10/100Base-T Single Port LAN Transformer w/ PoE

ALAN-505

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
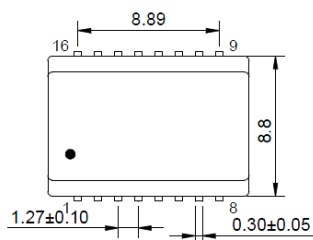- RoHS peak reflow temperature rating 245°C
- 1500Vrms Hi-Pot

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:

Parameters	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	0		+70	°C	
Storage Temperature	-40		+85	°C	
Turn Ratio (± 2%)		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			-1.0	dB	0.1-100MHz
Return Loss		-16		dB	30MHz
		-12			60MHz
		-11			80MHz
Cross Talk		-50		dB	30MHz
		-45			62MHz
		-40			100MHz
Differential to Common Mode Rejection	-30			dB	1-100MHz
Common Mode Rejection		-35		dB	30MHz
		-33			50MHz
		-20			100MHz
		-20			150MHz
PoE Current Capacity			350	mA	
Hi-Pot	1500Vrms/0.5mA/60Sec or 1650Vrms/0.5mA/2Sec				

OUTLINE DIMENSIONS:

Recommended Land Pattern

8.89
16   9
8.8
1.27±0.10
8
0.30±0.05

8.89
6.85
10.67
0.635

5.70
4.80
12.7
9.40
≤0.1
16surfaces
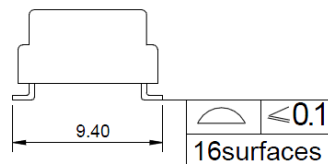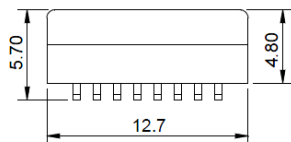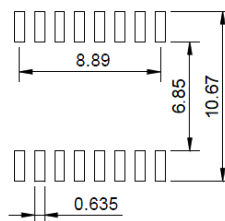
Dimensions: mm (Unless otherwise specified, tolerances are ±0.25)

ALAN-505

RoHS/RoHS II Compliant

12.70 x 9.40 x 5.70mm

▷ SCHEMATIC:
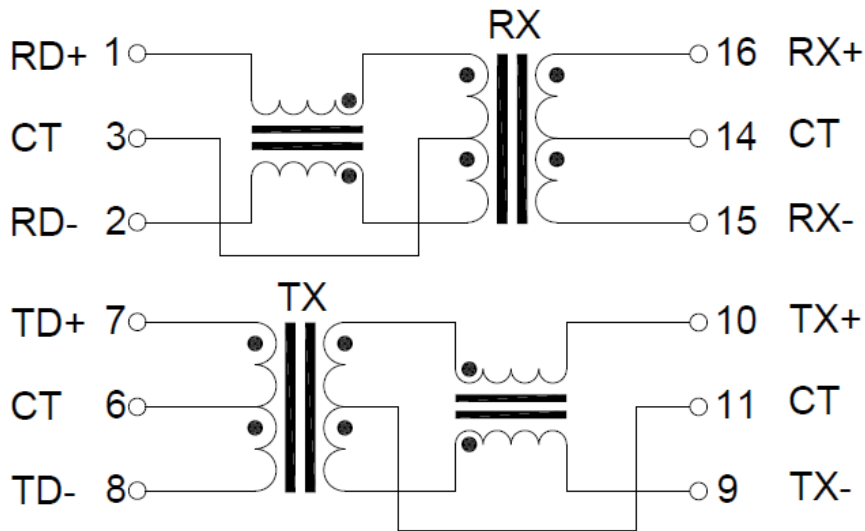
▷ REFLOW PROFILE:
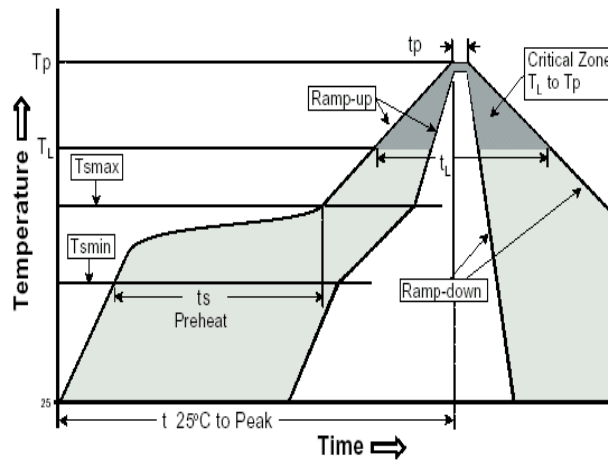
Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate (Ts $_{max}$ to Tp)	3℃ /second max.
Preheat -Temperature Min (Ts $_{min}$) -Temperature Max (Ts $_{max}$) -Time (ts $_{min}$ to ts $_{max}$)	150℃ 200℃ 60-120 seconds
Time maintained above: -Temperature (T$_L$) -Time (t$_L$)	217℃ 60-150 seconds
Peak/Classification Temperature (Tp)	245±5℃
Time within 5℃ of actual Peak Temperature (tp)	20-40 seconds
Ramp-Down Rate	6℃ /seconds max
Time 25℃ to Peak Temperature	8 minutes max.

