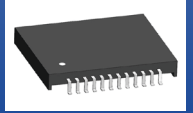


# 10/100/1000 BASE-T Low Profile SMD LAN Transformer Module



ALANL10001



19.8 x 16.6 x 2.5 mm  
RoHS/RoHS II Compliant  
MSL = 1

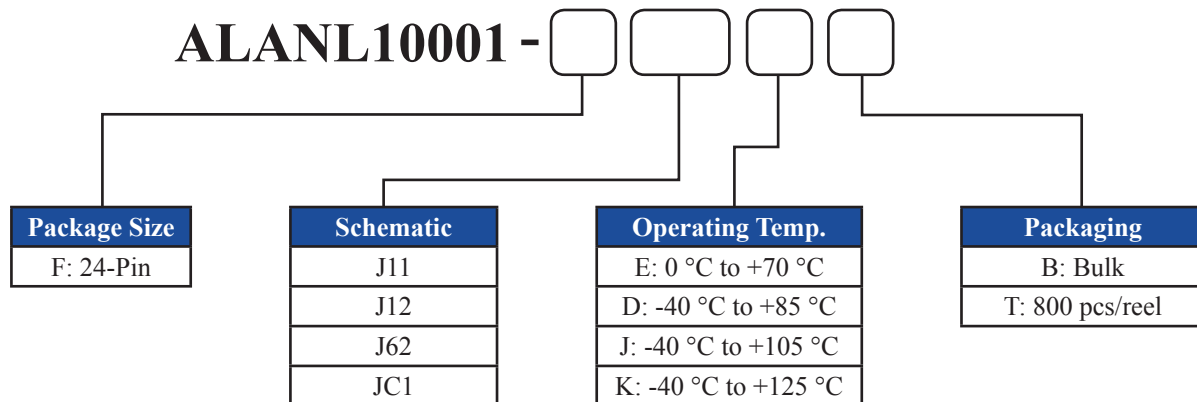
## Features

- Low Profile of 2.53 mm
- Meets IEEE 802.3ab standards
- Compatible with 10 BASE-T, 100 BASE-TX, and 1000 Base-T
- RoHS Compliant
- High performance magnetics for EMI suppression and common mode noise rejection
- 1CT:1CT TX and RX Transformers

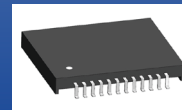
## Applications

- Fast and gigabit Ethernet
- IP cameras, surveillance, and IP phone
- Industrial computers and robotics
- PC Card and Cardbus

## Part Identification



# 10/100/1000 BASE-T Low Profile SMD LAN Transformer Module



ALANL10001



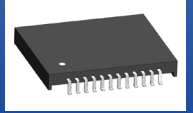
19.8 x 16.6 x 2.5 mm  
RoHS/RoHS II Compliant  
MSL = 1

## Electrical Specifications at 25°C

Part Number	Insertion Loss (dB Max)	Return Loss (dB Min)				Crosstalk (dB Min)			CMRR (dB Min)			DCMR (dB Min)		
	0.5-100 MHz	1-40 MHz	60 MHz	80 MHz	100 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz
ALANL10001-FJ11	1.2	18	14.4	12	10	45	40	35	43	37	33	43	37	33
ALANL10001-FJ12	1.2	18	14.4	12	10	45	40	35	43	37	33	43	37	33
ALANL10001-FJ62	1.2	18	14.4	12	10	45	40	35	43	37	33	43	37	33
ALANL10001-FJC1	1.2	18	14.4	12	10	45	40	35	43	37	33	43	37	33

Part Number	Inductance (uH Min)	Leakage Inductance (uH Max)	Interwinding Capacitance (pF Max)	DC Resistance ( $\Omega$ Max)		Hi Pot (Vrms)	Weight (g)
Test Condition	@100kHz, 0.2V, 8mA DC Bias	@100kHz, 0.2V TD to MX	@100kHz, 0.1V TD to MX	TD+ to TD-	MX+ to MX-	0.5mA/6 sec.	Per Piece
ALANL10001-FJ11	350	0.5	30	1.0	1.5	1500	1.2
ALANL10001-FJ12	350	0.5	30	1.0	1.5	1500	1.2
ALANL10001-FJ62	350	0.5	30	1.5	1.0	1500	1.2
ALANL10001-FJC1	350	0.5	30	1.0	1.5	1500	1.2

