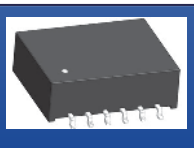
10/100 BASE-TX Single Port SMD LAN Transformer Module



ALANS100X1

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

Features

- Meets IEEE 802.3u standards
- Compatible with 10 BASE-T and 100 BASE-TX
- Operating temperature range up to -55°C to +125°C
- RoHS Compliant
- High performance magnetics for EMI suppression and common mode noise rejection
- Multiple schematic and pinout options with 1.27mm pin pitch.
- 1CT:1CT TX and RX Transformers

Applications

- Fast 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

ALANS100X1 - □ □ □ □

Package Size
2: 16-pin

16 pin
F10
F30
F02
F00
*F82

Operating Temp.
E: 0 °C to +70 °C
D: -40 °C to +85 °C
J: -40 °C to +105 °C
K: -40 °C to +125 °C
*L: -55 °C to +125 °C

*Operating temp. option L
not available for schematic option F82

Packaging
T: Tape & Reel **

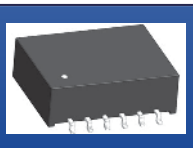
**Package size 2: 16-pin:
T= 600 pcs/reel

ABRACON LLC
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

REVISED: 02-12-23

ABRACON IS
ISO9001-2015
CERTIFIED

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



ALANS100X1

12.8 x 6.9 x 5.6 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
ALANS100X1-2F10	-0.8	-18	-14.4	-12	-10	-45	-40	-35	-43	-37	-33	-43	-37	-33
ALANS100X1-2F30	-0.8	-18	-14.4	-12	-10	-45	-40	-35	-43	-37	-33	-43	-37	-33
ALANS100X1-2F02	-0.8	-18	-14.4	-12	-10	-45	-40	-35	-43	-37	-33	-43	-37	-33
ALANS100X1-2F00	-0.8	-18	-14.4	-12	-10	-45	-40	-35	-43	-37	-33	-43	-37	-33
ALANS100X1-2F82	-0.8	-18	-14.4	-12	-10	-45	-40	-35	-43	-37	-33	-43	-37	-33

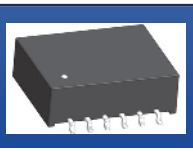
Part Number	Inductance (uH Min)	Leakage Inductance (uH Max)	Interwinding Capacitance (pF Max)	DC Resistance (Ω Max)		Hi Pot (VDC)
	@100kHz, 0.1V, 8mA DC Bias	@100kHz, 0.1V TD to MX	@100kHz, 0.1V TD to MX	Primary	Secondary	0.5mA/6 sec.
ALANS100X1-2F10	350	0.35	35	0.9	1.2	2500
ALANS100X1-2F30	350	0.35	35	0.9	1.2	2500
ALANS100X1-2F02	350	0.35	35	0.9	1.2	2500
ALANS100X1-2F00	350	0.35	35	0.9	1.2	2500
ALANS100X1-2F82	350	0.35	35	DCR(7-8):1.2	DCR(1-2,16-15,10-9):0.9	2500

