



TAOGLAS®



Datasheet

RJ45 ICM 10G Base-T Quad Port PoE+

Part No:
TMJY701DDD8WZ5NL

Description:

RJ45 connector with integrated magnetics 10G Base-T
1x4 Ports Tab-UP with right angle THT mount and LEDs

Features:

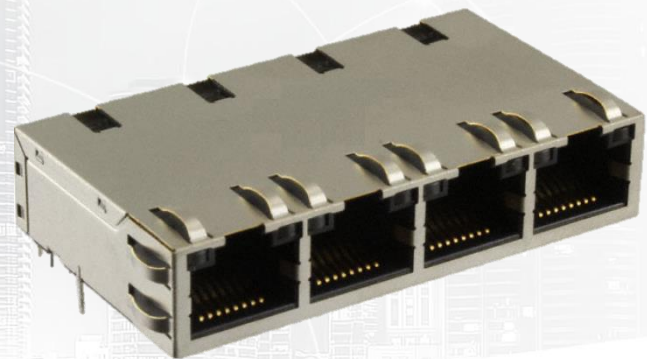
- 1x4 Configuration
- 3 Wire + Transformer
- Shielded EMI Finger
- Industrial grade
- PoE+ (500mA)
- RoHS Compliant

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 popular footprint and compatible package to industry RJ45 Integrated Connectors standards, the Taoglas TMJY701DDD8WZ5NL is an RJ45 Integrated Connector 10G Base-T Quad Port Tab Up with shielded EMI finger and PoE+ (500mA) capabilities.

Typical Applications Include:

- Industrial Automation
- Hubs
- Routers
- Switches
- Wireless Access Points

Taoglas Magnetics offer an extensive product line of RJ45 Integrated Connectors designed for commercial and industrial grade applications, supporting 10/100 Base-T (Atmos100 Series) and 1G Base-T (Atmos1000 series). These surface mount or through-hole components provide reliable performance and maintain signal integrity that meets IEEE 802.3 standards, and they are UL certified. The Power over Ethernet options are also available including PoE, PoE+ and PoE++.

The majority of Taoglas RJ45 ICMs are manufactured with fully automated winding, assembly & testing to ensure consistent performance, quality and reliability while ensuring cost competitiveness for its customers. These products are fully compliant with the REACH and RoHS directive, and compatible with all major PHY vendors.

For customized products or support with integration, contact your regional Taoglas customer support team for further information.

2. Specifications

Electrical Performance @25°C	
OCL (100KHz/0.1V)	160uH Min
Turn Ratio (±3%)	1CT:1CT
Insertion Loss (dB MAX)	-3.0dB (100KHz)
	-2.0dB (1-400MHz)
Return Loss (dB MIN)	-16dB (1-40MHz)
	-16+Log(f/40) dB(40-400MHz)
	-6+30log(f/400) dB(400-500MHz)
Cross talk (dB MIN)	-28dB (1-100) MHz
	-19dB (100-500) MHz
Common Mode Rejection (dB MIN)	-26dB(1-500MHz)
CDMR (dB MIN)	-22dB(1-500MHz)
Hi-Pot	2250VDC/0.5mA/2Sec
PoE	500mA Max

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

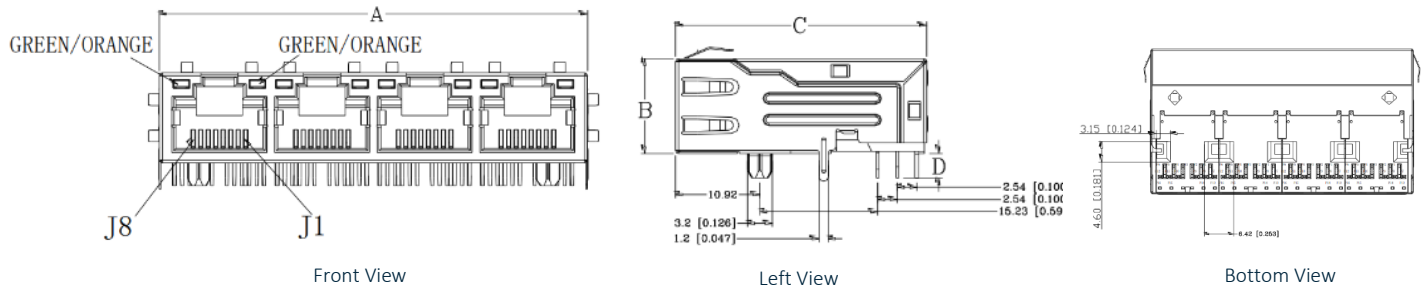
Material Specifications	
Housing	Thermoplastic Black UL94V-0
Contact	Phosphor Bronze
Shield	Brass
Shield Plating	Nickel
Contact plating	Nicke 40 micro-inches min. under plating overall Gold 50 micro-inches min on mating surface Tin 100 micro-inches min on contact tails
Wave solder tip temperature	260°C Max, 10 Sec Max

