Datasheet

LAN Transformer 1G Base-T PoE

Part No:
TMY85ANL

Description:

1G Base-T transformer
24pin SMT

Features

3 Wire + Transformer
PCMCIA
PoE (350mA)
Industrial grade

Ireland
ISO 9001: 2015
Certified

Taiwan
ISO 9001: 2015
Certified

1. Introduction

Featuring a compatible footprint with industry LAN transformers, and designed to work in demanding industrial environmental conditions, the Taoglas TMY85ANL is a 1G Base-T Single Port of 24pin with 3 Wire and Transformer designed for PoE applications.

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(100KHz/0.1V@8mA)	350uH Min
Turns Ratio (±2%)	1CT: 1CT
Insertion Loss	1-100MHz: -1.5dB Max
Return Loss	1-30MHz: -18dB Min
	30-60MHz: -12.5dB Min
	60-80MHz: -10.0dB Min
	80-100MHz: -8.0dB Min
Crosstalk (dB Min)	1-100MHz: -30dB
DCMR (dB Min)	-42dB(1-30MHz)
	-37dB(30-60MHz)
	-33dB(60-100MHz)
PoE applications current capability	350mA
Hi-Pot	1500Vrms

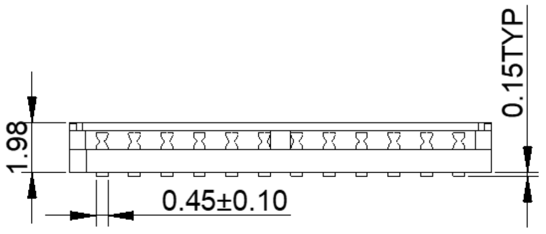
Environmental Specifications	
Operating Temperature	-40°C TO +85°C
Max. reflow temperature	240℃ Max

Compliance
RoHS Compliant

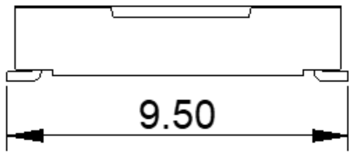
Storage requirements	
Humidity	MSL - 1
Storage Temperature	-40°C TO +125°C

3. Mechanical

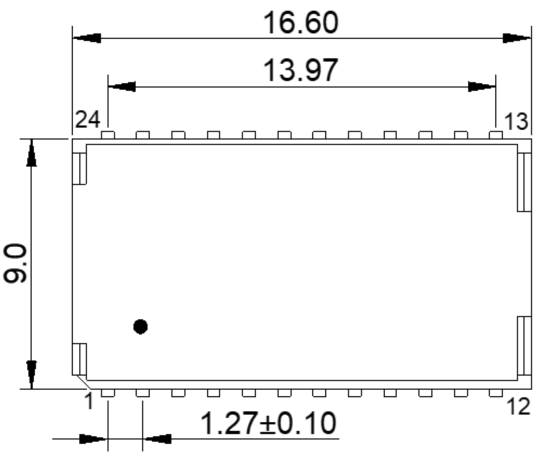
3.1 Mechanical Drawings



Front View



Left View

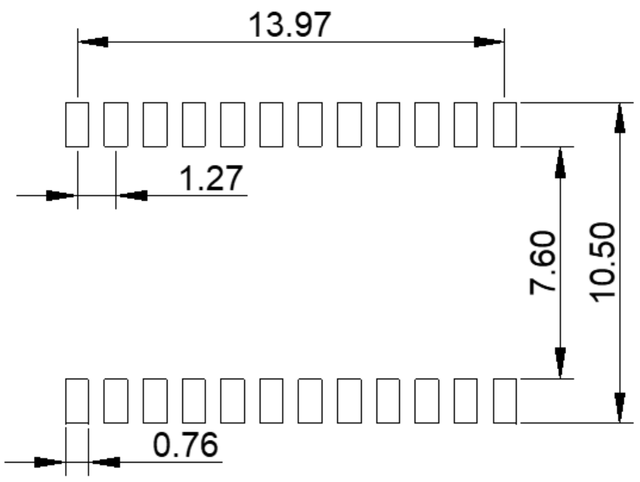


Top View

Mechanical Specifications	
Length	16.60 mm
Width	9.5 mm
Height	1.98 mm
Weight	0.56 g
Mounting Style	Surface Mount (SMT)