ABRACON LLC
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

REVISED: 02-12-23

ABRACON IS
ISO9001-2015
CERTIFIED

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

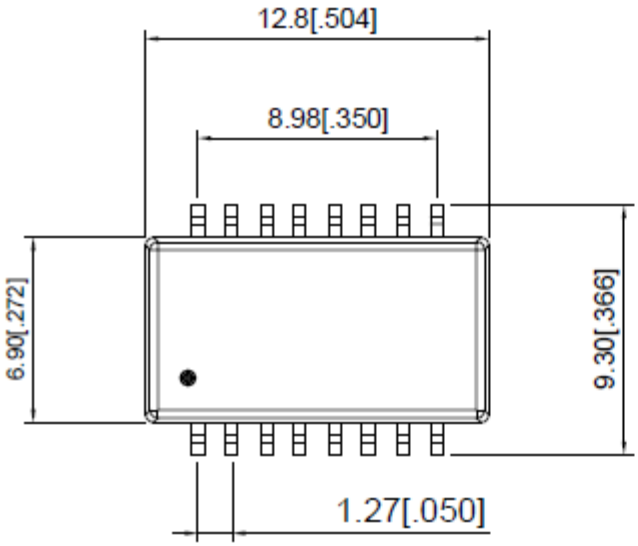


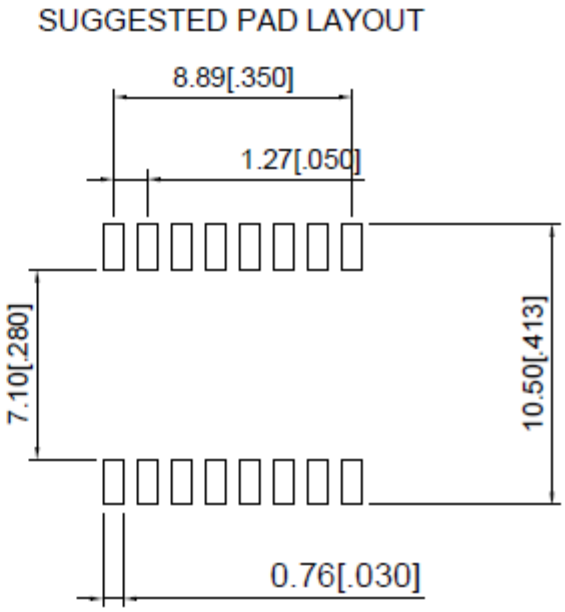
ALANS100X1

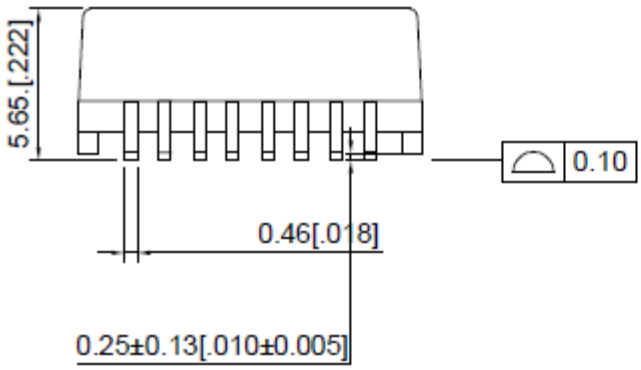
12.8 x 6.9 x 5.6 mm
RoHS/RoHS II Compliant
MSL = 1

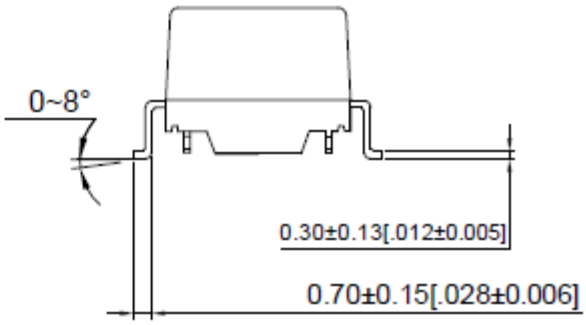
Mechanical Dimensions

16-pin









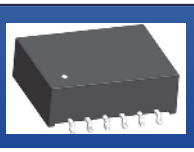
Unless otherwise specified, all tolerances are ±0.25 in mm
Dimensions: inch/ [mm]