Compliance	
IEEE 802.3	
UL recognized - FILE NO. E528697	
RoHS Compliant	

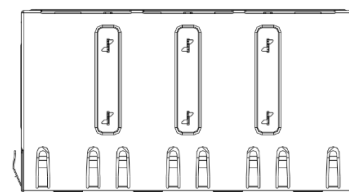
Storage requirements	
Humidity	MSL - 1
Storage Temperature	-40°C TO +85°C

3. Mechanical

3.1 Mechanical Drawings



Mechanical Specifications	
Height	12.40mm
Width	58.24mm
Depth	32.76mm
Weight	
Mounting Style	Through Hole (THT)
Mounting Angle	Right Angle

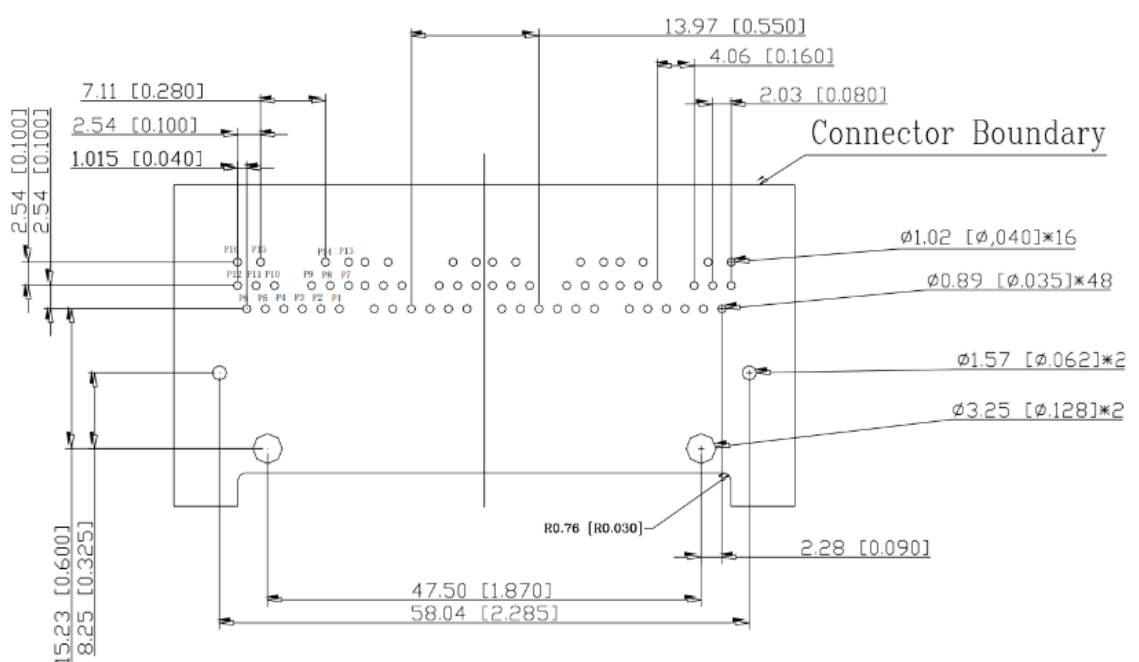


UNIT : mm / inch
 A = 58.24 / 2.293
 B = 12.40 / 0.488
 C = 32.76 / 1.290
 D = 3.17 / 0.125