# 10/100/1000 BASE-T Low Profile SMD LAN Transformer Module



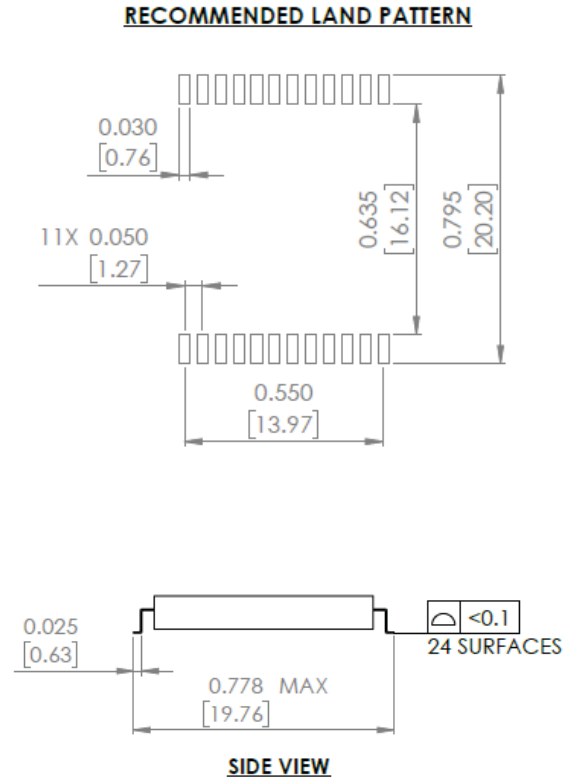
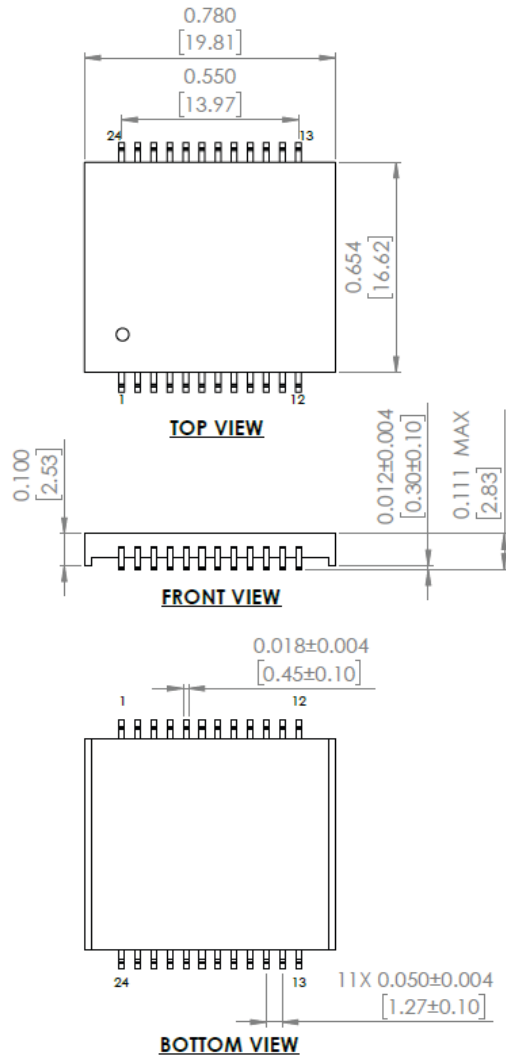
ALANL10001



