

10/100 Base-T Single Port LAN Transformer for Auto MDI/MDIX Extended Temperature

ALAN-134

RoHS
Compliant



12.70 x 9.40 x 5.40 mm

FEATURES:

- Meet IEEE802.3 specification
- Extended Temperature (-40°C - +85°C)
- ROHS peak reflow temperature rating 240°C
- 1500Vrms Hi-Pot

APPLICATIONS:

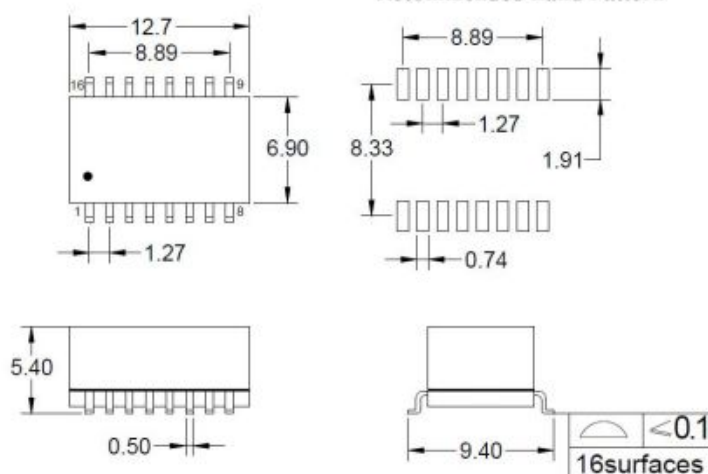
- Designed for most leading PHY IC manufacturers such as Broadcom, Marvell, Micrel, & Microsemi
- 10/100Base-T Ethernet-LAN
- VoIP
- Symmetrical Tx & RX channels for Auto MDI/MDIX capability
- Provides signal conditioning, EMI suppression and signal isolation.
- Hubs/Switches/Routers/Servers/NIC Cards

STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	-40		+85	°C	
Storage Temperature	-40		+85	°C	
Turn Ratio ($\pm 2\%$)		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	0.3-100MHz
Return Loss	-18			dB	2-30MHz
	-14.4				40MHz
	-13.1				50MHz
	-12				60-80MHz
Cross Talk	-55			dB	0.3MHz
	-45				30MHz
	-40				60MHz
	-33				100MHz
Differential to Common Mode Rejection	-30			dB	1-100MHz
Common Mode Rejection	-37			dB	1-60MHz
	-25				60-200MHz
Hi-Pot	1500Vrms				

OUTLINE DRAWING:

Recommended Land Pattern



Dimensions: inch/mm (Unless otherwise specified, tolerances are $\pm 0.10/0.25$)

ABRACON IS
ISO9001:2008
CERTIFIED

 **ABRACON**[®] LLC
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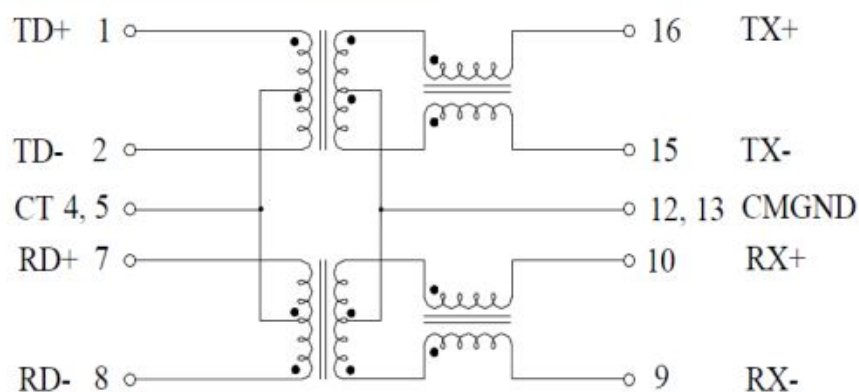
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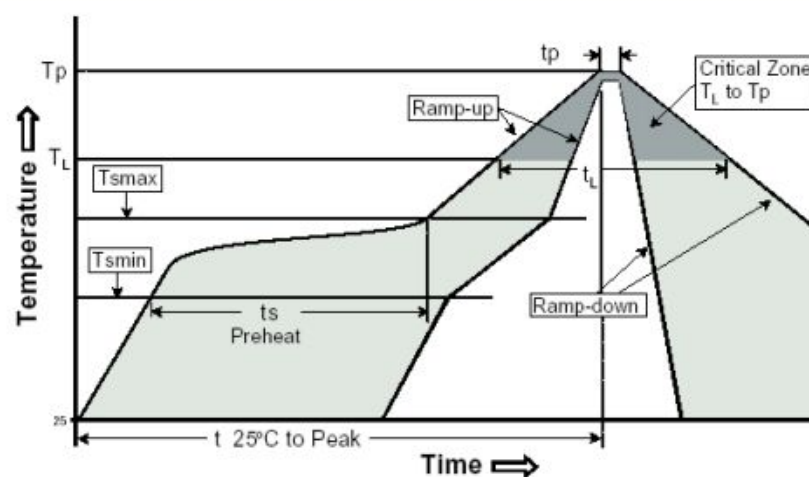


