



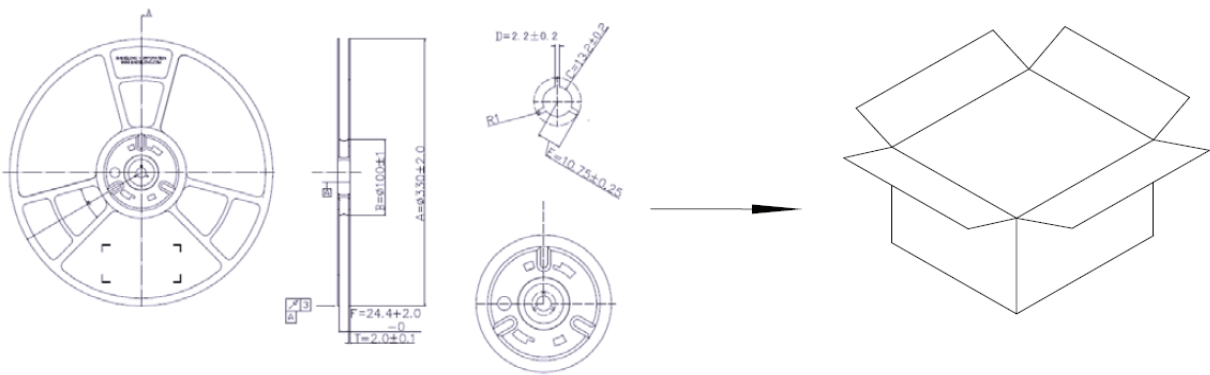
12.70 x 9.40 x 5.70mm

TAPE & REEL:

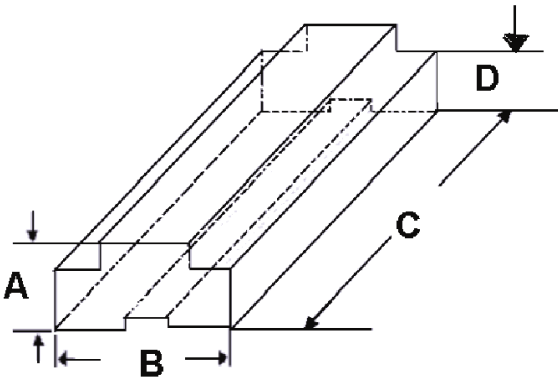
Packing Option I: 700 pcs / reel
Weight: 0.7 grams / pcs



Tape & Reel



Packing Option II: 36 pcs / tube
Weight: 0.7 grams / pcs



A	B	C	D
9.20	13.70	485.0	6.0

Dimensions: mm

ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.