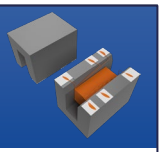
10/100/1000 Base-T, SMD PoE LAN Isolation Transformer



ALANC001G

Request Samples | Check Inventory

4.6 x 3.4 x 3.5 mm
RoHS/RoHS II Compliant
MSL Level = 1

Features

- Uniform transformer windings
- Power over Ethernet (PoE, PoE+) capable.
- Meets IEEE 802.3u and 802.3ab standards
- Compatible with 10 BASE-T, 100 BASE-TX and 1000 BASE-T
- Symmetric Orientation
- Operating temperature range of -40°C to +85°C
- RoHS Compliant
- 1CT:1CT Transformer

Applications

- Fast and 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

Electrical Specifications @25ºC

Part Number*	Inductance (uH Min)	Interwinding Capacitance (pF Max)	DC Resistance (Ω Max)		Rated Current (mA)	Insertion Loss (dB Max)	Return Loss (dB Min)	Hi Pot (VAC)	Turn Ratio
Test Condition	@100kHz, 0.1V	@ 100KHz, 0.2V	Pins 1-2	Pins 4-5	Pins 1-2-6 Pins 5-4-3	1 ~125 MHz	1 ~125 MHz	1 sec.	1-2 : 4-5
ALANC001G1-EADT	200	35	1.5	1.5	300	-1.5	-10	1500	1CT:1CT
ALANC001G2-EADT	180	35	1.2	1.2	600	-1.5	-10	1500	1CT:1CT

*The "T" at the end of the part numbers refers to "Tape & Reel" packaging. For other options, please refer to the Part Identification section.

ALANC001G series is RoHS/ RoHS II Compliant and Pb free.
Applicable Standards: IEEE 802.3u and 802.3ab.
Operating Temperature: -40˚C ~ +85˚C.
Storage Condition: -40˚C ~ +85˚C (on board), 40% - 60% RH.

ALANC001G1-EADT

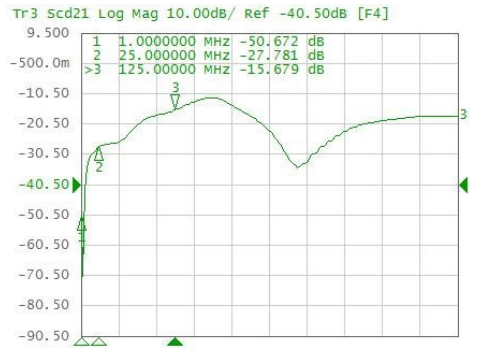
Insertion Loss (dB)



Return Loss (dB)



DCMR (dB)



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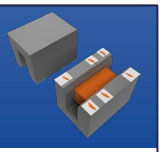
REVISION A : 11/12/2024

ABRACON IS ISO9001-2015 CERTIFIED

10/100/1000 Base-T, SMD PoE LAN Isolation Transformer



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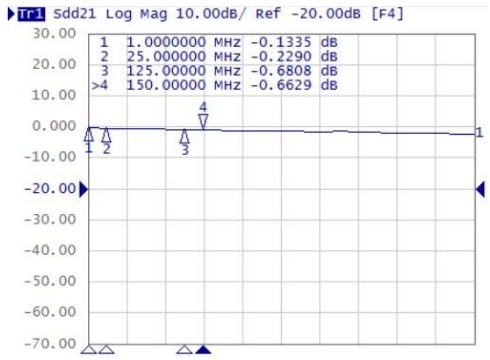
RoHS/RoHS II Compliant
MSL Level = 1

ALANC001G2-EADT

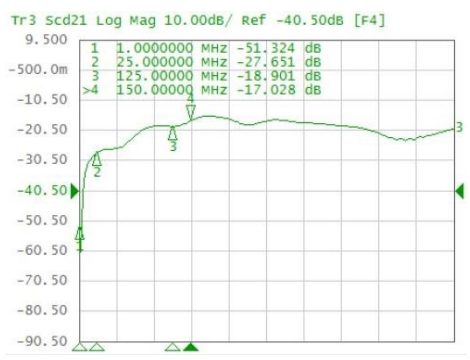
Insertion Loss (dB)



Return Loss (dB)



DCMR (dB)



Part Identification

ALANC001G□ - □□□□

Power Over Ethernet	Package	Schematic	Operating Temp.	Packaging
PoE: 1	E: 6-pin	A: Standard	D: -40°C ~ +85°C	T: Tape & reel
PoE+: 2				B: Bulk

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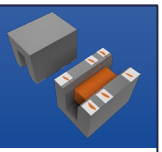

