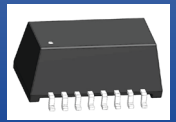


# POE 10/100 BASE-TX Single Port SMD LAN Transformer Module



ALAN1100X1



12.8 x 6.9 x 5.6 mm  
RoHS/RoHS II Compliant  
MSL = 1

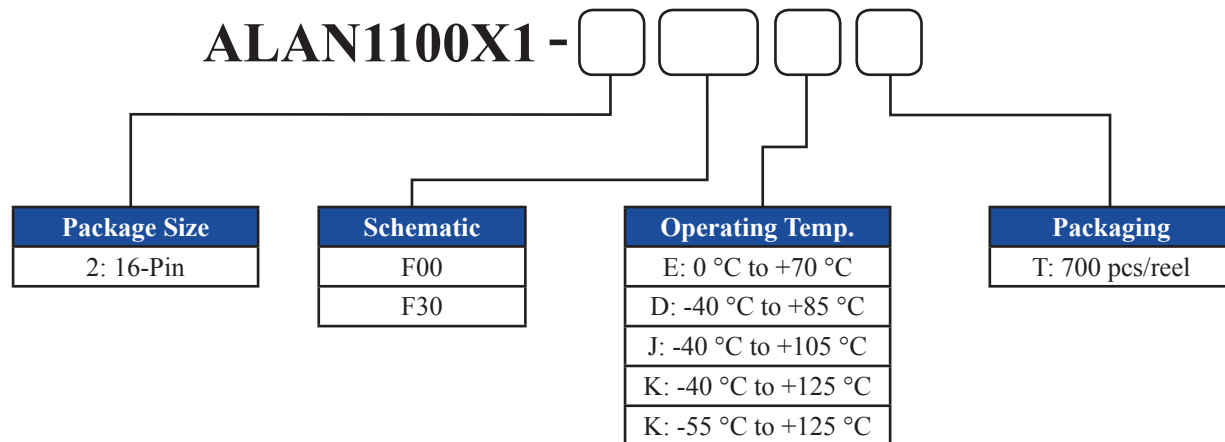
## Features

- Meets IEEE 802.3af standards
- Supports speed up to 100 Mbps
- Power Over Ethernet up to 15 Watts
- Current capability up to 350 mA
- Operating temperature range up to -55°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

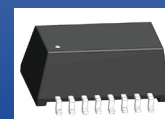
## Applications

- Fast 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 BASE-TX Single Port SMD LAN Transformer Module



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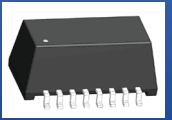
## Electrical Specifications at 25°C

Part Number	Insertion Loss (dB Max)	Return Loss (dB Min)					Crosstalk (dB Min)			CMRR (dB Min)			DCMR (dB Min)		
	1-100 MHz	1-30 MHz	40 MHz	50 MHz	60-80 MHz	100 kHz	1 MHz	50 MHz	100 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz
ALAN1100X1-2F00	1.2	18	16	14	12	50	40	35	30	40	35	30	47	40	33
ALAN1100X1-2F30	1.2	18	16	14	12	50	40	35	30	40	35	30	47	40	33

Part Number	Inductance (uH Min)	Leakage Inductance (uH Max)	Interwinding Capacitance (pF Max)	DC Resistance (Ω Max)		Hi Pot (Vrms)	Weight (g)
				Primary	Secondary		
Test Condition	@100kHz, 0.1V, 8mA DC Bias	@100kHz, 0.1V TD to MX	@100kHz TD to MX			6 sec.	Per Piece
ALAN1100X1-2F00	350	0.3	30	1.2	1.0	1500	0.7
ALAN1100X1-2F30	350	0.3	30	1.0	1.2	1500	0.7

Standard	Current (mA Max)	Voltage (V)	Power Delivered per Port (W Max)
IEEE 802.3af: Type-1 / POE	350	@57 V Continuous	15.4

