

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

ALAN-101

RoHS/RoHS II Compliant



11.43 x 9.24 x 5.51 mm

FEATURES:

- Meet IEEE802.3 specification
- Extended Temperature (-40°C - +85°C)
- ROHS peak reflow temperature rating 230°C
- 1500Vrms Hi-Pot

APPLICATIONS:

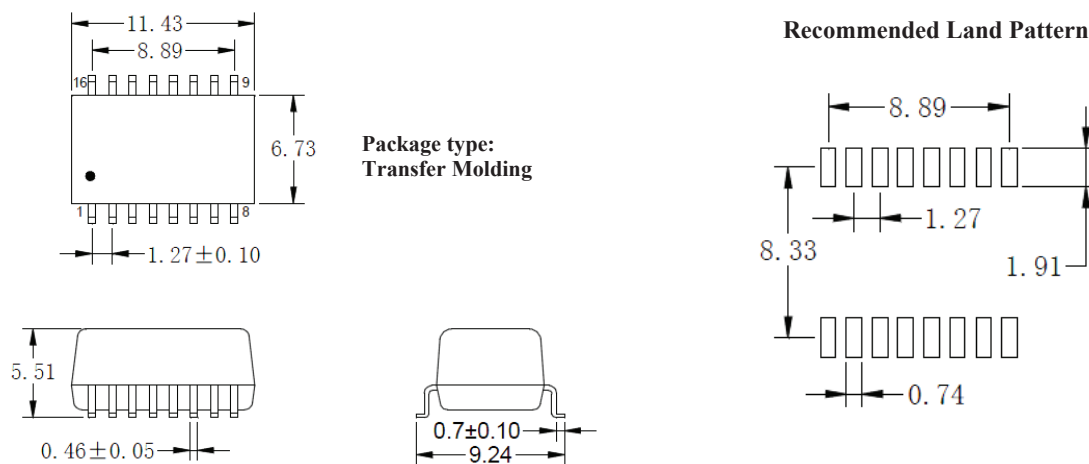
- Designed for most leading PHY IC manufacturers such as Broadcom, Marvell, Micrel, & Microsemi
- 10/100Base-T Ethernet-LAN
- VoIP
- Symmetrical Tx & RX channels for Auto MDI/MDIX capability
- Provides signal conditioning, EMI suppression and signal isolation.
- Hubs/Switches/Routers/Servers/NIC Cards

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 ($\pm 2\%$)		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			-1.1	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				

OUTLINE DRAWING:



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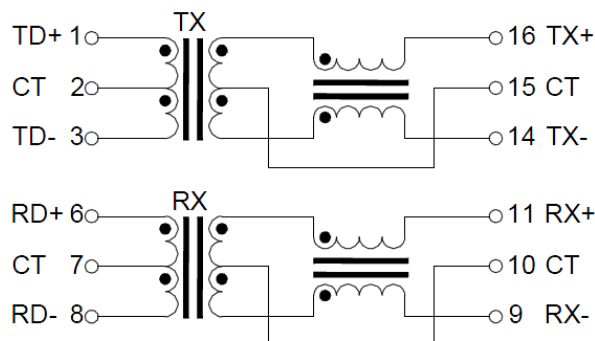
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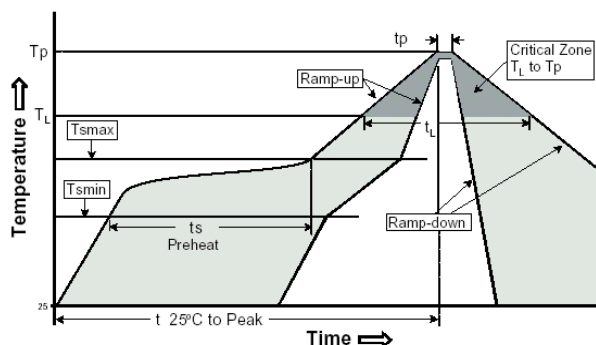


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SCHEMATIC:



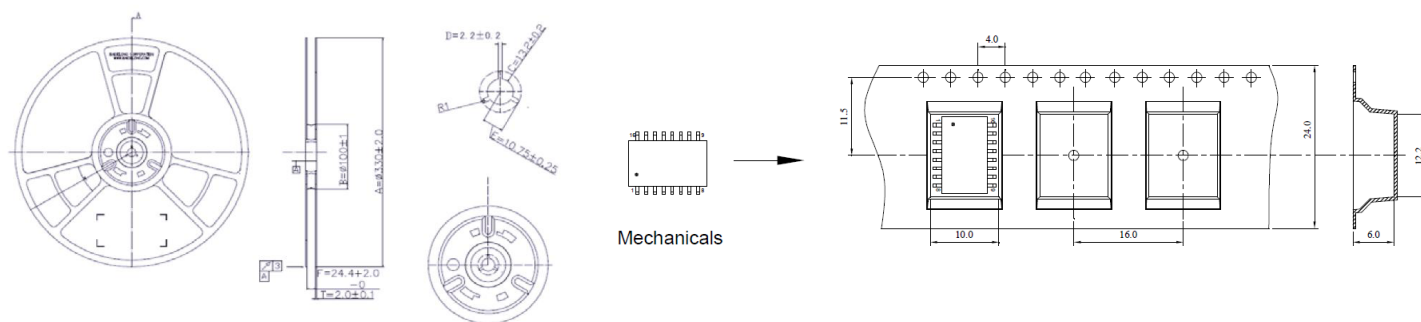
REFLOW PROFILE:



Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate ($T_{s \max}$ to T_p)	3°C /second max.
Preheat	
-Temperature Min ($T_{s \min}$)	100°C
-Temperature Max ($T_{s \max}$)	150°C
-Time ($t_{s \min}$ to $t_{s \max}$)	60-120 seconds
Time maintained above:	
-Temperature (T_L)	183°C
-Time (t_L)	60-150 seconds
Peak/Classification Temperature (T_p)	230±5°C
Time within 5°C of actual Peak Temperature (t_p)	10-30 seconds
Ramp-Down Rate	6°C /seconds max
Time 25°C to Peak Temperature	8 minutes max.

TAPE & REEL:

Packing option I: 700pcs/reel
Weight: 1.0 grams / pcs



Dimensions: mm

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