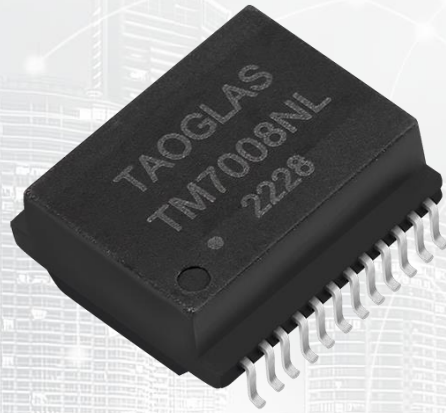




# TAOGLAS®



# Datasheet

## LAN Transformer 10G Base-T PoE+

**Part No:**  
TM7008NL

### Description:

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

### Features:

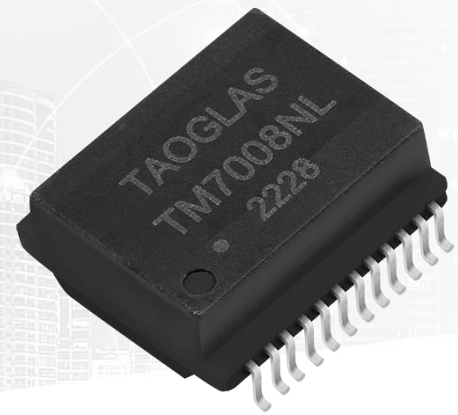
PoE+ (600mA)  
RoHS & REACH Compliant

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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 TM7008NL is a 10GBase-T Single Port of 24pin.

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	120µH MIN @100KHz 0.1V 8mA DC Bias
Turns Ratio (±2%)	TX=1CT: 1CT      RX=1CT: 1CT
Insertion Loss	-3dB MAX @ 100Mhz
	-1dB MAX (-0.6 dB TYP) @ 1-500Mhz
Return Loss (Z OUT = 100 OHM ±1%)	-18dB MIN @ 1-40Mhz
	-17+10*LOG(f/40) @ 40-500Mhz
Cross talk	-40dB MIN @ 1-100Mhz
	-30dB MIN @ 100-500Mhz
Common Mode Rejection Ratio	-35dB MIN @ 1-100Mhz
	-30dB MIN @ 100-300Mhz
	-25dB MIN @ 300-500Mhz
Common to Differential Mode Rejection	-30dB MIN @ 1-250Mhz
	-22dB MIN @ 250-500Mhz
Hi-Pot	1500Vrms MIN
DC Current/Voltage Rating-PSE PINS	600mA Max @57V (Continuous)

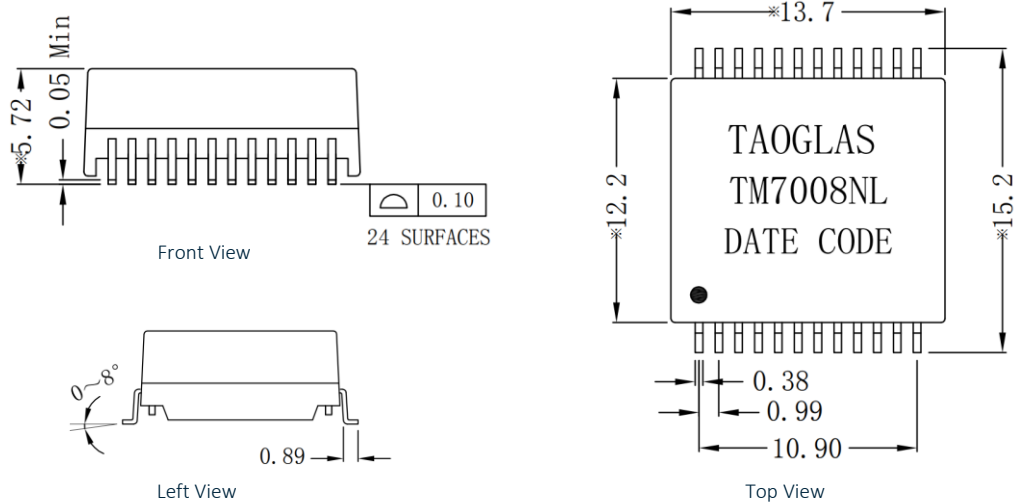
Environmental Specifications	
Operating Temperature	0°C TO +70°C

