

# 10/100/1000 BASE-T Dual Port SMD LAN Transformer Module



ALANM10002



30.9 x 15.2 x 5.5 mm  
RoHS/RoHS II Compliant  
MSL = 1

## Features

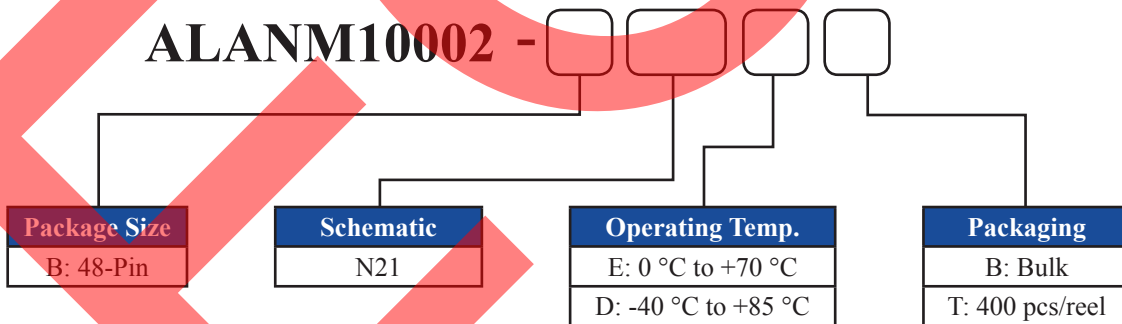
- Uniform transformer windings
- Fully automated production lines
- Meets 802.3ab standards
- Dual Port
- Operating temperature range up to -40°C to +85°C
- RoHS Compliant
- 1CT:1CT TX and RX Transformers

## Applications

- Gigabit Ethernet
- Servers, switches and routers
- IP cameras, surveillance, and phone
- Access points
- Industrial computers and robotics
- Networking and communications
- Broadcast video
- Set top box

## Part Identification

ALANM10002 -



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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)		
	0.5-100 MHz	1-40 MHz	60 MHz	80 MHz	100 MHz	0.5-40 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz
ALANM10002-BN21	1.5	18	16	12	10	40	37	33	42	37	33	42	37	33

Part Number	Inductance (uH Min)	Leakage Inductance (uH)	Interwinding Capacitance (pF Max)	DC Resistance ( $\Omega$ Max)				Hi Pot (Vrms)	Weight (g)
				CT to TD	TD+ to TD-	CT to MX	MX+ to MX-		
ALANM10002-BN21	200	0.5	50	2	3.5	2.5	5.0	1500	3.4

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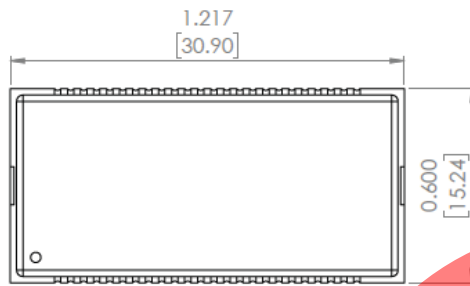
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## Mechanical Dimensions

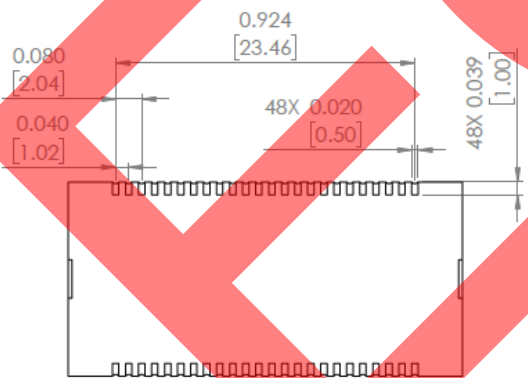
B: 48-pin



TOP VIEW

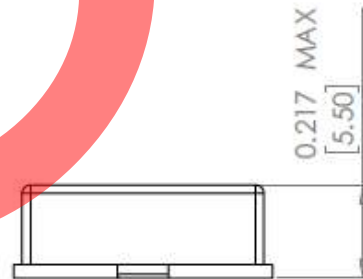
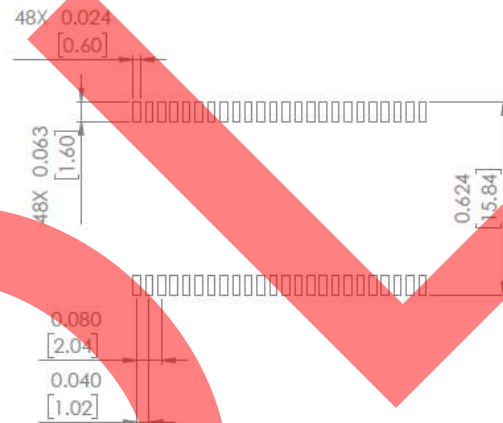


