

## LAN Transformer 10/100 Base-T

Part No:

**TM1188NL** 

## **Description:**

LAN 10/100 Base-T transformer Single Port and 16pin SMT

#### **Features:**

CMC/Cable
AutoMDIX
Industrial grade
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 TM1188NL is a 10/100Base-T Single Port of 16pin with Common Mode Choke on the cable side which makes it suitable of AutoMDIX feature.

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 @2	5°C
Inductance OCL	350μH MIN @ 100KH	Hz 0.1V 8mA DC Bias
Turns Ratio (±2%)	TX=1CT: 1CT	RX=1CT: 1CT
DCR	1.2 Ω	MAX
Insertion Loss	-1.1dB MAX	@ 1-100Mhz
	-20dB MIN	@ 1-30Mhz
Return Loss	-14dB MIN @	ຼື 30-60Mhz
	-11.5dB MIN	@ 60-80Mhz
Cross talk	-45dB MIN	@ 1-30Mhz
	-40dB MIN @	ற 30-60Mhz
	-35dB MIN @	9 60-100Mhz
DCMR (dB TYP)	-42dB MIN	@ 1-30Mhz
	-37dB MIN @	<u>ම</u> 30-50Mhz
	-33dB MIN @	9 50-100Mhz
Hi-Pot	1500Vr	ms Min

En	vironmental Specifications
Operating Temperature	-40°C TO +85°C

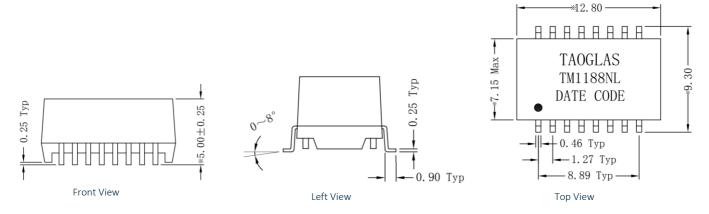
Compliance
UL recognized - FILE NO. E528697
RoHS Compliant

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



## 3. Mechanical

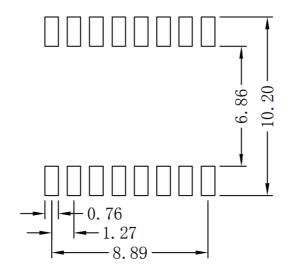
## 3.1 Mechanical Drawings



Mecha	nical Specifications
Length	12.8 mm
Width	9.3 mm
Height	5.1 mm
Mounting Style	Surface Mount (SMT)

Dimensions are in millimeters with the following tolerances:  $X.XX = \pm 0.25$ 

## 3.2 Pad Layout

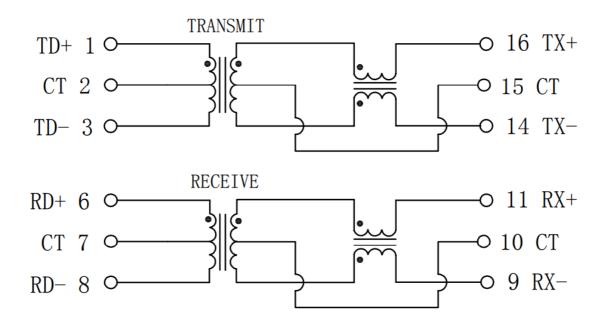


 $\label{eq:Suggested} Suggested\ Pad\ Layout$  Dimensions are in millimeters with the following tolerances: X.XX =  $\pm 0.10$ 

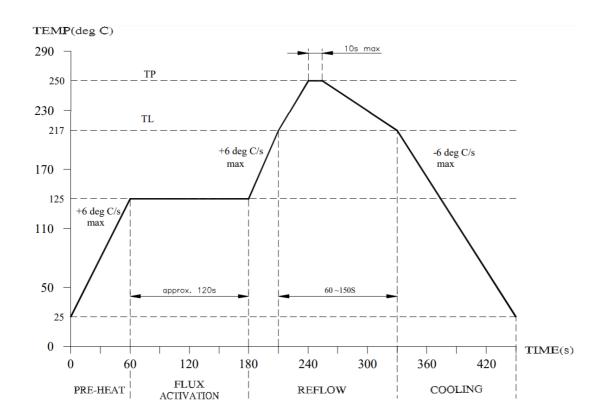


## 4. Electrical

## 4.1 Electrical Drawings



## 4.2 Profile of Reflow Solder





# Packaging and Storage

**SPQ** 

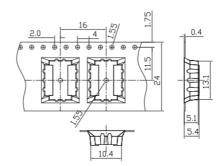
750 pcs/reel

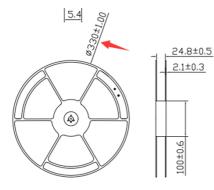
Reel weight: 800 g

Inner box size: 350\*340\*110mm

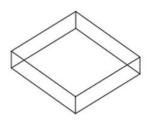
Q'ty in inner box: 2250pcs (3 Reels)

2.1±0.3







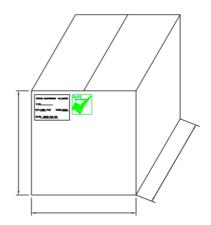


INNER CARTON: 350 (L) X340 (W) X110 (H)

1CTN = 6 reels = 4500 pcs

Carton dimensions: 370\*365\*240mm

Carton Weight: 6.5 kg





# Changelog



## SPE-22-8-074 - TM1188NL

<b>Revision: B (Current</b>	Version)
Date:	2025-08-01
Notes:	Updated packaging information.
Author:	Paul Liu

#### **Previous Revisions**

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





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