ABRACON LLC
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

REVISED: 02-12-23

ABRACON IS
ISO9001-2015
CERTIFIED

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



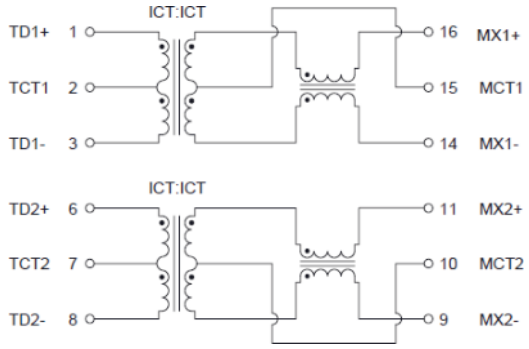
ALANS100X1

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

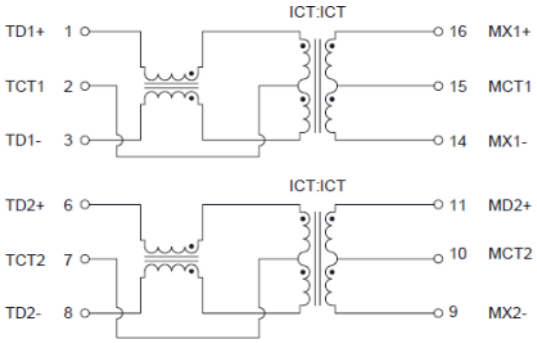
Schematics

16- Pin

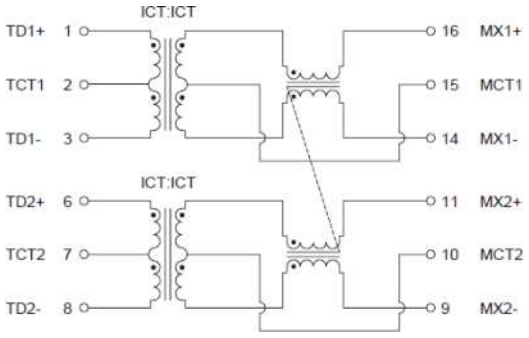
F10



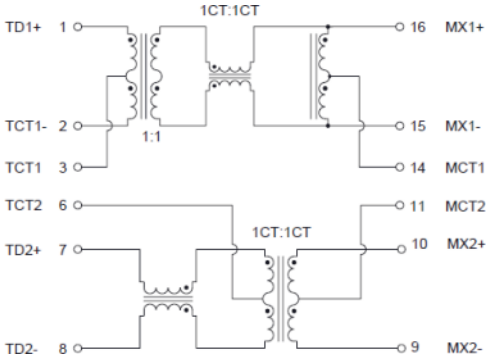
F00



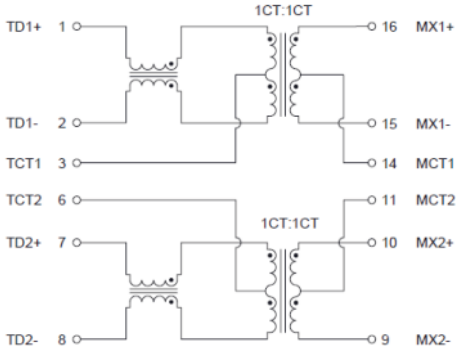
F30



F82



F02



Contact Abracon for additional options.

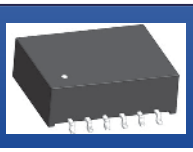
ABRACON LLC

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

REVISED: 02-12-23

ABRACON IS
ISO9001-2015
CERTIFIED

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

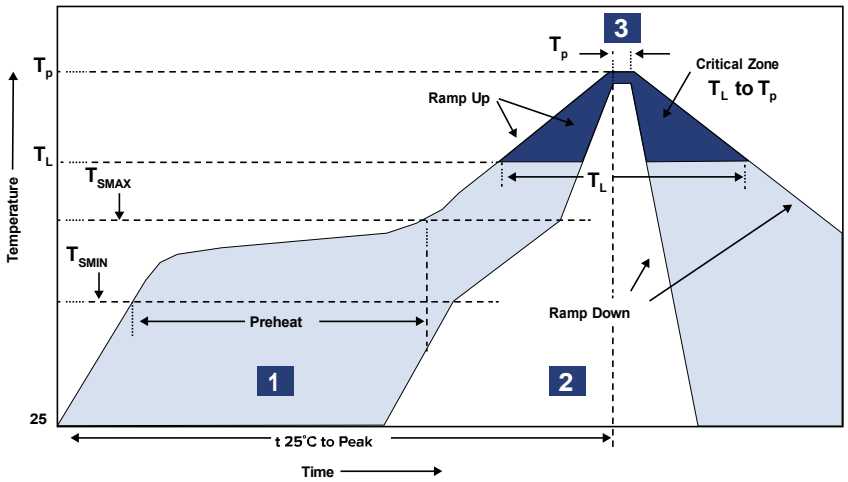


ALANS100X1

Pb

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_{SMIN} ~ T_{SMAX} 150°C ~ 200°C	60 ~ 120 sec.
2	Reflow	T_L 217°C	60 ~ 150 sec.
3	Peak heat	T_P 245°C±5°C	40 sec. MAX

