

POE++ 10/100/1000 BASE-T Single Port SMD LAN Transformer Module



ALAN310001



18.3 x 12.4 x 6.4 mm
RoHS/RoHS II Compliant
MSL = 1

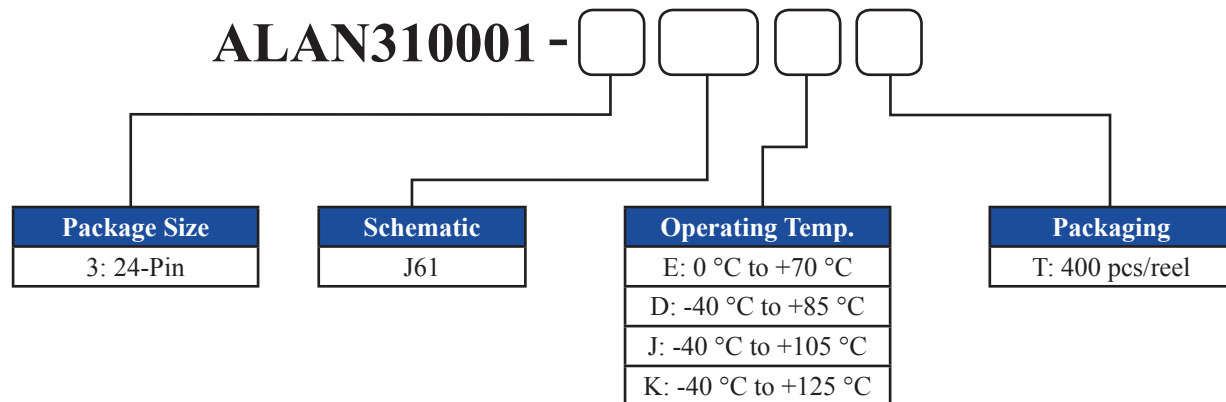
Features

- Meets IEEE 802.3bt standards
- Supports speed up to 1 Gbps
- Power Over Ethernet up to 90 - 100 Watts
- Current capability up to 600 mA per pair
- Operating temperature range up to -40°C to +125°C
- Compatible with major IC's for Ethernet applications
- High performance magnetics for EMI suppression and common mode noise rejection
- 1CT:1CT TX and RX Transformers

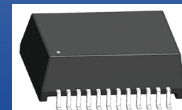
Applications

- Fast and gigabit Ethernet
- Hubs, servers, switches, routers, access points
- IP cameras, surveillance, and phone
- Industrial computers and robotics
- Networking and communications
- Broadcast video
- Set top box

Part Identification



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Electrical Specifications at 25°C

Part Number	Insertion Loss (dB Max)		Return Loss (dB Min)				Crosstalk (dB Min)			CMRR (dB Min)			DCMR (dB Min)		
	0.3-100 MHz	125 MHz	0.5-30 MHz	40-60 MHz	60-80 MHz	100 MHz	30 MHz	50 MHz	100 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz
ALAN310001-3J61	1.2	1.9	16	14	12	10	44	39	33	43	36	31	31	25	21

Part Number	Inductance (uH Min)	Leakage Inductance (uH Max)	Interwinding Capacitance (pF Max)	DC Resistance (Ω Max)		Hi Pot (Vrms)	Weight (g)
				Primary	Secondary		
ALAN310001-3J61	350	0.25	30	1.2	1.0	1500	2.1

Standard	Current (mA Max)	Voltage (V)	Power Delivered per Port (W Max)
IEEE 802.3bt : Type-3 / POE++	1200	@57 V Continuous	90 - 100