Top View

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

3.2 PCB Layout

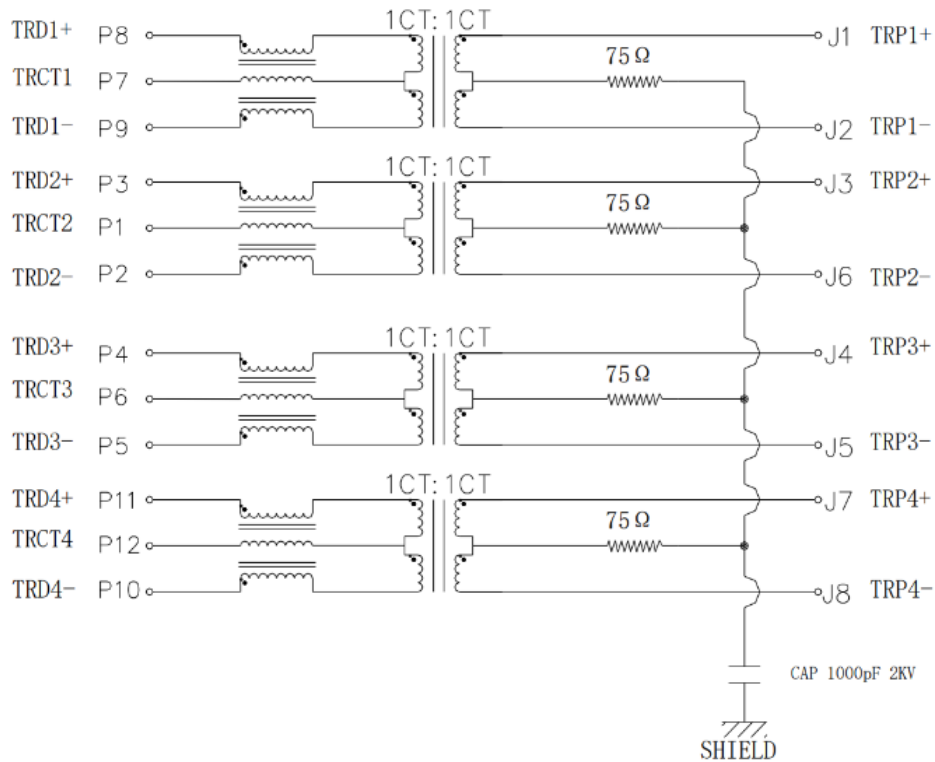


Suggested PCB Layout (Top View)

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

4. Electrical

4.1 Electrical Drawings

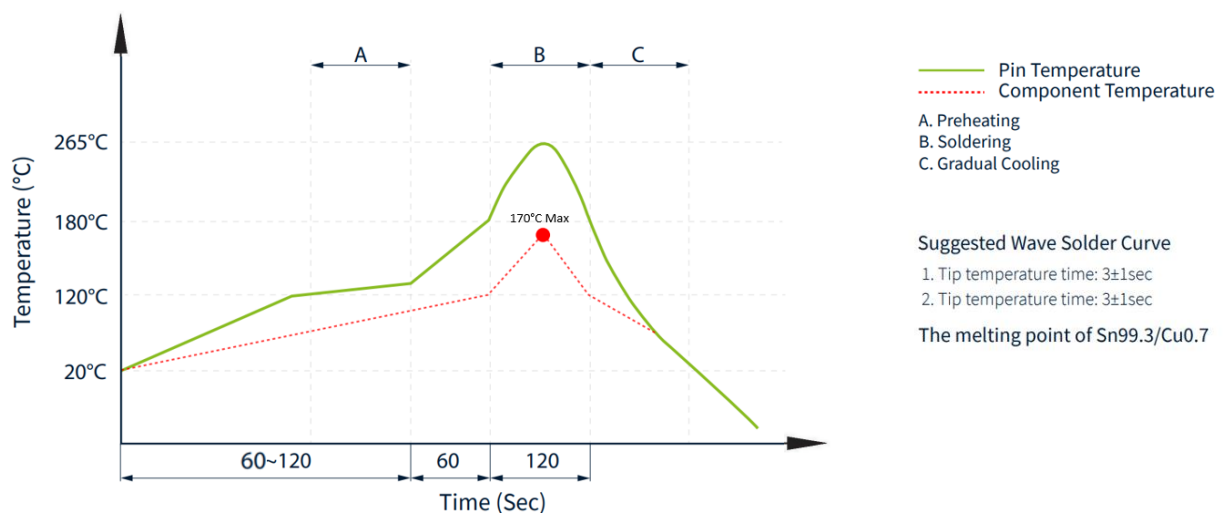


LED Electrical Specification

Standard LED	Wavelength (nm)	Forward V(max)	TYP
Green	565	2.4v	2.2v
Orange	605	2.5v	2.0v



4.2 Profile of Wave Solder



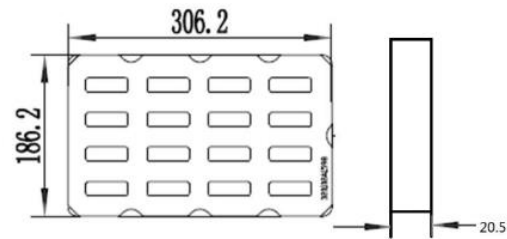
5. Packaging

5.1 SPQ

16 pcs/tray

Tray dimension: 306.2*186.2*20.5 mm

Tray Weight: 500g



1 Carton = 26 trays = 416 pcs

Carton dimensions: 400*320*335mm

Carton Weight: 15.1kg



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-23-8-197 – TMJY701DDD8WZ5NL

Revision: A (Original First Release)

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

Previous Revisions



www.taoglas.com