ABRACON IS ISO9001:2008 CERTIFIED

ABRACON LLC
The Power of Linking Together

2 Faraday, Suite# B | Irvine | CA 92618 **Revised: 03.25.15**
Ph. 949.546.8000 | Fax. 949.546.8001
Visit www.abracon.com for Terms and Conditions of Sale
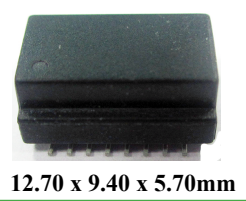
▷ **TAPE & REEL:**

Packing option I: **700 pcs / reel,**
Weight **0.7 grams / pcs**
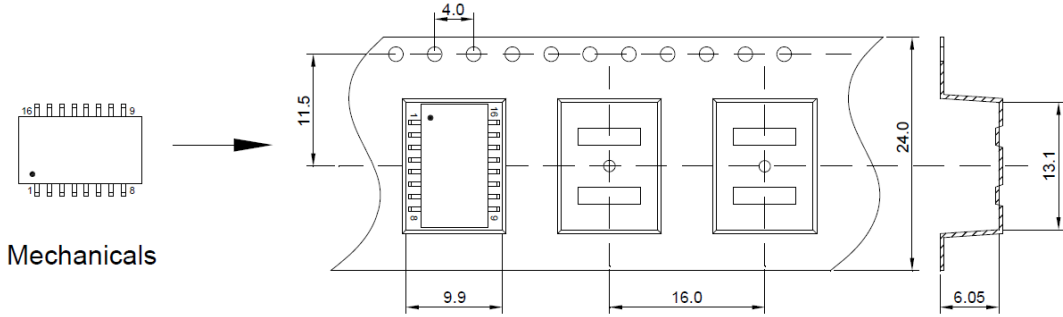
Mechanicals

Tape & Reel
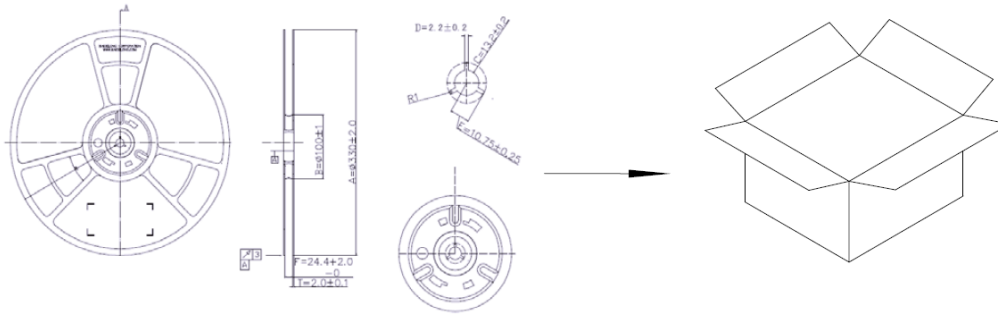
Packing Option II: **36 pcs / tube**
Weight: **0.7 grams / pcs**

A	B	C	D
9.20	13.70	485.0	6.0