

ALAN210001



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

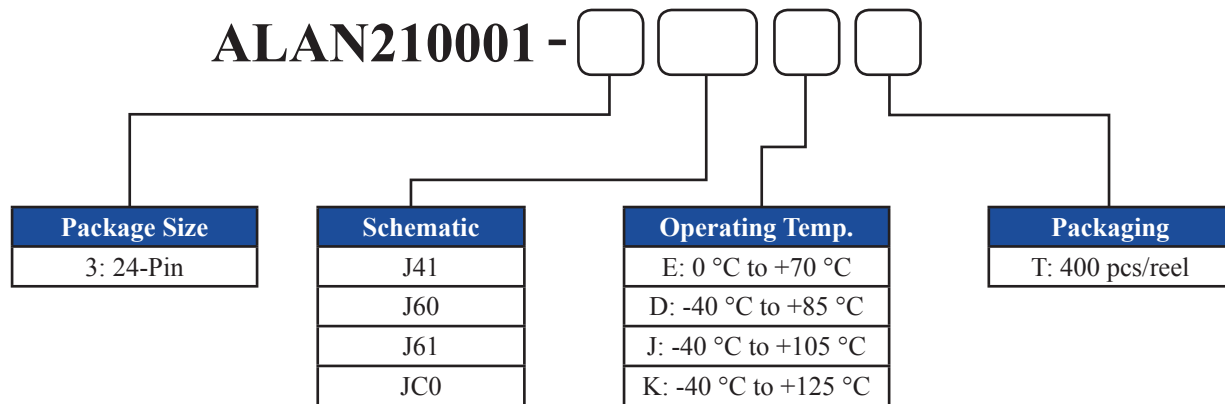
**Features**

- Meets IEEE 802.3at standards
- Supports speed up to 1 Gbps
- Power Over Ethernet up to 30 Watts
- Current capability up to 600 mA
- 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

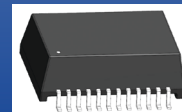
**Applications**

- 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**



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



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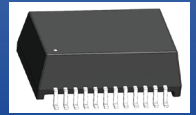
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## Electrical Specifications at 25°C

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
ALAN210001-3J41	1.2	2.0	16	14	12	10	35	28	23	55	36	31	43	36	31
ALAN210001-3J60	1.2	2.0	16	14	12	10	35	28	23	55	36	31	43	36	31
ALAN210001-3J61	1.2	2.0	16	14	12	10	35	28	23	55	36	31	43	36	31
ALAN210001-3JC0	1.2	2.0	16	14	12	10	35	28	23	55	36	31	43	36	31

Part Number	Inductance (uH Min)	Leakage Inductance (uH Max)	Interwinding Capacitance (pF Max)	DC Resistance (Ω Max)		Hi Pot (Vrms)	Weight (g)
				Primary	Secondary		
<b>Test Condition</b>	<b>@100kHz, 0.2V, 8mA DC Bias</b>	<b>@100kHz, 0.1V TD to MX</b>	<b>@100kHz, 0.1V TD to MX</b>			<b>6 sec.</b>	<b>Per Piece</b>
ALAN210001-3J41	350	0.5	35	1.0	1.0	1500	2.1
ALAN210001-3J60	350	0.5	35	1.2	1.0	1500	2.1
ALAN210001-3J61	350	0.5	35	1.2	1.0	1500	2.1
ALAN210001-3JC0	350	0.5	35	1.0	1.2	1500	2.1

Standard	Current (mA Max)	Voltage (V)	Power Delivered per Port (W Max)
IEEE 802.3at : Type-2 / POE+	600	@57 V Continuous	30



