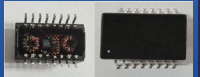




THE DATASHEET OF ALAN-101-T



10/100 Base-T Single Port LAN Transformer Extended Temperature



ALAN-101

Request Samples



Check Inventory



12.8 x 9.3 x 5.56 mm
RoHS/RoHS II Compliant
 MSL Level = 1

Features

- Meet IEEE802.3 specification
- Extended Temperature (-40°C - +85°C)
- ROHS peak reflow temperature rating 230°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

Electrical Specifications @25°C

Parameters	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	-40		+85	°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			-1.1	dB	0.1-100MHz
Return Loss		-18		dB	30MHz
		-14			60MHz
		-11.5			80MHz
Cross Talk		-45		dB	30MHz
		-40			60MHz
		-35			100MHz
Differential to Common Mode Rejection		-42		dB	30MHz
		-37			50MHz
		-33			100MHz
Common Mode Rejection	-30			dB	1-100MHz
Hi-Pot	1500Vrms/0.5mA/60Sec or 1650Vrms/0.5mA/2Sec				

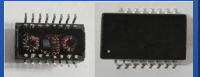


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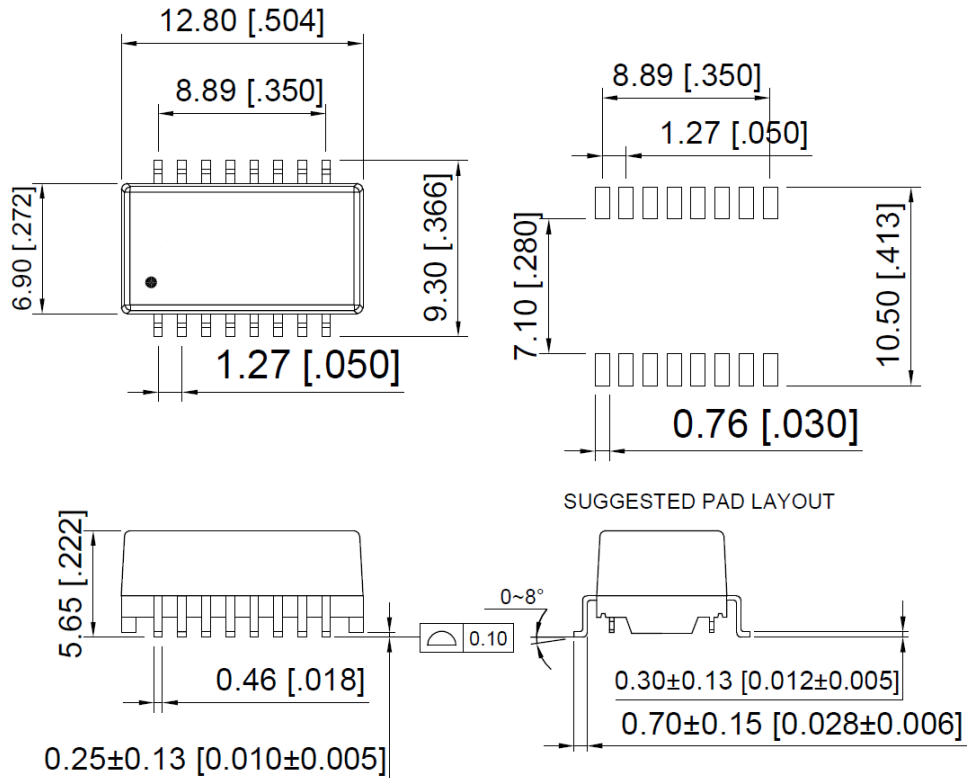


