



TAOGLAS®



Datasheet

LAN Transformer Dual 1G Base-T PoE

Part No:
TM85002ANL

Description:

Dual 1G Base-T Transformer
Dual Port and 50pin SMT with PoE

Features:

Dual port
PoE (350mA)
3Wire + Transformer
Industrial grade
RoHS Compliant

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1. Introduction



Featuring a compatible footprint with industry LAN transformers, and designed to work in demanding industrial environmental conditions, the Taoglas TM85002ANL is a LAN Transformer Dual 1GBase-T Single Port of 50pins that is capable for PoE (350mA).

Typical applications for this cost-effective part are:

- Industrial Automation
- Hubs
- Routers
- Switches
- Wireless Access Points

The Taoglas Magnetics Product Team have over fifteen years of LAN magnetics design and high-quality manufacturing. With an ever-expanding portfolio, we provide trusted products and services to customers within a wide range of applications such as: Networking and Interconnect Devices, Servers, Switches, Router, Communication systems and any Digital Consumer electronics.

The Taoglas Exos Series offer an extensive product line of LAN Transformers designed for commercial and industrial grade applications, supporting 10/100 Base-T (Exos100 Series), 1G Base-T (Exos1G Series) and 10G Base-T (Exos10G Series). These products include Single, Dual, and Quad configurations not only for standard applications but also for Power over Ethernet (PoE, PoE+, PoE++).

For more information on the range of products or for assistance with integration, contact your regional Taoglas customer support team.

2. Specifications

Electrical Performance @25°C	
Inductance OCL	350uH Min @100KHz,0.1Vrms,8mADC
Turns Ratio (±2%)	1CT: 1CT
Insertion Loss	1-100MHz: -1.0dB Max
Return Loss (dB Min)	1-30MHz: -16
	40MHz: -14.4
	50MHz: -13.1
	60-80MHz: -12
	100MHz: -10
Crosstalk (dB Min)	1-100MHz: -30
DC Current/Voltage Rating	350mA MAX @57V Continuous
Isolation Voltage	1500Vrms Min

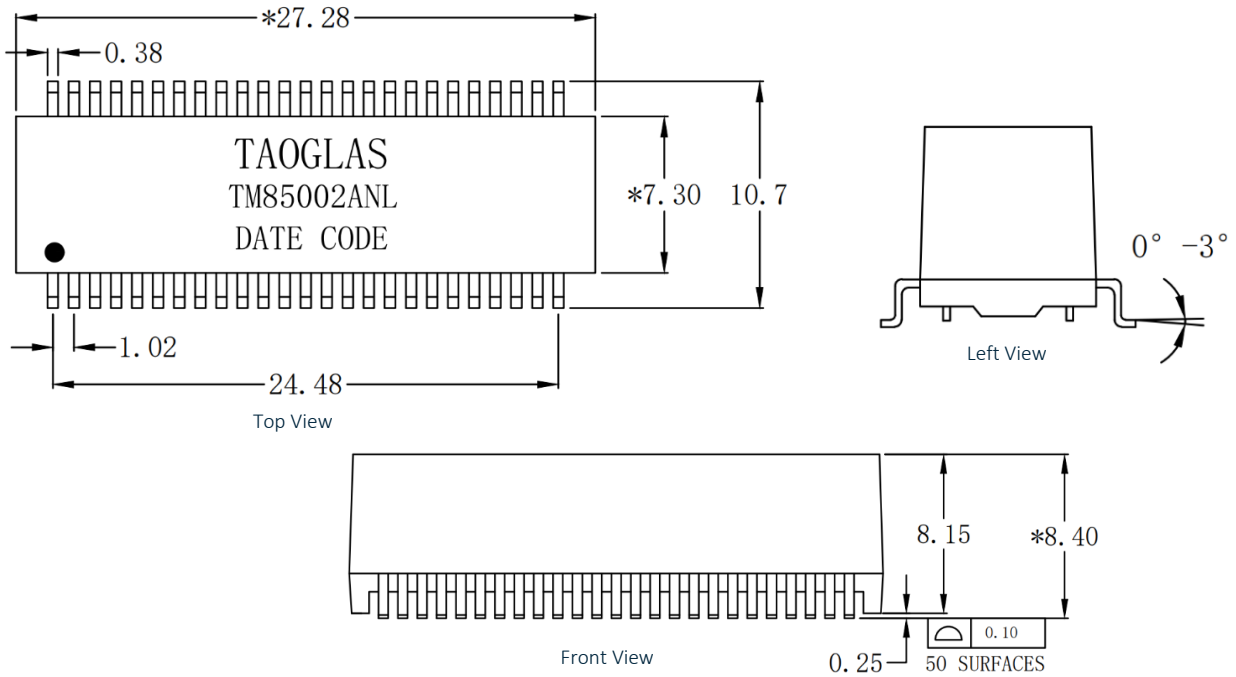
Environmental Specifications	
Operating Temperature	-40°C TO +85°C