ALANC001G

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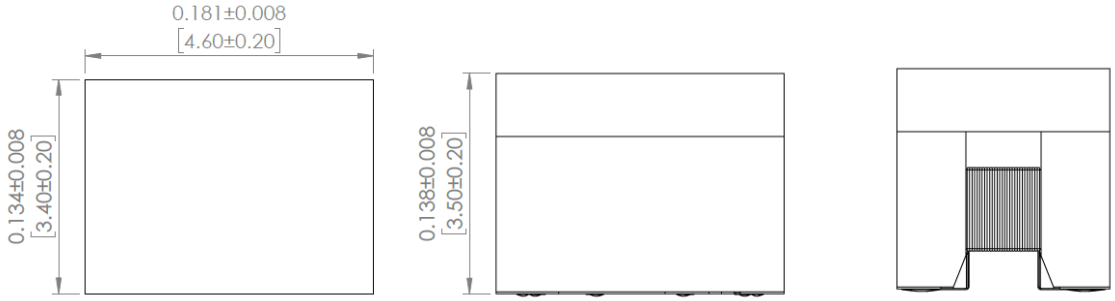
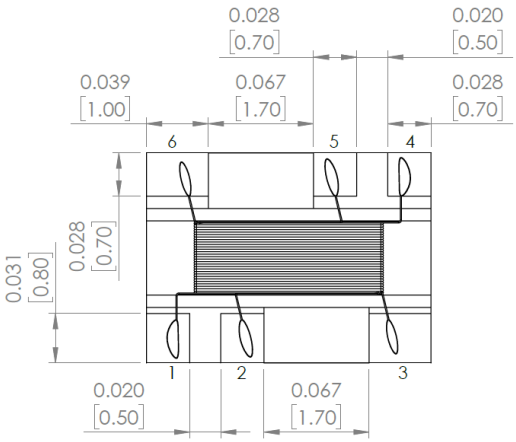
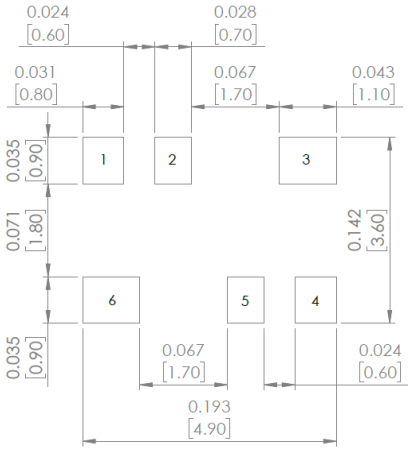
RoHS/RoHS II Compliant
MSL Level = 1

Mechanical Specifications

Package E: 6-pin





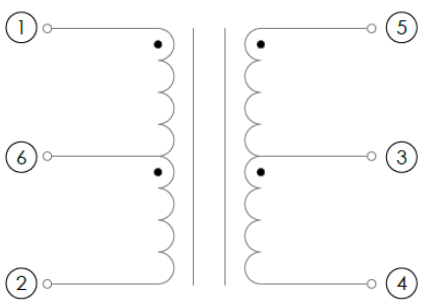


Dimensions unit: inches [mm]

Recommended Land Pattern

Schematic

A: Standard



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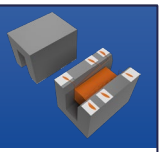

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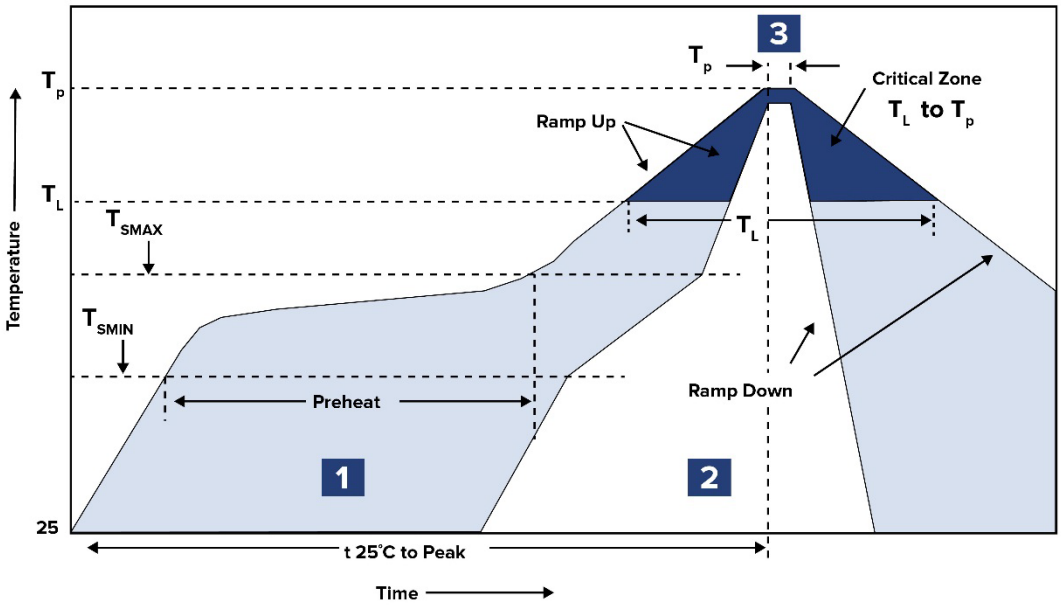
Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	T_{SMIN} ~ T_{SMAX} 150°C ~ 200°C	60 ~ 180 sec.
2	Reflow	T_L 217°C	60 ~ 150 sec.
3	Peak heat	T_P 260°C	10 sec. MAX

