



# TAOGLAS®



# Datasheet

## LAN Transformer 10G Base-T PoE+

**Part No:**  
TM724103NL

### Description:

10G Base-T Transformer  
Single Port and 24pin SMT with PoE+

### Features:

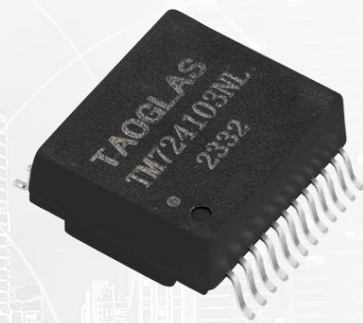
PoE+ (600mA)  
3 Wire + Transformer  
RoHS Compliant

1. Introduction	3
2. Specifications	4
3. Mechanical	5
4. Electrical	6
5. Packaging	7
<hr/>	
Changelog	8

Taoglas makes no warranties based on the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Taoglas reserves all rights to this document and the information contained herein. Reproduction, use or disclosure to third parties without express permission is strictly prohibited.



# 1. Introduction



Featuring a compatible footprint with industry LAN transformers, and designed to work in demanding industrial environmental conditions, the Taoglas TM724103NL is a LAN Transformer 10GBase-T Single Port of 24pins that is capable for PoE+ (600mA).

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	120uH Min @100KHz,0.1V
Turns Ratio (±2%)	1CT: 1CT
Insertion Loss	0.1MHz: -3.0dB Max
	1-100MHz: -1.0dB Max
	400MHz: -1.8dB Max
	500MHz: -2.5dB Max
Return Loss	1MHz: -22dB Min
	10MHz: -25dB Min
	100MHz: -23dB Min
	200MHz: -17dB Min
	300MHz: -14dB Min
	400MHz: -11dB Min
	500MHz: -9dB Min
Cross talk	1-100MHz: -40dB Min
	100-500MHz: -30dB Min
Common Mode Rejection Ratio	1-100MHz: -37dB Min
	100-300MHz: -30dB Min
	300-500MHz: -25dB Min
DC Current/Voltage Rating	600mA MAX @57V Continuous
Hi-Pot	1500VAC 60S

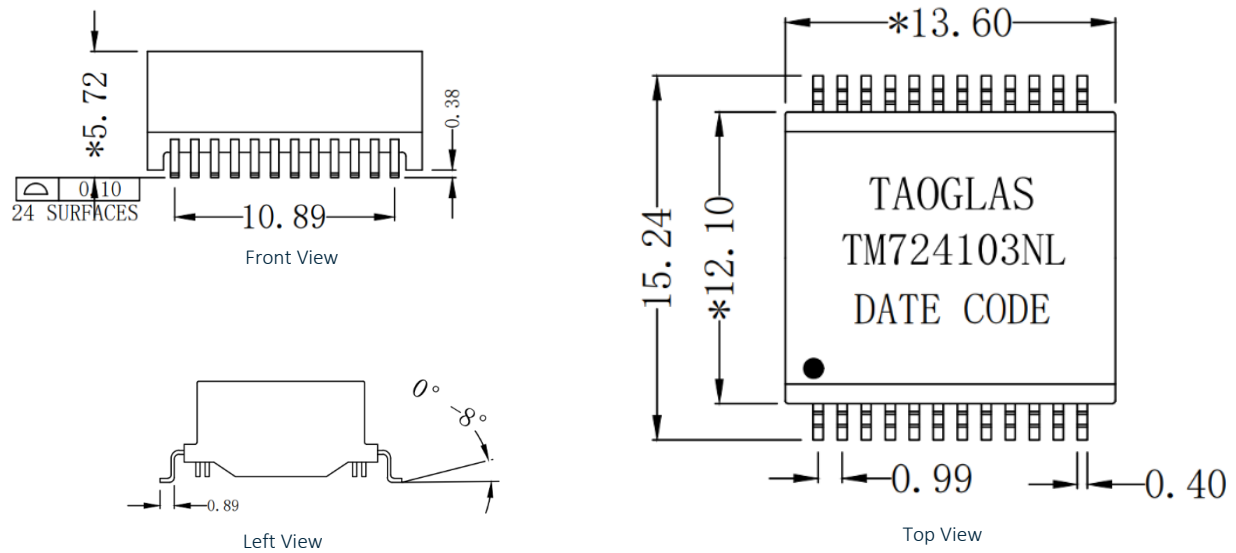
Environmental Specifications	
Operating Temperature	0°C TO +70°C

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

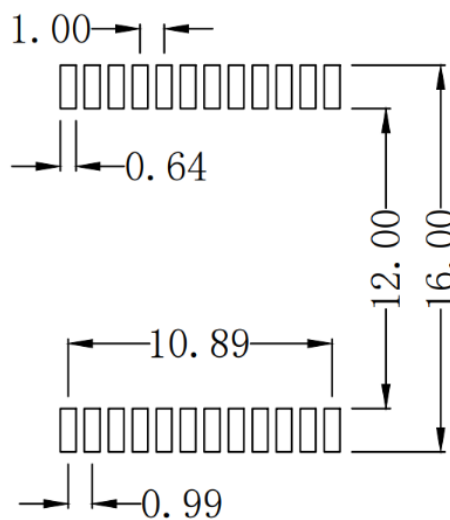
#### 3.1 Mechanical Drawings



Mechanical Specifications	
Length	13.6 mm
Width	12.10 mm
Height	5.72 mm
Weight	1.22 g
Mounting Style	Surface Mount (SMT)