Compliance	
RoHS Compliant	
UL recognized - FILE NO. E528697	
IEEE 802.3	

Storage requirements	
Humidity	MSL - 1
Storage Temperature	-40°C TO +85°C

3. Mechanical

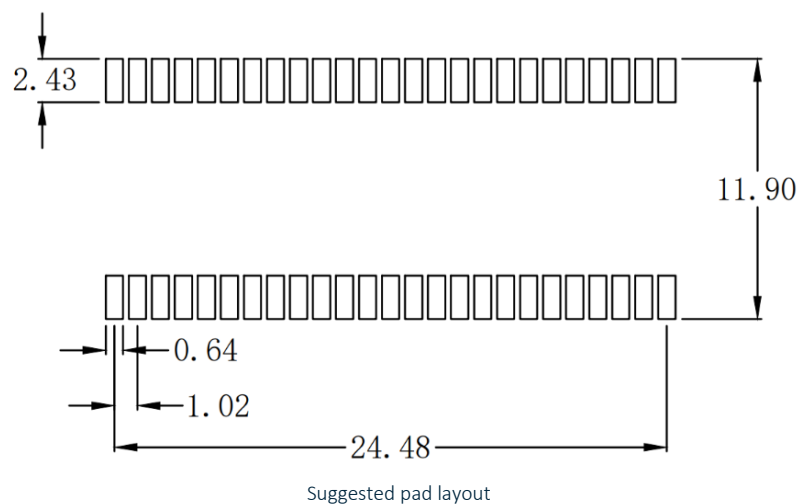
3.1 Mechanical Drawings



Mechanical Specifications	
Length	27.28 mm
Width	7.30 mm
Height	8.40 mm
Weight	2.45g
Mounting Style	Surface Mount (SMT)

Dimensions are in millimeters with the following tolerances: X.XX = ±0.25

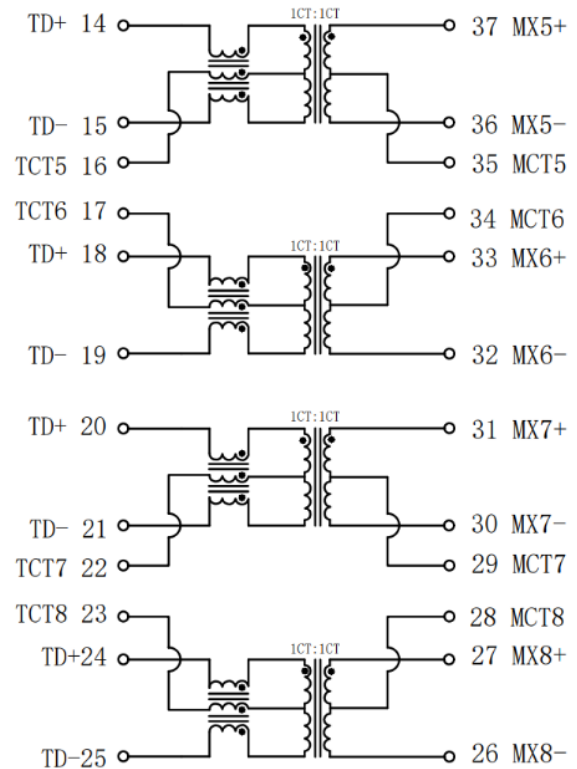
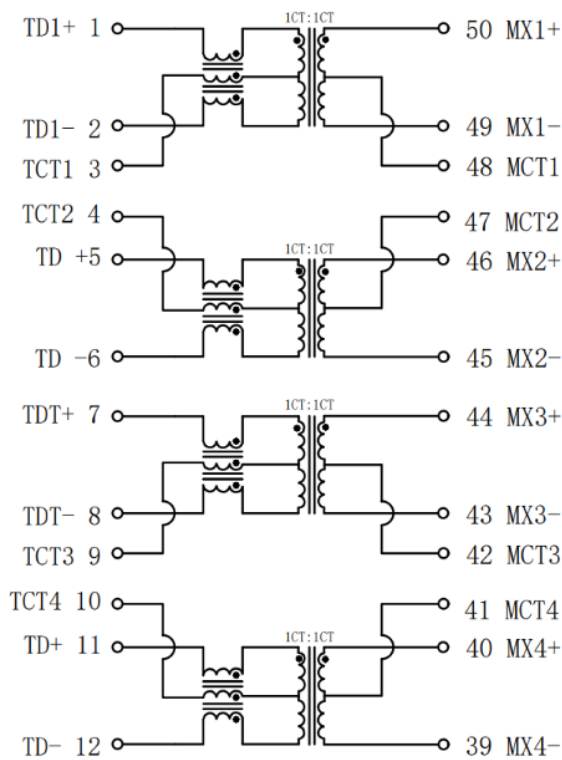
3.2 Pad Layout