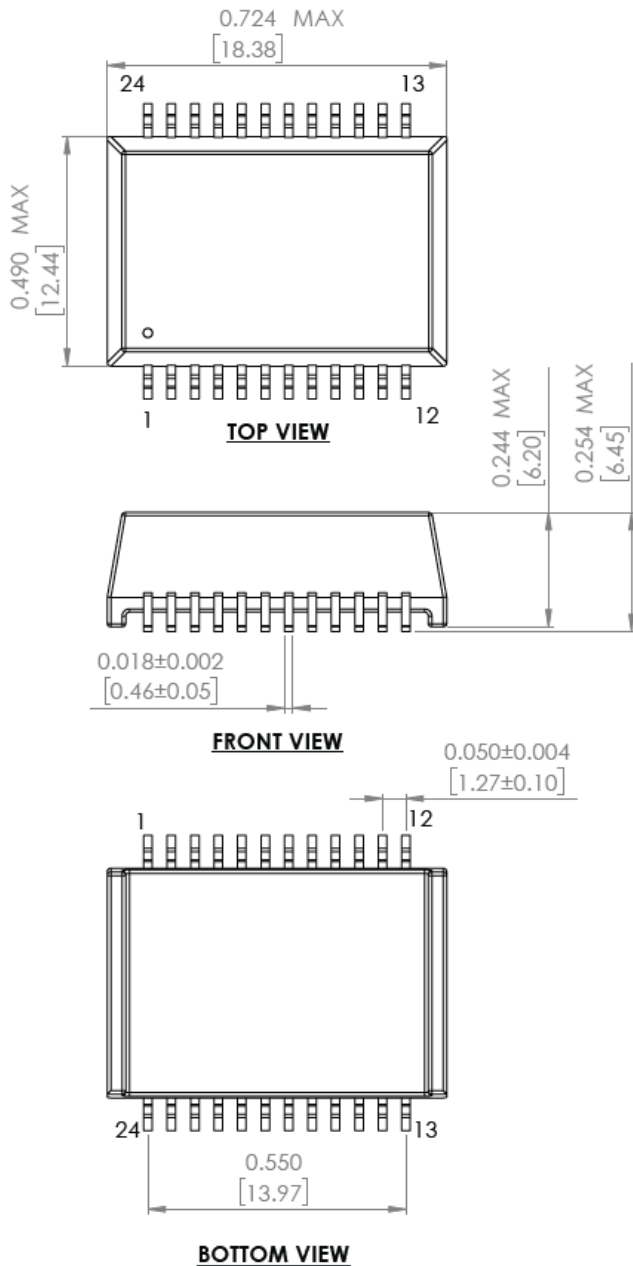
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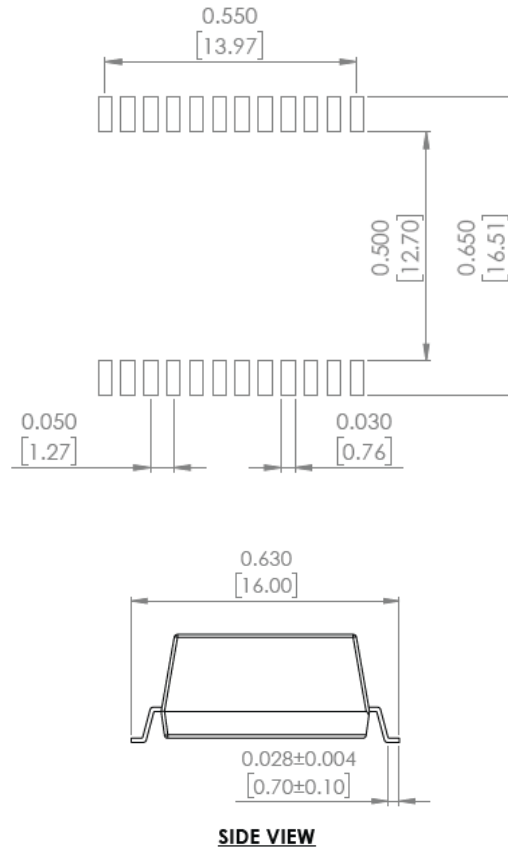
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**Mechanical Dimensions**

