



TAOGLAS®



Datasheet

LAN Transformer 5G Base-T PoE++

Part No:
TMYB-83AYNL

Description:

5G Base-T Transformer
Single Port and 24pin SMT with PoE++

Features:

PoE++ (720mA)
3 Wire + 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 TMYB-83AYNL is a LAN Transformer 5GBase-T Single Port of 24pins that is capable to work in industrial environmental conditions and offer PoE capabilities.

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	
OCL (100KHz/0.1V@8mA)	180uH MIN
OCL (100KHz/0.1V@19mA)	120uH MIN
Turns Ratio (±2%)	1CT: 1CT
Insertion Loss (dB MAX)	-1.0dB (1-100MHz)
	-2.0dB (100-250MHz)
Return Loss (dB MIN)	-16dB (1-40MHz)
	-16+10*log ₁₀ (f/40MHz) dB(40-250MHz)
Crosstalk (dB TYP)	-30dB (1-125MHz)
	-20dB (125-250MHz)
CMR (dB TYP)	-30dB (30-250MHz)
POE applications current capability	720mA
Hi-Pot	2250VDC

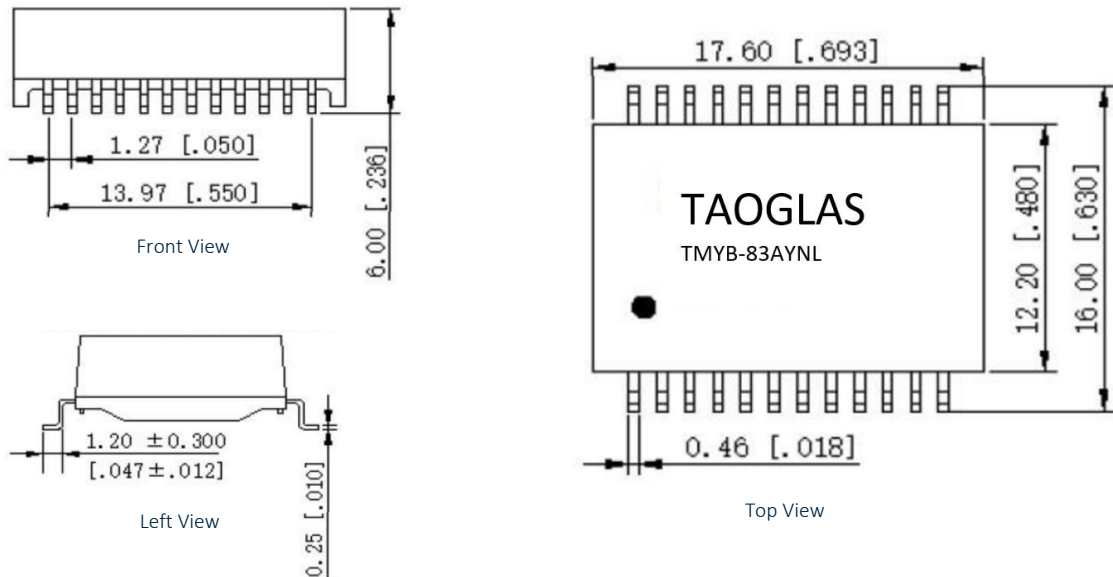
Environmental Specifications	
Operating Temperature	-40°C TO +85°C

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

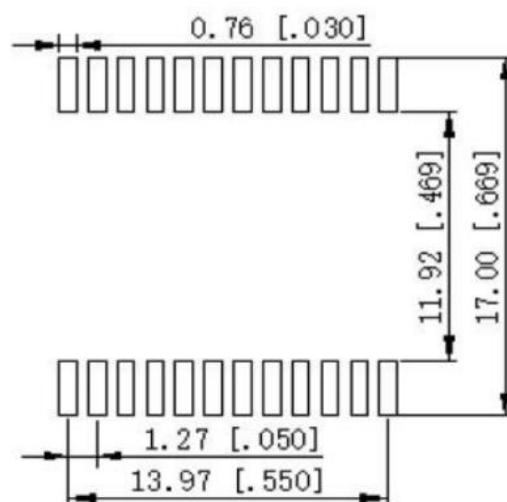
3.1 Mechanical Drawings



Mechanical Specifications	
Length	17.60 mm
Width	12.20 mm
Height	6.00 mm
Weight	1.53 g
Mounting Style	Surface Mount (SMT)