19.8 x 16.6 x 2.5 mm  
RoHS/RoHS II Compliant  
MSL = 1

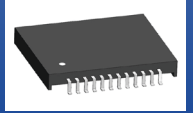
## Mechanical Dimensions

### F: 24-pin Option 1



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

# 10/100/1000 BASE-T Low Profile SMD LAN Transformer Module



ALANL10001

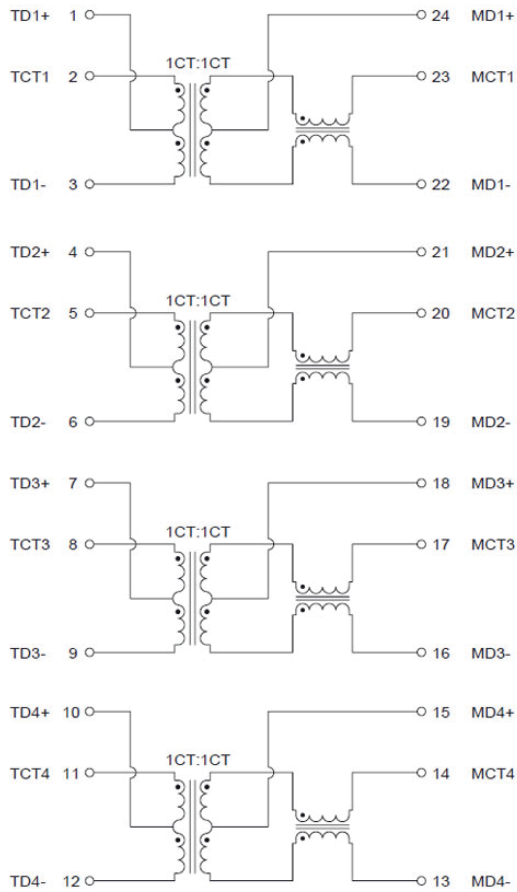


19.8 x 16.6 x 2.5 mm  
RoHS/RoHS II Compliant  
MSL = 1

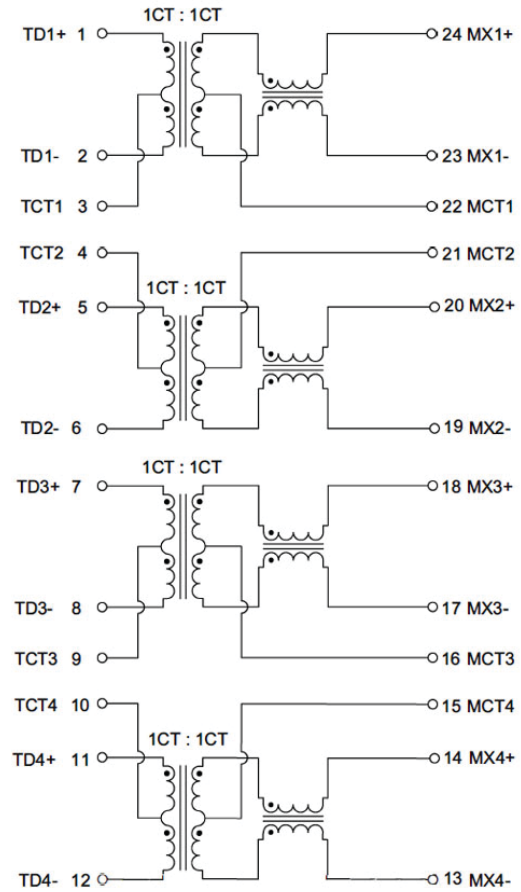
## Schematics

### 24-Pin

#### J11



#### J12



Contact Abracon for additional options.

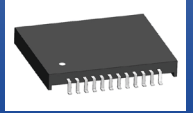


5101 Hidden Creek Ln Spicewood TX 78669  
Phone: 512-371-6159 | Fax: 512-351-8858  
For terms and conditions of sales, please visit:  
[www.abracon.com](http://www.abracon.com)