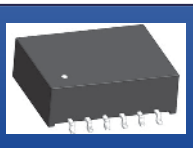
ABRACON LLC

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

REVISED: 02-12-23

ABRACON IS
ISO9001-2015
CERTIFIED

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

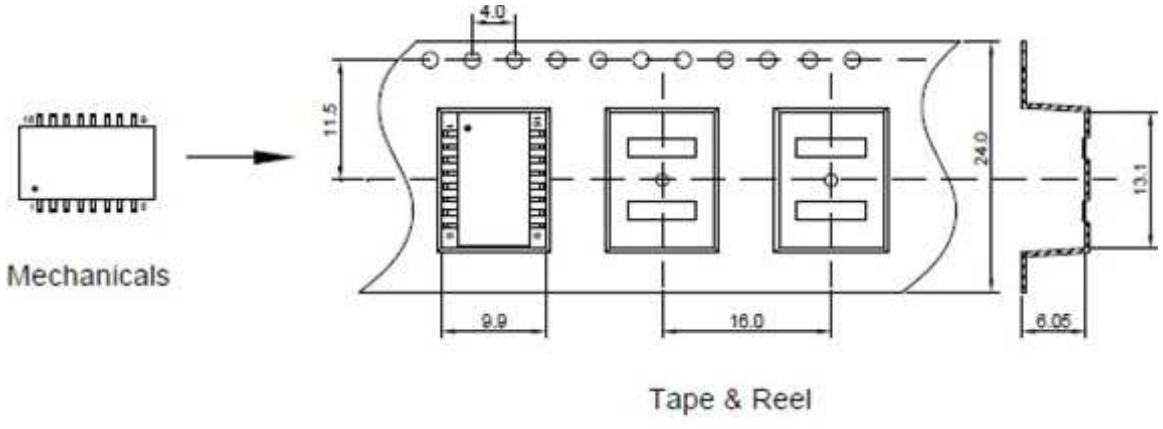


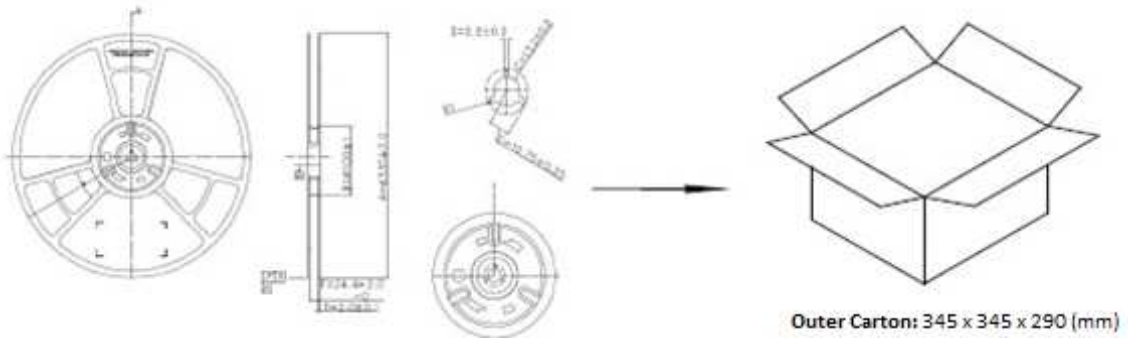
ALANS100X1

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

Packaging

Tape and Reel: 600 pcs/reel
Pieces per Carton: 4800
T&R per Carton: 8
Weight per Carton: 9.0kg
Weight per Piece: 0.7g





Dimensions: mm

ATTENTION: **Abracon LLC's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependent Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.**

ABRACON LLC

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

REVISED: 02-12-23

ABRACON IS
ISO9001-2015
CERTIFIED