Compliance	
UL recognized - FILE NO. E528697	
RoHS Compliant	

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

### 3. Mechanical

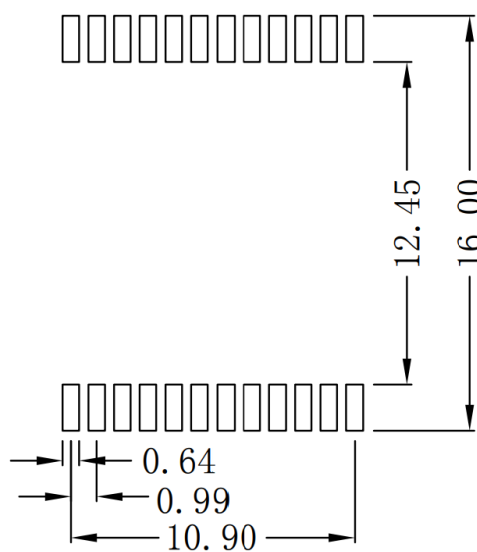
#### 3.1 Mechanical Drawings



Mechanical Specifications	
Length	13.70 mm
Width	15.20 mm
Height	5.72 mm
Mounting Style	Surface Mount (SMT)

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

#### 3.2 Pad Layout

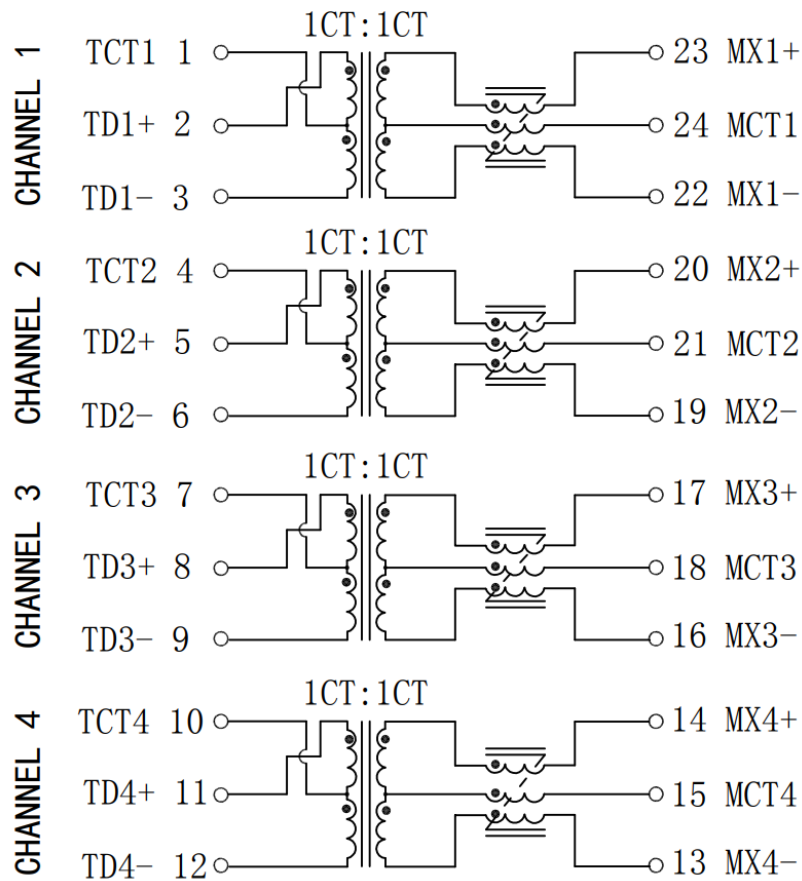


Suggested Pad Layout

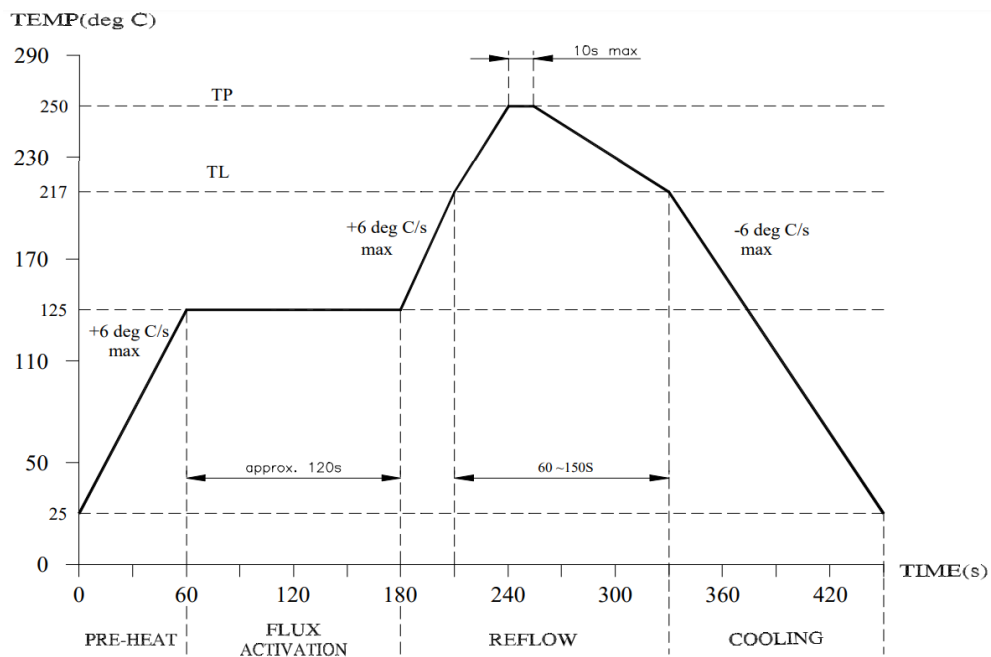
Dimensions are in millimeters with the following tolerances: X.XX = ±0.10