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

3.2 Pad Layout

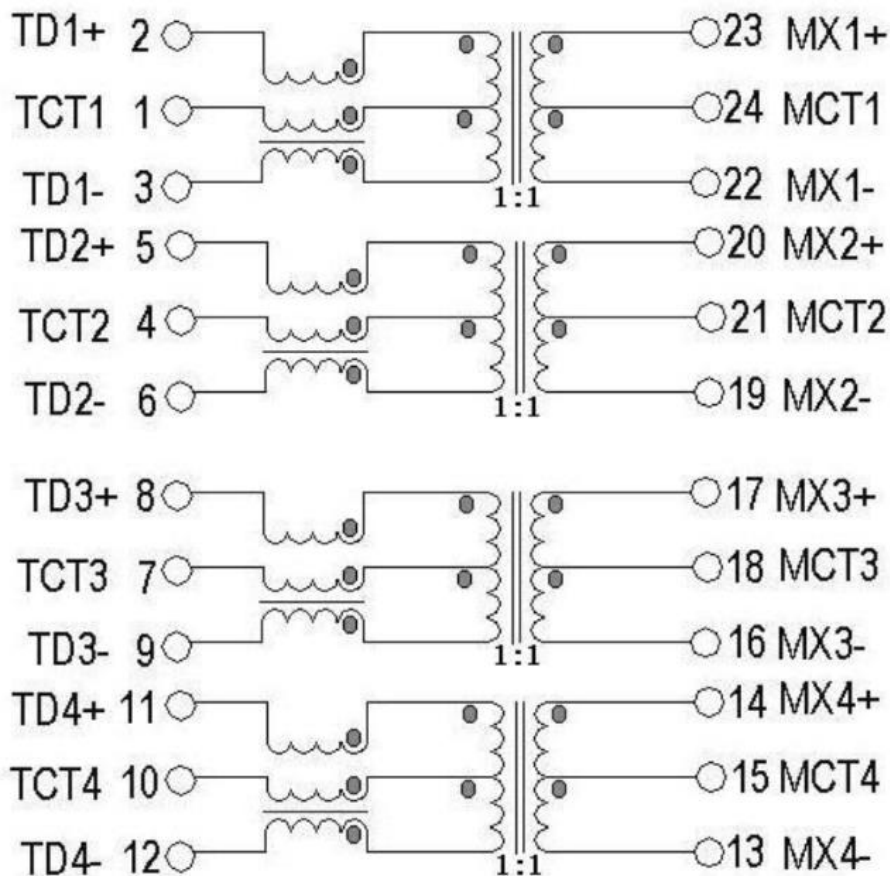


Suggested pad layout

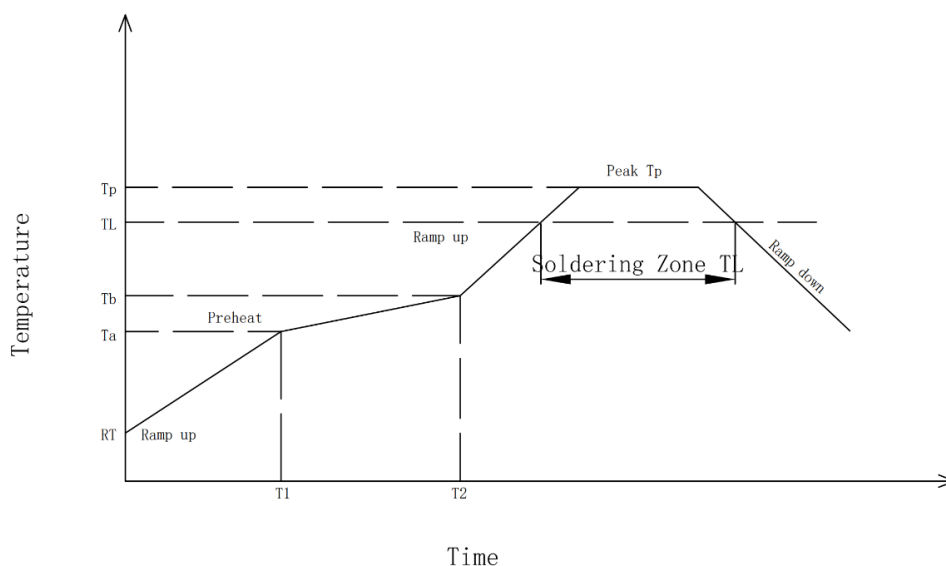
Dimensions are in millimeters with the following tolerances: X.XX = ±0.10

4. Electrical

4.1 Electrical Drawings



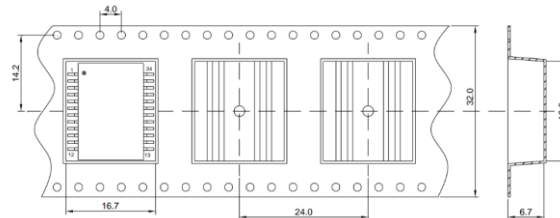
4.2 Profile of Reflow Solder



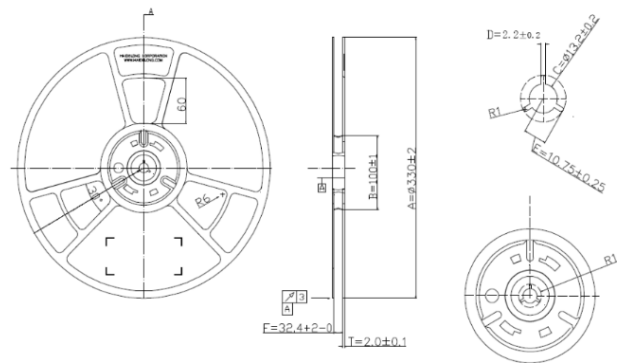
5. Packaging

5.1 SPQ

1 reel = 400 pcs
 Reel = 32x18.8x6.7mm
 Weight = 1400g



Tape & Reel



1 Carton = 8 reels = 3200 pcs
 Carton dimensions: 365*365*350 mm
 Carton Weight: 11.5 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-23-8-198 – TMYB-83AYNL

Revision: A (Original First Release)

Date:	2023-10-01
Notes:	
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Previous Revisions



www.taoglas.com