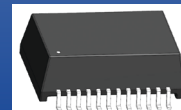
**3: 24-pin**



**RECOMMENDED LAND PATTERN**



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



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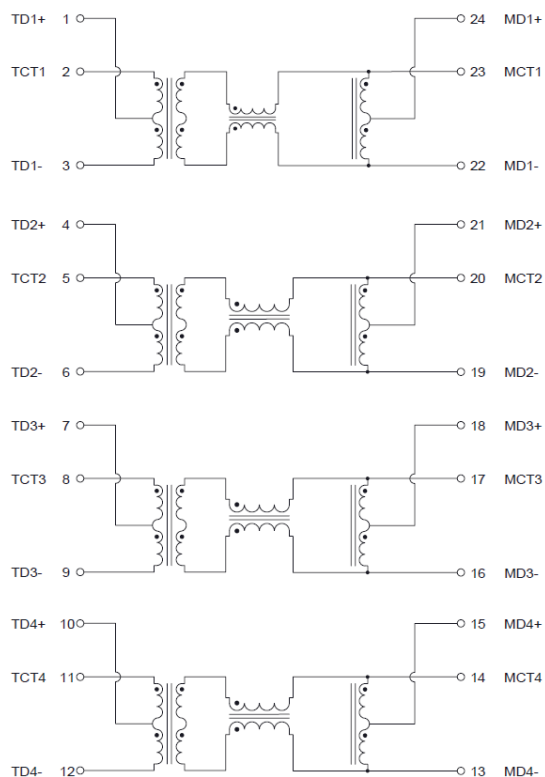


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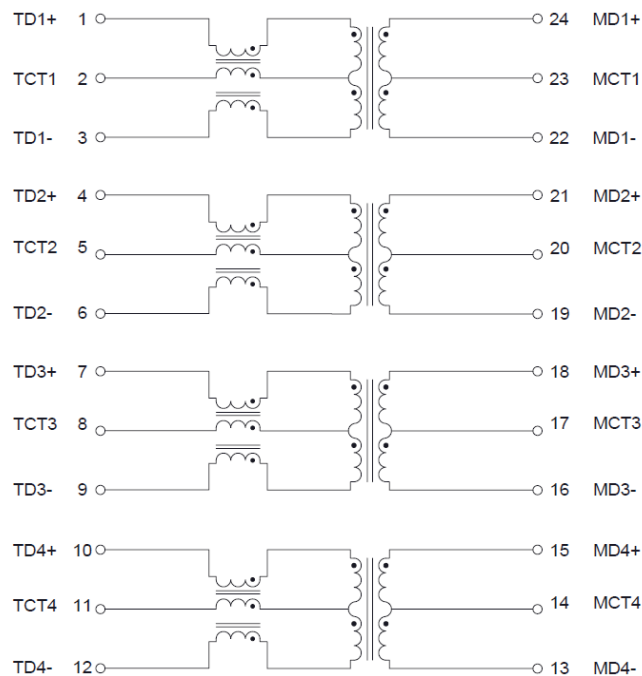
Schematics

24-Pin

J41



J60



Contact Abracon for additional options.