# POE 10/100 BASE-TX Single Port SMD LAN Transformer Module



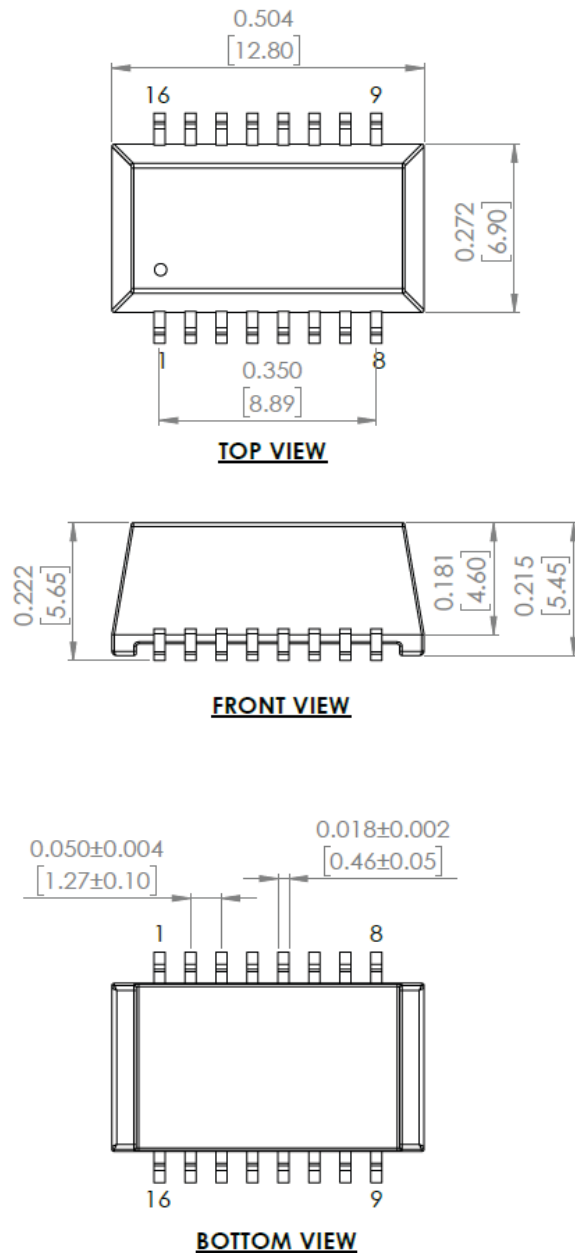
ALAN1100X1



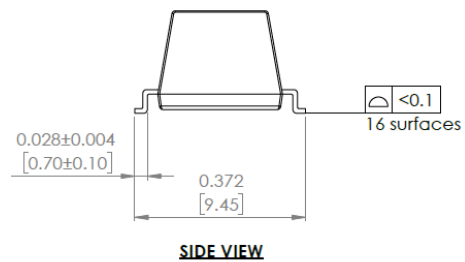
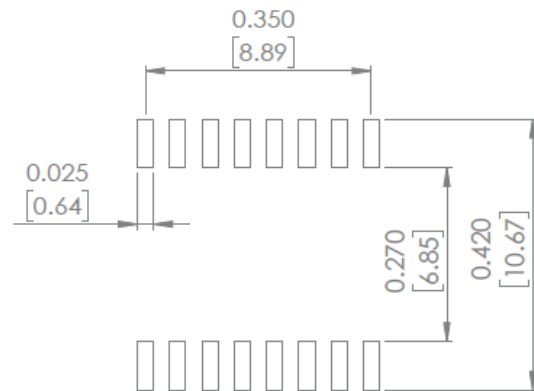
12.8 x 6.9 x 5.6 mm  
RoHS/RoHS II Compliant  
MSL = 1

## Mechanical Dimensions

2: 16-pin

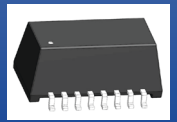


## RECOMMENDED LAND PATTERN



Unless otherwise specified, all tolerances are  $\pm 0.010$  [0.25]  
Dimensions: inch [mm]