12.70 x 9.40 x 5.40 mm

SCHEMATIC:



REFLOW PROFILE:



Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate (T _{s max} to T _p)	3°C /second max.
Preheat -Temperature Min (T _{s min}) -Temperature Max (T _{s max}) -Time (t _{s min} to t _{s max})	150°C 200°C 60-120 seconds
Time maintained above: -Temperature (T _L) -Time (t _L)	217°C 60-150 seconds
Peak/Classification Temperature (T _p)	240±5°C
Time within 5°C of actual Peak Temperature (t _p)	20-40 seconds
Ramp-Down Rate	6°C /seconds max
Time 25°C to Peak Temperature	8 minutes max.

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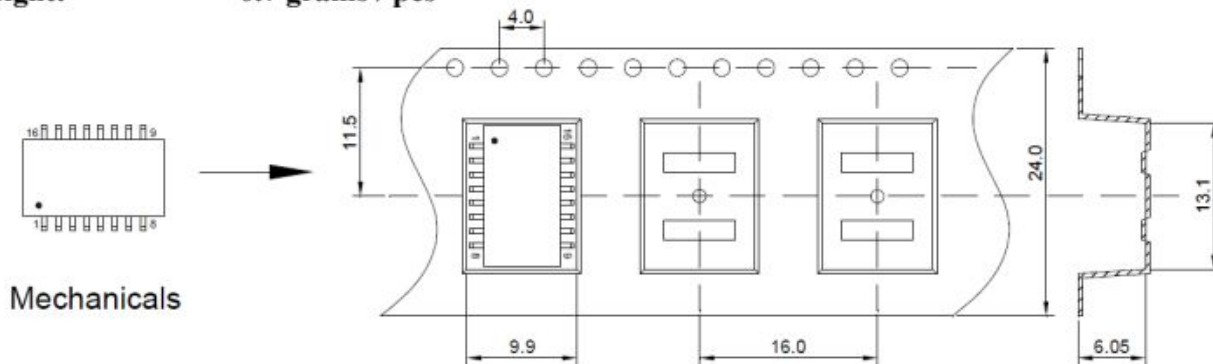
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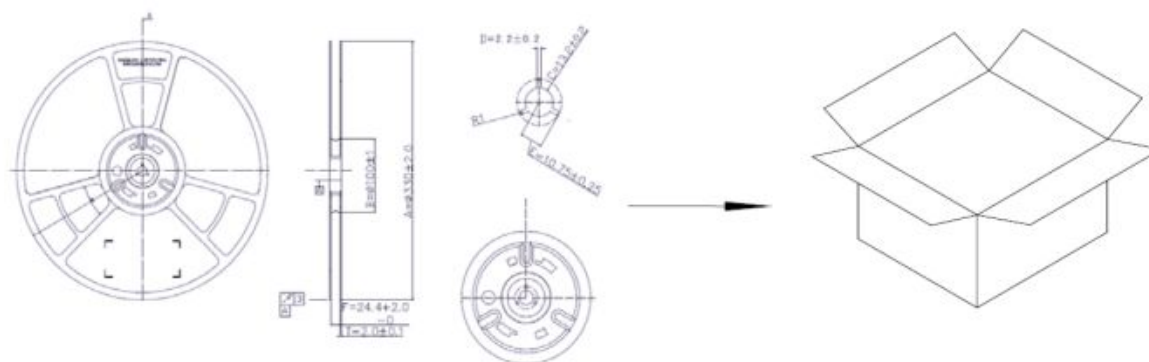
TAPE & REEL:

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

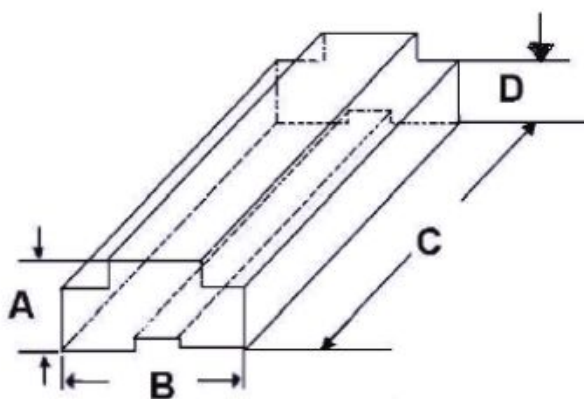


Mechanicals

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

Dimensions: mm

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