## 4. Electrical

### 4.1 Electrical Drawings



### 4.2 Profile of Reflow Solder



## 5. Packaging and Storage

### 5.1 SPQ

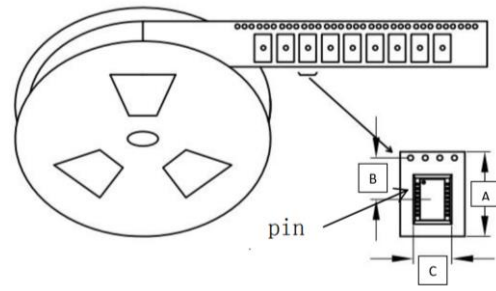
450 pcs/reel

A (Carrier Tape Width):  $24 \pm 0.3$  mm

B (Sprocket hole to Cavity center):  $10.75 \pm 0.2$  mm

C (Cavity width):  $14 \pm 0.2$  mm

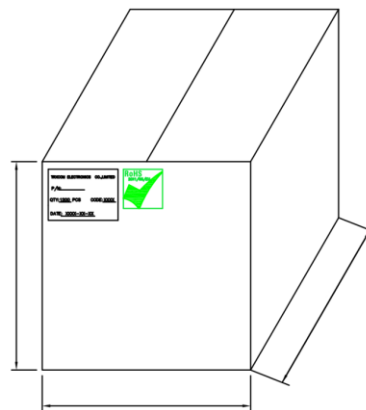
Reel weight: 1150g



1CTN = 4 reels = 1800 pcs

Carton dimensions: 370\*370\*250mm

Carton Weight: 6.5kg



# Changelog

Changelog for the datasheet

**SPE-22-8-065 – TM7008NL**

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

Date:	2022-11-08
Notes:	
Author:	Javier Vasena

**Previous Revisions**