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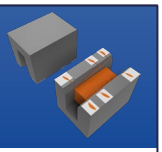


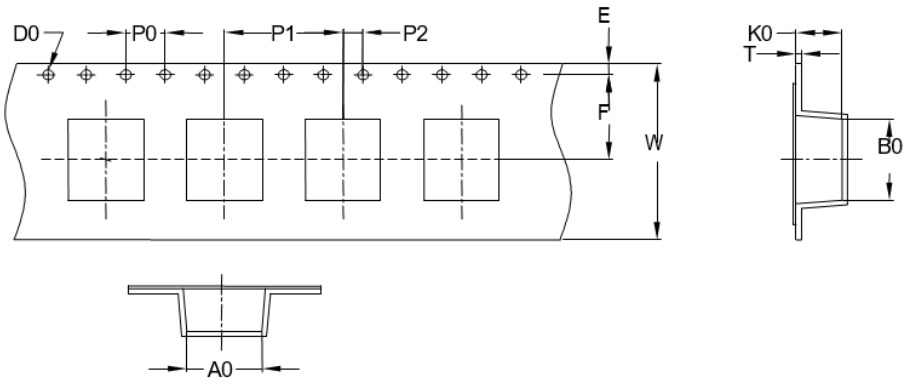
ALANC001G

Request Samples | Check Inventory

4.6 x 3.4 x 3.5 mm
RoHS/RoHS II Compliant
MSL Level = 1

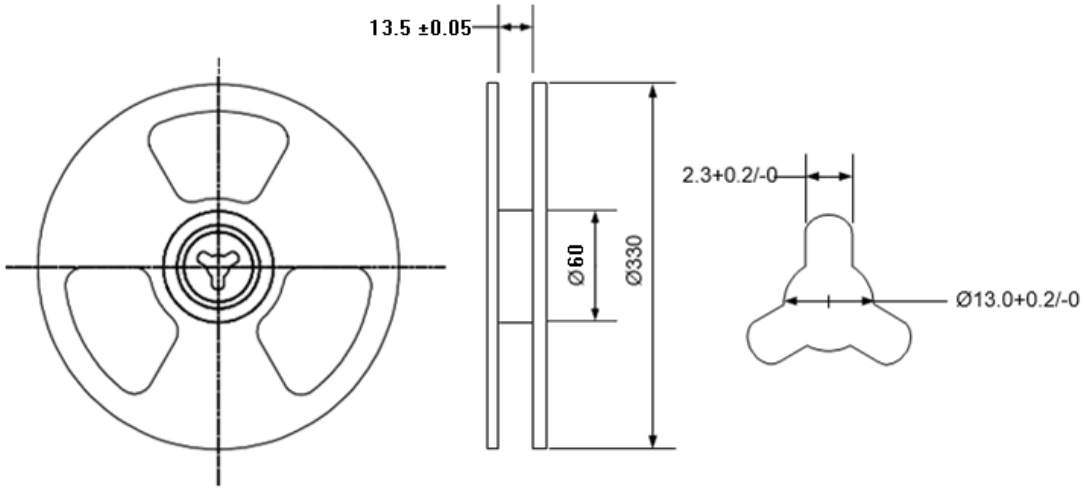
Packaging

Tape and Reel: **2,000 pcs/reel**



A0	B0	W	E	F	P0	P1	P2	D0	T	K0
3.60	4.90	12.00	1.75	5.50 ±0.05	4.00±0.05	8.00	2.00	1.50 ±0.05	0.40 ±0.05	3.0

Tolerance: ±0.1 (unless otherwise noted)



Dimensions unit: mm

ATTENTION: Abracon LLC's products are Commercial-Off-The-Shelf (COTS, which are designed, intended and validated for use in commercial, industrial and automotive applications. The customer is responsible for testing and verifying the performance of an Abracon solution to meet their system-level requirements.

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