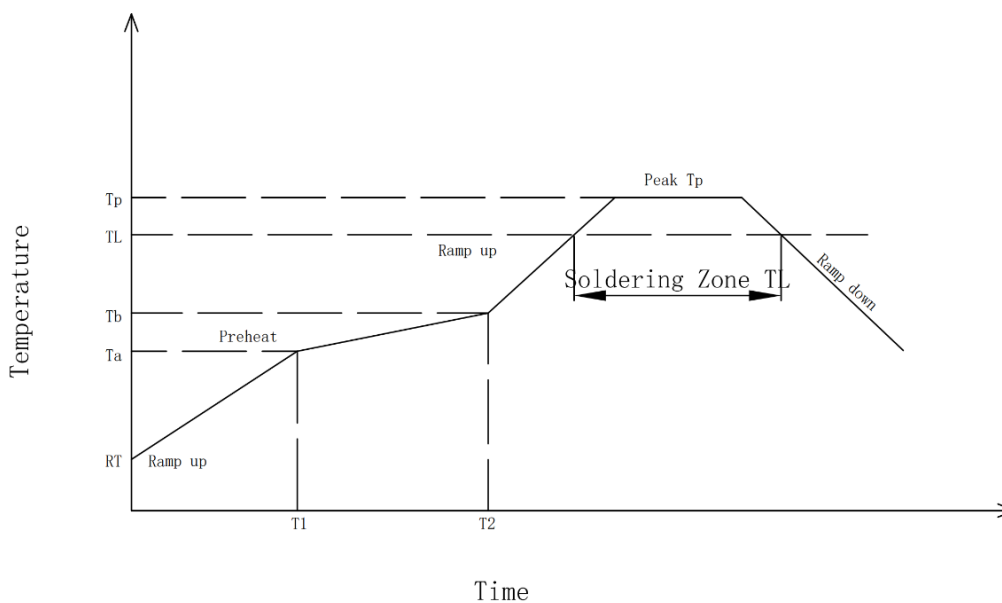
Dimensions are in millimeters with the following tolerances: X.XX = ±0.10

4. Electrical

4.1 Electrical Drawings



4.2 Profile of Reflow Solder



Preheat :

Temperature (Ta-Tb):150-200°C

Time(T1-T2):60-180s

Holding Temperature:217°C

Time (TL):60-150s

Max Temperature (Tp):250(+0/-5°C)

Max Time (Tp):30Sec±10Sec

The average speed:3°C/S Max

The average cooling speed:6°C/S Max

From 25°C to Products out of the

furnace:6 minutes Max

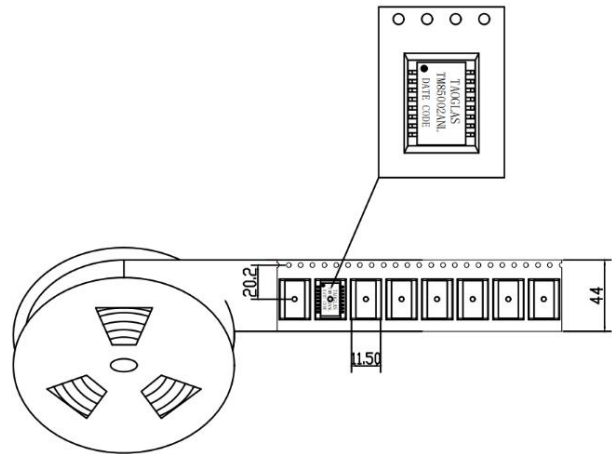
5. Packaging

5.1 SPQ

1 reel = 400 pcs

Reel (mm) = 44x20.2x11.5

Weight = 2000 g



1 Carton = 4 reels = 1600 pcs

Carton dimensions: 360*360*300 mm

Carton Weight: 8 kg



5.2 Label

Taoglas Limited	
P/N NO: XXXXXXXX	
QYT: XXX PCS	DC: XXXX
DATE: XXXX-XX-XX	

SPQ Label (8x4cm)

Taoglas Limited	
P/N NO: XXXXXXXX	
PO: XXXXXXXX	B/N: XXXXXXXX
QYT: XXX PCS	DC: XXXX
DATE: XXXX-XX-XX	

Carton Label (8x4cm)

Changelog

Changelog for the datasheet

SPE-23-8-216 – TM85002ANL

Revision: A (Original First Release)

Date:	2023-10-01
Notes:	
Author:	Javier Vasena

Previous Revisions



www.taoglas.com