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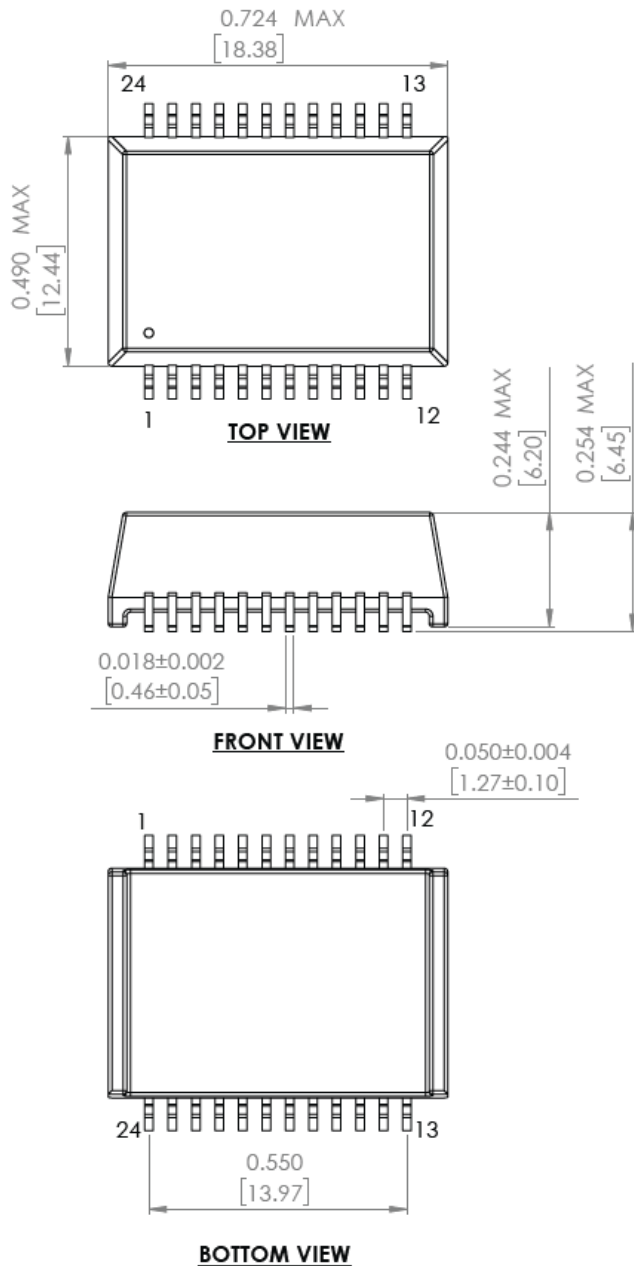
ALAN310001



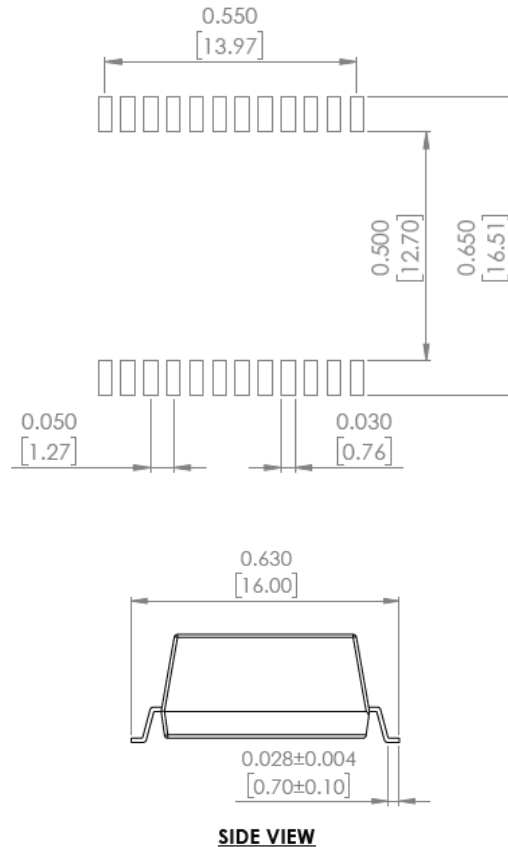
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Mechanical Dimensions