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

3.2 Pad Layout



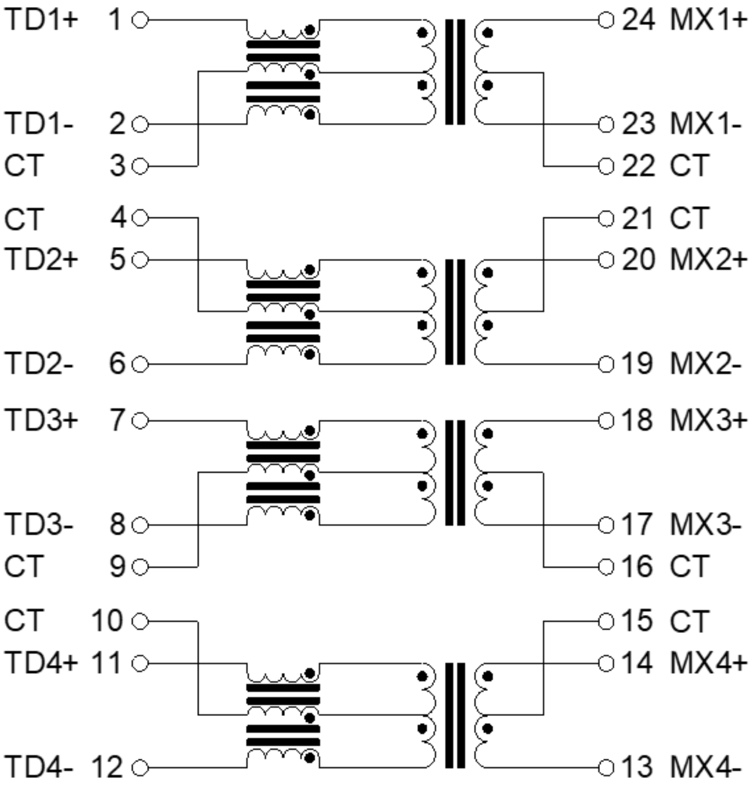
Suggested pad layout

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

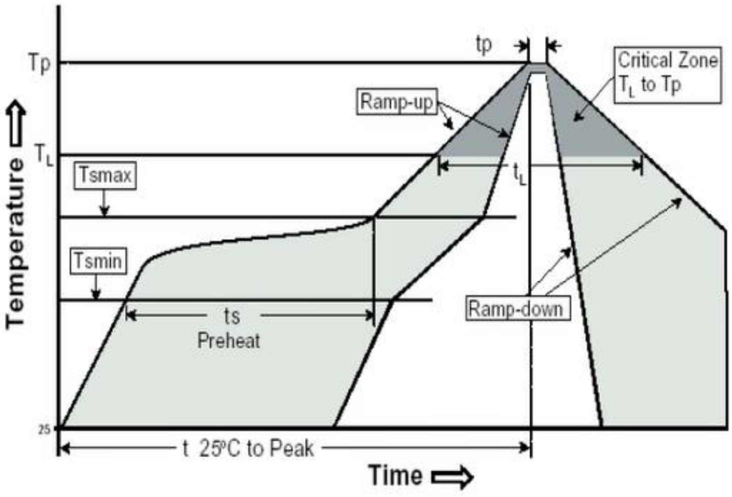
z

4. Electrical

4.1 Electrical Drawings



4.2 Profile of Reflow Solder



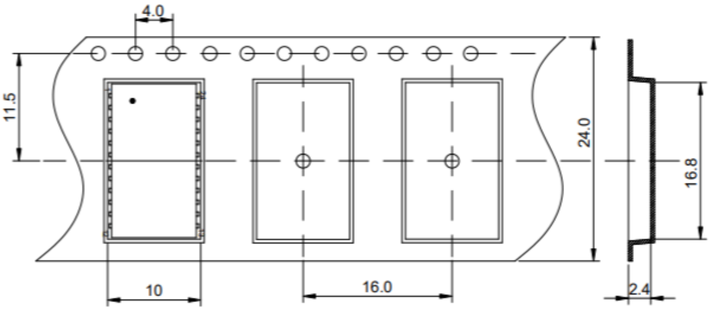
Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate (Ts_{max} to Tp)	3°C /second max.
Preheat	
-Temperature Min (Ts_{min})	150°C
-Temperature Max (Ts_{max})	200°C
-Time (ts_{min} to ts_{max})	60-120 seconds
Time maintained above:	
-Temperature (T_L)	217°C
-Time (t_L)	60-150 seconds
Peak/Classification Temperature (Tp)	245±5°C
Time within 5°C of actual Peak Temperature (tp)	20-40 seconds
Ramp-Down Rate	6°C/seconds max
Time 25°C to Peak Temperature	6 minutes max.

5. Packaging

5.1 SPQ

1 reel = 1400 pcs

Weight = 0.9 kgs



5.2 Carton

1 Carton = 10 reels = 14000 pcs

Carton dimensions: 365*365*350 mm

Carton Weight: 15 kg

5.3 Label

SPQ Label

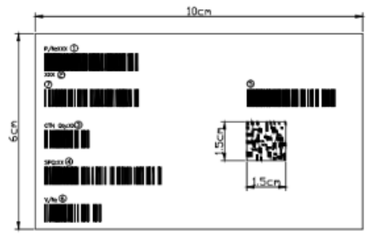
① P/N (part number)

② SPQ

③ Unit

MSL Label

(Size 100x140 mm)



Carton Label

① P/N

② Description

③ CTN QTY

④ SPQ QTY

⑤ Purchase No.

⑥ V/N

⑦ Batch No.

Changelog

Changelog for the datasheet

SPE-23-8-336 – TMY85ANL

Revision: A (Original First Release)	
Date:	2023-11-30
Notes:	
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Previous Revisions

www.taoglas.com