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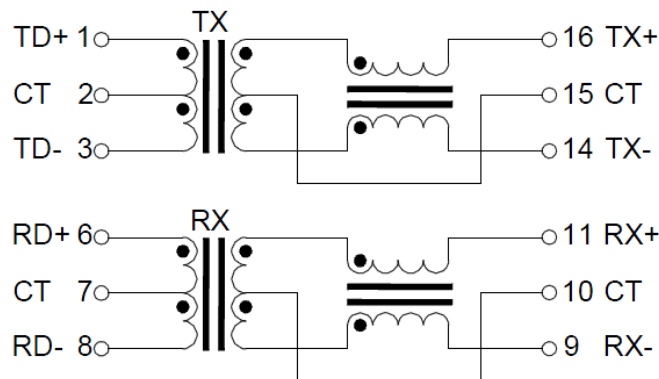
12.8 x 9.3 x 5.56 mm
RoHS/RoHS II Compliant
 MSL Level = 1

Mechanical Specifications



Dimensions: mm[inches]
 Unless otherwise specified, tolerances are ± 0.25

Schematics

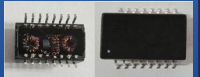


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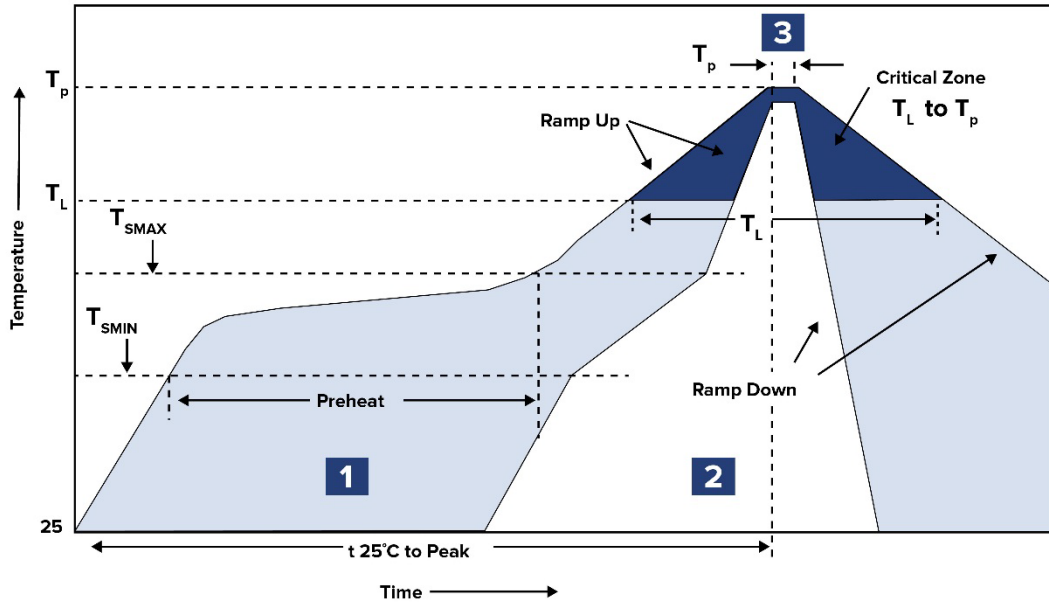


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12.8 x 9.3 x 5.56 mm
RoHS/RoHS II Compliant
 MSL Level = 1

Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 100°C ~ 150°C	60 ~ 120 sec.
2	Reflow	T_L 183°C	60 ~ 150 sec.
3	Peak heat	T_p 230°C±5°C	10 ~30 sec. MAX

Ref. paste: Pb-Free Assembly

Time 25°C to Peak Temperature: 8 minutes (Max.)

Ramp up rate: 3°C/sec (Max.)

Ramp down rate: 6°C/sec (Max.)