3: 24-pin



RECOMMENDED LAND PATTERN



Unless otherwise specified, all tolerances are ±0.010 [0.25]
Dimensions: inch [mm]



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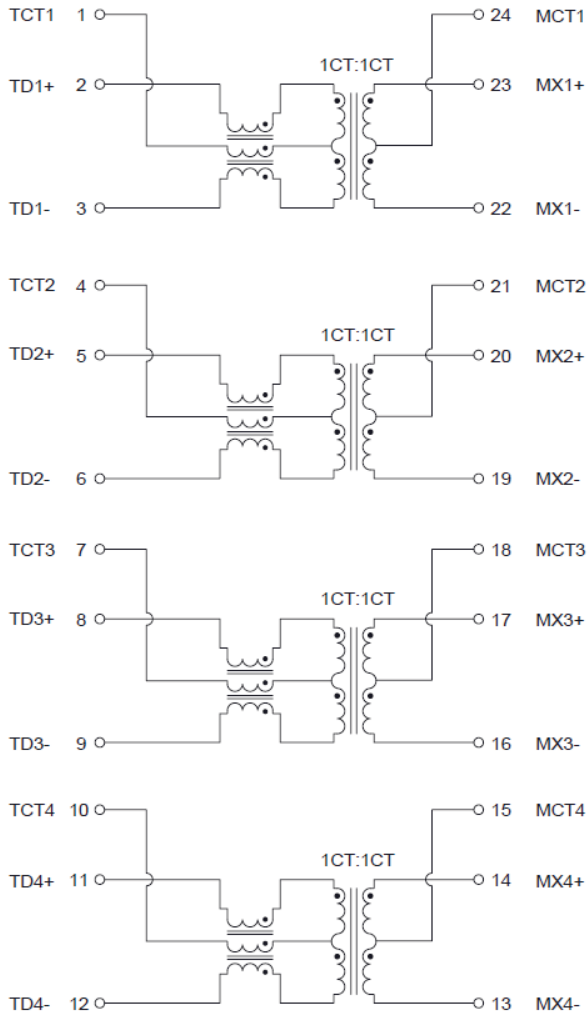


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Schematics

24-Pin

J61



Contact Abracon for additional options.

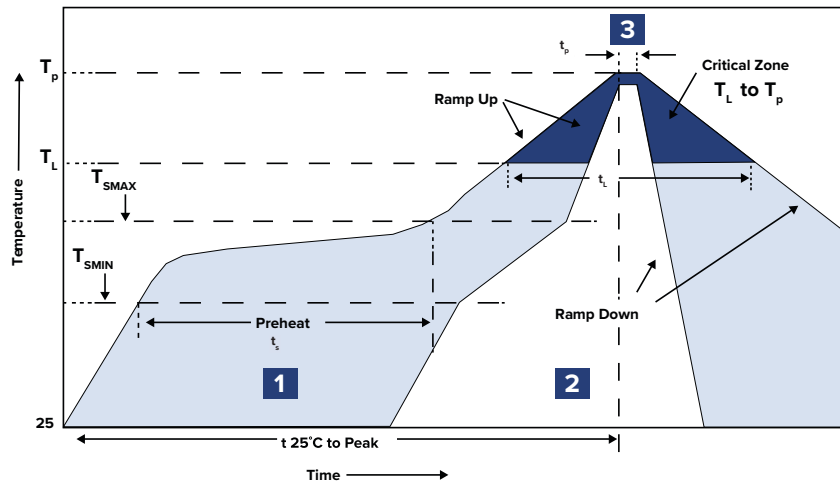


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Reflow Profile



Zone	Description	Temperature	Time
1	Preheat / Soak	T_S 150 °C ~ 200 °C	t_s 60 ~ 120 sec.
2	Reflow	T_L 217 °C	t_L 60 ~ 150 sec.
3	Peak heat	T_p 245 ± 5 °C	t_p 20 ~ 40 sec.