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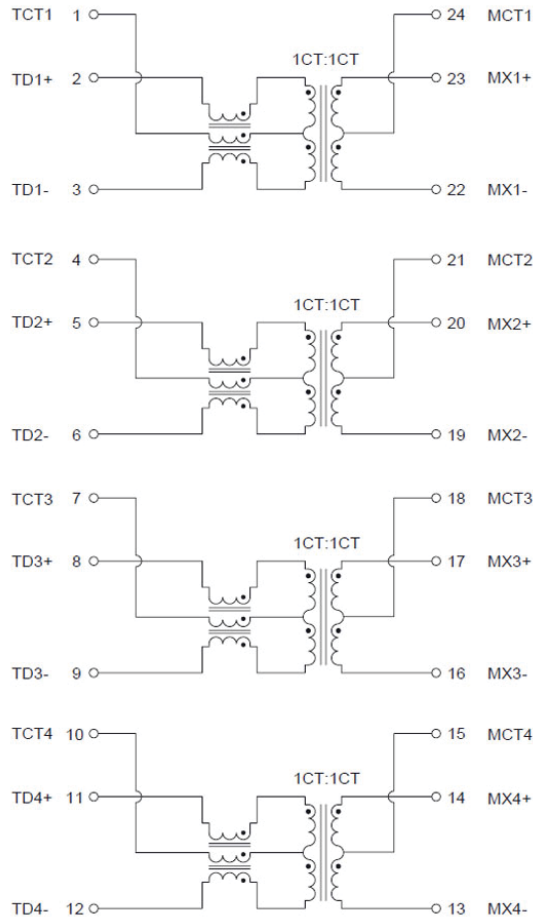


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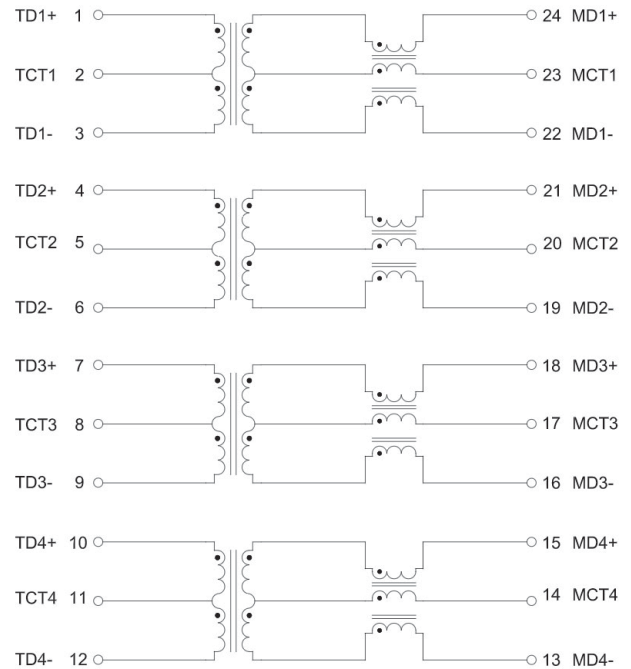
Schematics

24-Pin

J61



JC0



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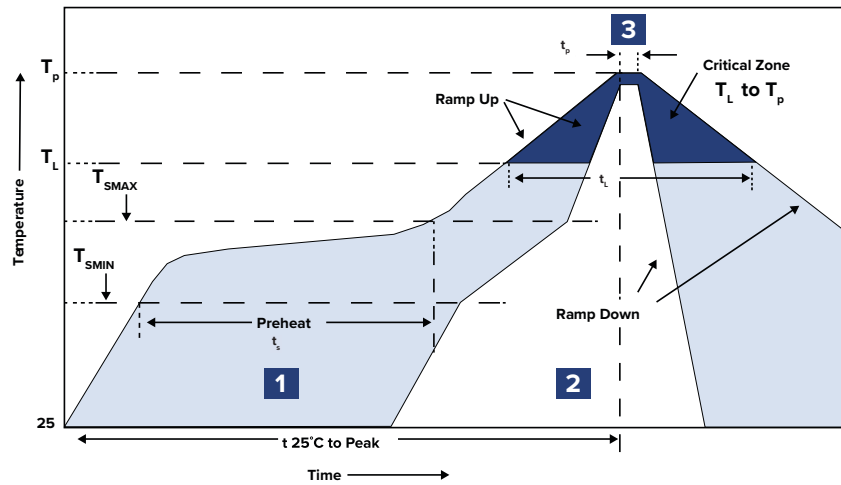


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Reflow Profile



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.