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

#### 3.2 Pad Layout

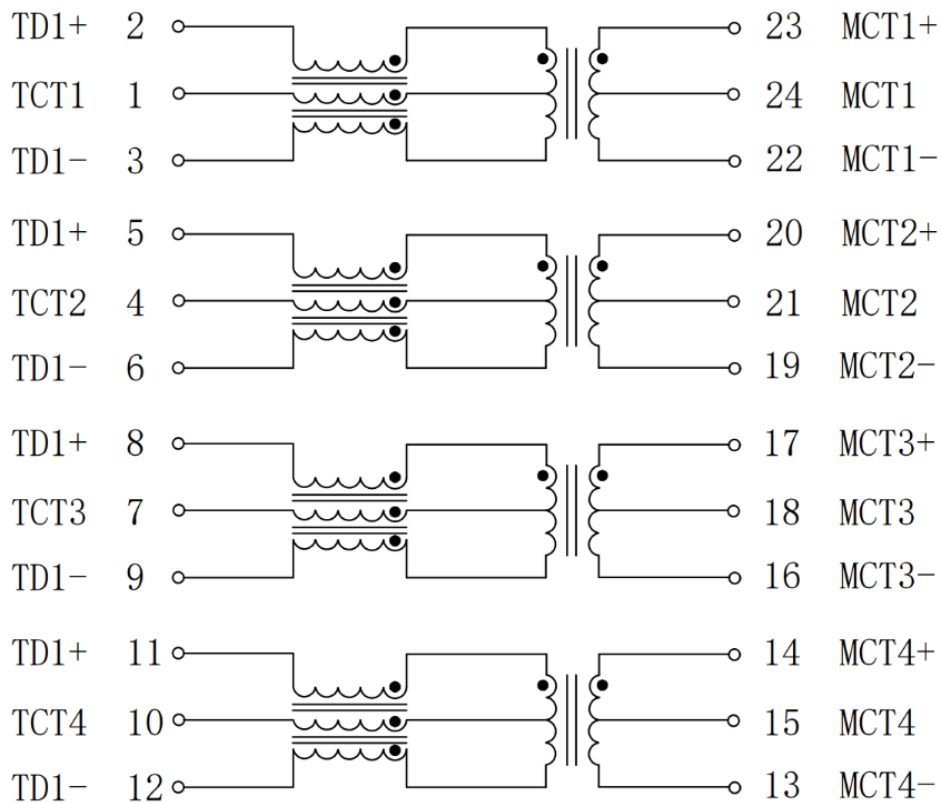


Suggested pad layout

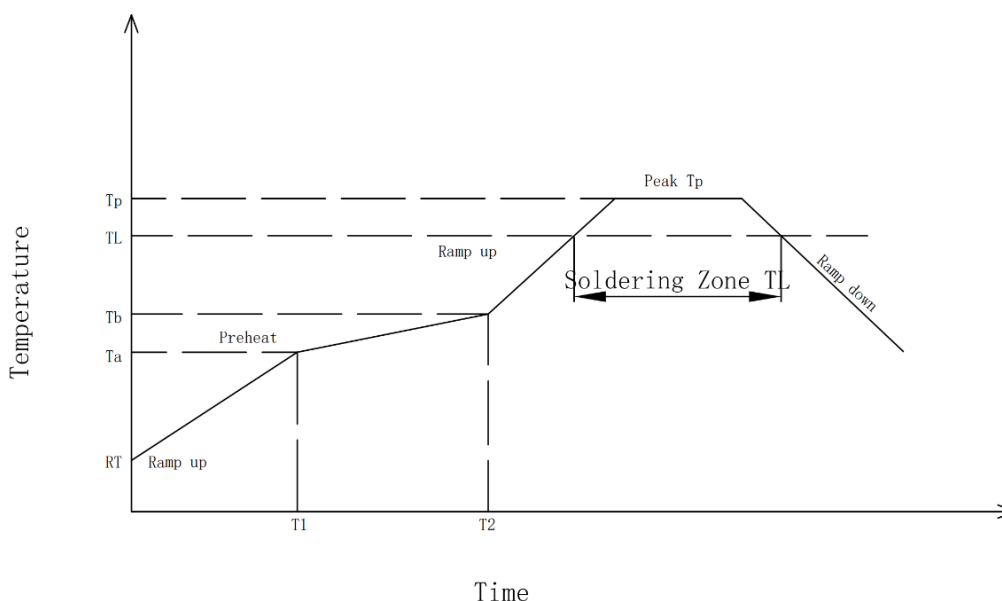
Dimensions are in millimeters with the following tolerances: X.XX = ±0.10

## 4. Electrical

### 4.1 Electrical Drawings



### 4.2 Profile of Reflow Solder



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

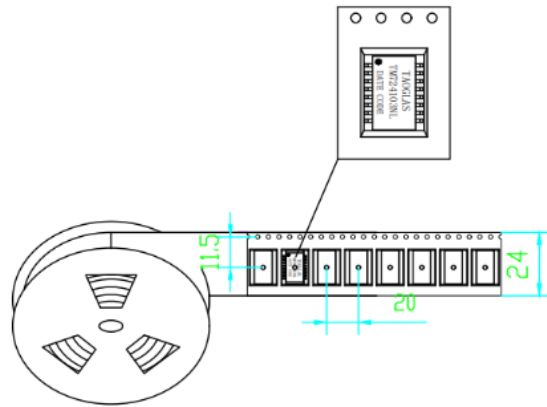
## 5. Packaging

### 5.1 SPQ

1 reel = 450 pcs

Reel (mm) = 24x20x11.5

Weight = 1200g



1 Carton = 6 reels = 2700 pcs

Carton dimensions: 360\*360\*250 mm

Carton Weight: 7 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-23-8-217 – TM724103NL**

**Revision: A (Original First Release)**

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

**Previous Revisions**






[www.taoglas.com](http://www.taoglas.com)