REVISED: 08-5-19

ABRACON IS  
ISO9001-2015  
CERTIFIED

# 10/100/1000 BASE-T Low Profile SMD LAN Transformer Module



ALANL10001

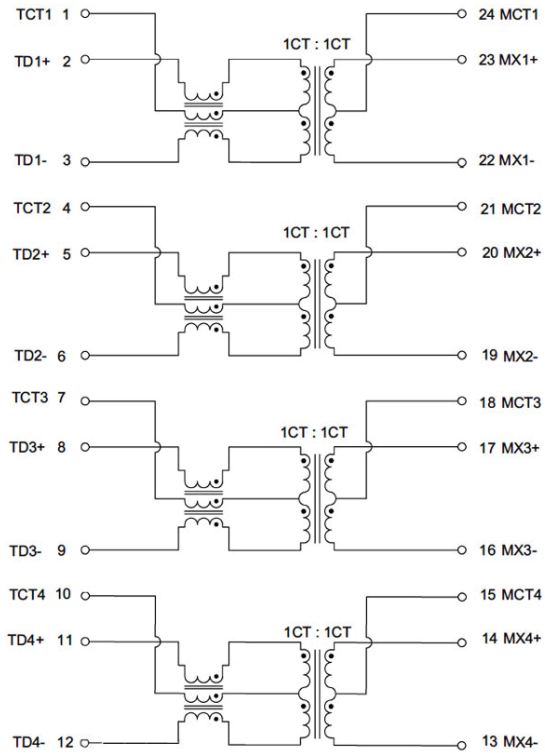


19.8 x 16.6 x 2.5 mm  
RoHS/RoHS II Compliant  
MSL = 1

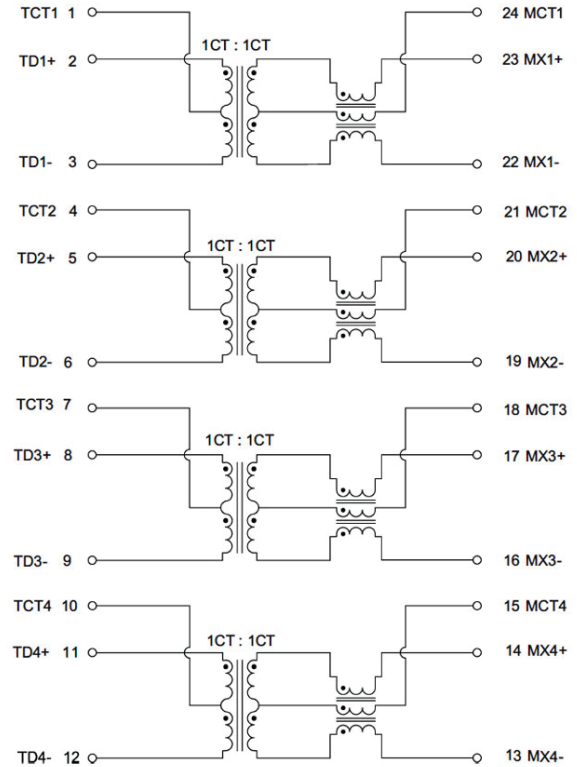
## Schematics

### 24-Pin

#### J62



#### JC1



Contact Abracon for additional options.

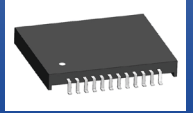


5101 Hidden Creek Ln Spicewood TX 78669  
Phone: 512-371-6159 | Fax: 512-351-8858  
For terms and conditions of sales, please visit:  
[www.abracon.com](http://www.abracon.com)

REVISED: 08-5-19

ABRACON IS  
ISO9001-2015  
CERTIFIED

# 10/100/1000 BASE-T Low Profile SMD LAN Transformer Module

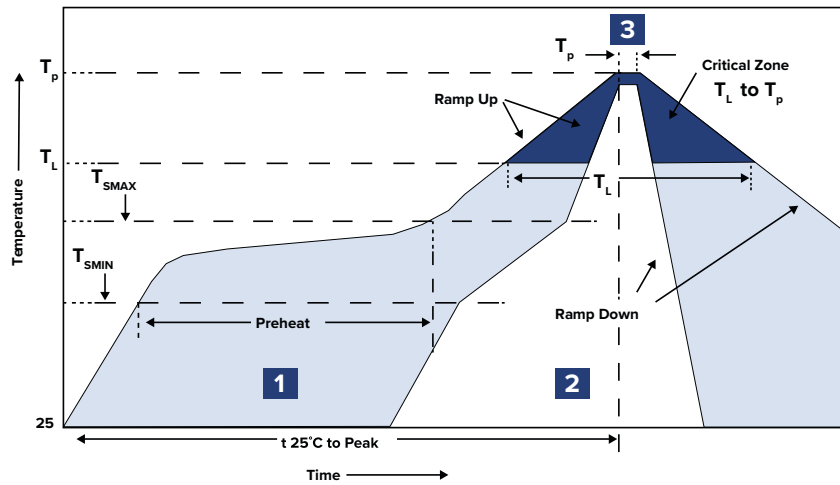


ALANL10001



19.8 x 16.6 x 2.5 mm  
RoHS/RoHS II Compliant  
MSL = 1

## Reflow Profile



Zone	Description	Temperature	Time
1	Preheat / Soak	$T_{SMIN} \sim T_{SMAX}$ 150°C ~ 200°C	60 ~ 180 sec.
2	Reflow	$T_L$ 245°C	20 ~ 40 sec.
3	Peak heat	$T_P$ 240°C±5°C	10 sec. MAX