# POE 10/100 BASE-TX Single Port SMD LAN Transformer Module



ALAN1100X1

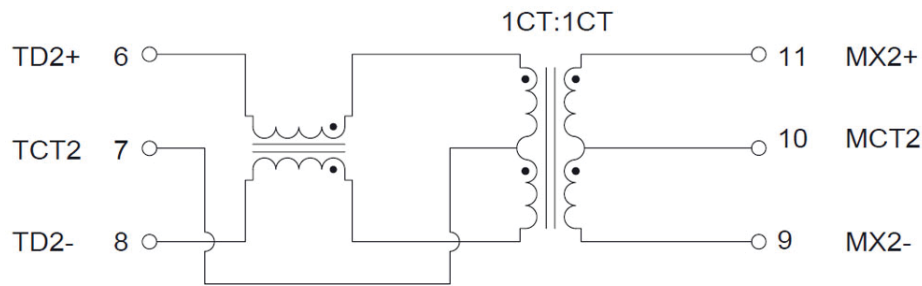
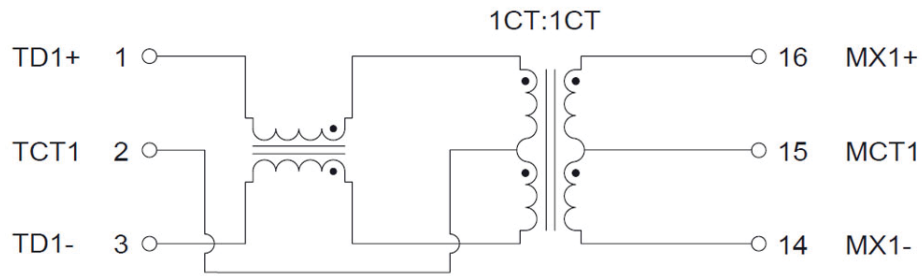


12.8 x 6.9 x 5.6 mm  
RoHS/RoHS II Compliant  
MSL = 1

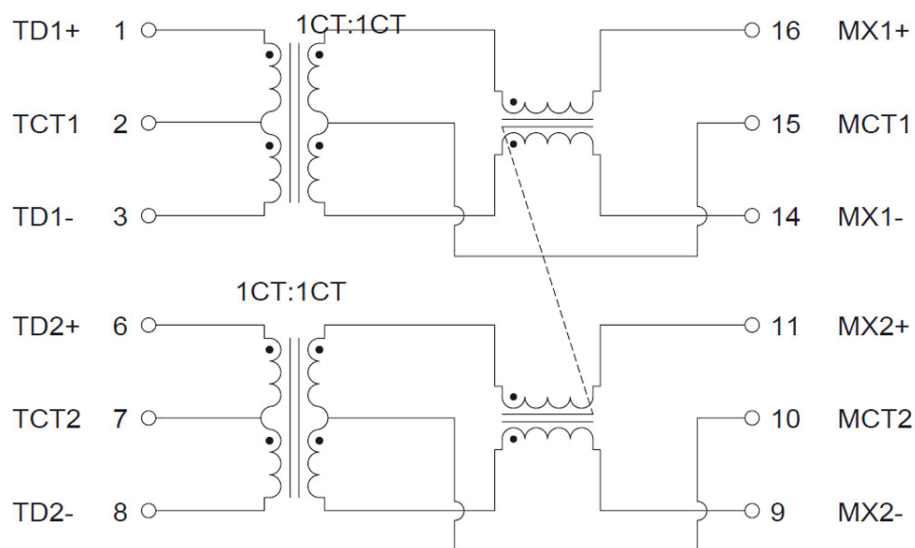
## Schematics

### 16-Pin

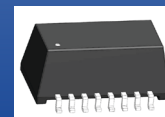
#### F00



#### F30



Contact Abracon for additional options.

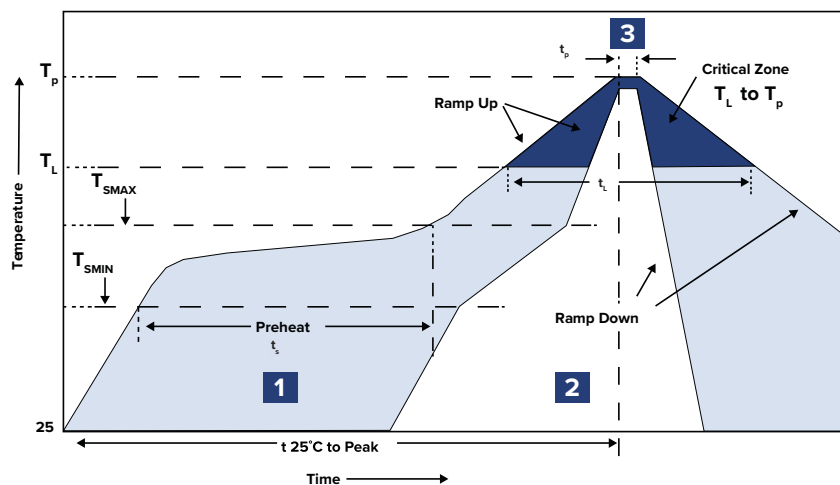


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12.8 x 6.9 x 5.6 mm  
RoHS/RoHS II Compliant  
MSL = 1

## 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.