FRONT VIEW



BOTTOM VIEW

### RECOMMENDED LAND PATTERN



SIDE VIEW

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



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REVISED: 05-10-19

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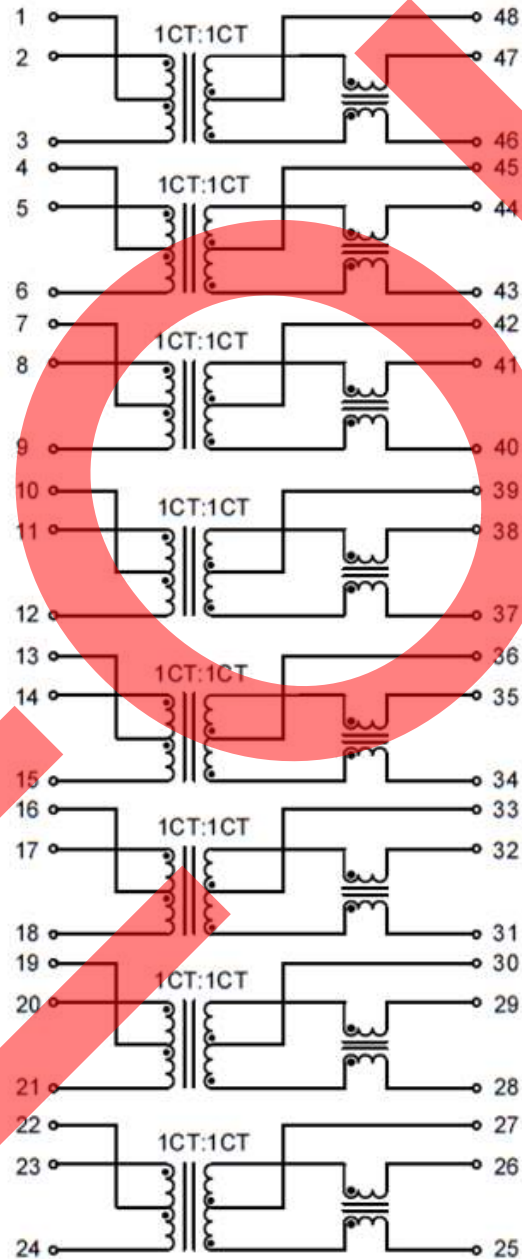


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## Schematics

### 48 - Pin

N21



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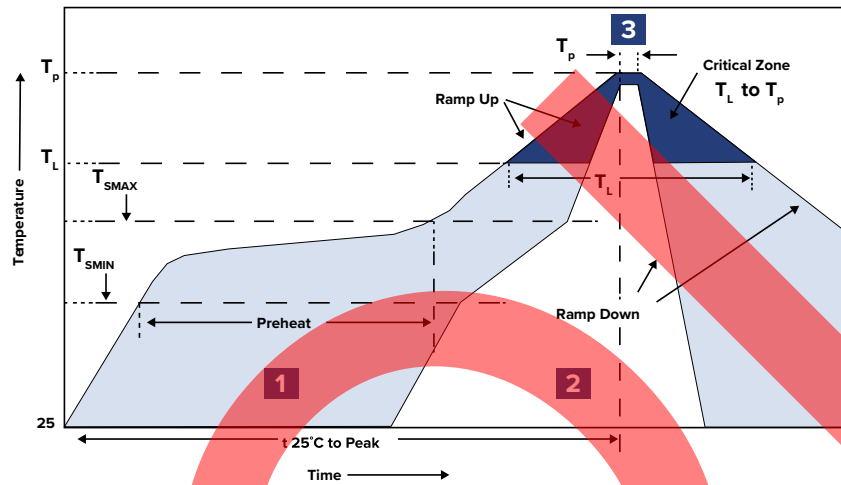


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## Reflow Profile



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	$T_P$ 260°C ± 5°C	10 sec. MAX

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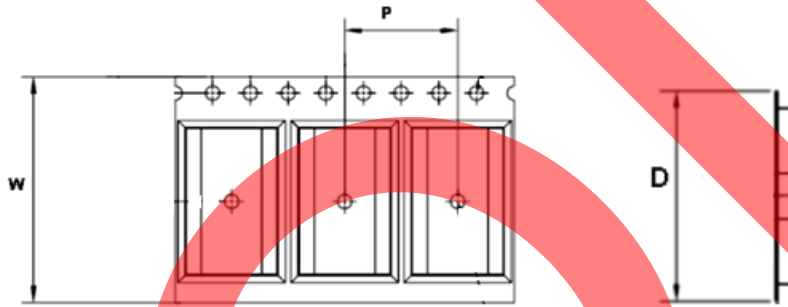
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## Packaging

Tape and Reel: 400 pcs/reel  
Pieces Per Carton: 2000 pcs  
Weight Per Carton: 9.0 kg (approx.)  
Dimension of Carton: 345 x 345 x 290 mm



W	P	D
44.0	24.0	Ø330

Dimensions: mm

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