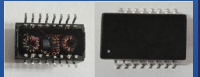


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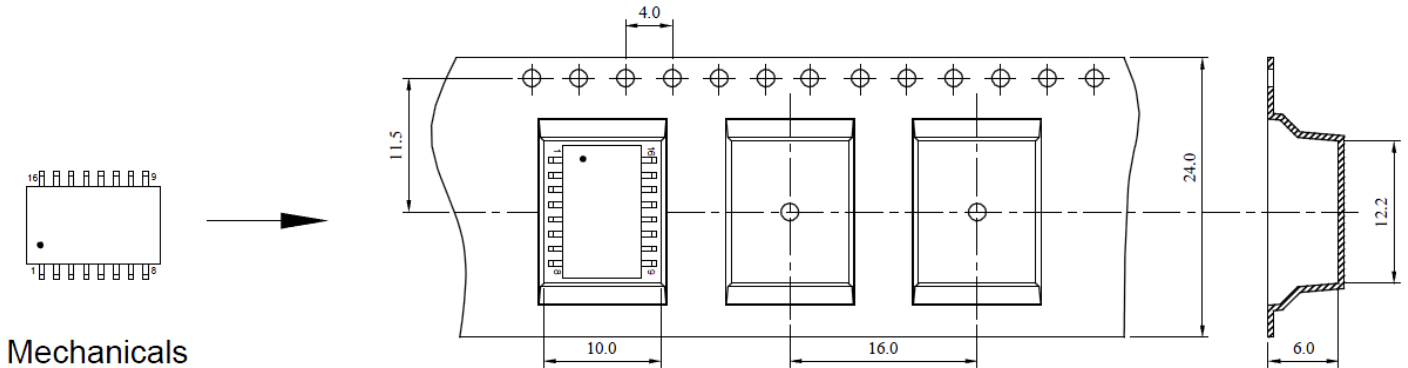
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RoHS/RoHS II Compliant
 MSL Level = 1

Packaging

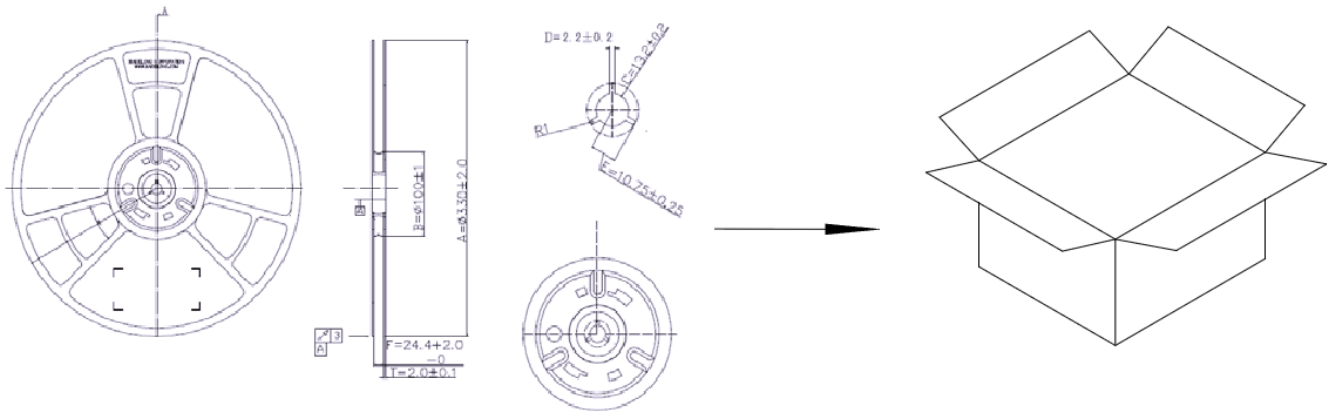
Tape & Reel: 600 pcs/reel

Weight/pcs: 0.62 grams

Weight/carton: 6.5 kg



Mechanicals



Dimensions: mm

ATTENTION: Abracon LLC's products are Commercial-Off-The-Shelf (COTS, which are designed, intended and validated for use in commercial, industrial and automotive applications. The customer is responsible for testing and verifying the performance of an Abracon solution to meet their system-level requirements.



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