



TAOGLAS®



Datasheet

RJ45 ICM 1G Base-T Vertical

Part No:
TMJY317YGDZ4NL

Description:

RJ45 connector with integrated magnetics 1G Base-T.
Vertical Single Port with THT mount and LEDs.

Features:

- Vertical
- Transformer + CMC
- Current/Voltage Drive
- Industrial grade
- Shielded
- 30 μ " gold
- RoHS compliant

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1. Introduction



Featuring a popular footprint and compatible package to industry RJ45 Integrated Connectors standards, the Taoglas TMJY317YGDZ4NL is an RJ45 Integrated Connector 1G Base-T Vertical with Shielded body designed for Industrial environments.

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	
Inductance OCL	350µH MIN @ 100KHz 0.1V 8mA DC Bias
Turns Ratio (±5%)	1CT: 1CT
Insertion Loss (dB MAX.)	-1.0dB (1-100MHz)
	-1.2dB (100-125MHz)
Return Loss (dB MIN)	-16dB (1-40MHz)
	-12dB (40-60MHz)
	-10dB (60-80MHz)
	-8dB (80-100MHz)
Crosstalk (dB MIN)	-30dB (1-100MHz)
CMR (dB MIN)	-30dB (1-100MHz)
Hi-Pot	2250VDC/0.5mA/2Sec

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

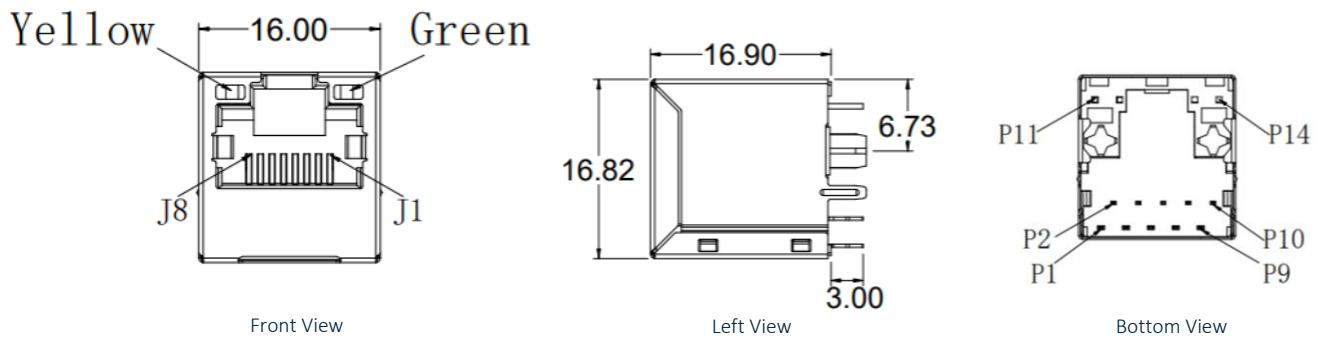
Material Specifications	
Housing	PA66 Black UL94 V-0
Insert	PA66 Black UL94 V-0
Shield	Brass
Shield Plating	Nickel
Contact	Phosphor Bronze
Contact Plating	Gold in contact area Thickness = 30µ" min.
Peak soldering temp.	260°C Max, 10 s Max

Compliance	
RoHS Compliant	

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

3. Mechanical

3.1 Mechanical Drawings



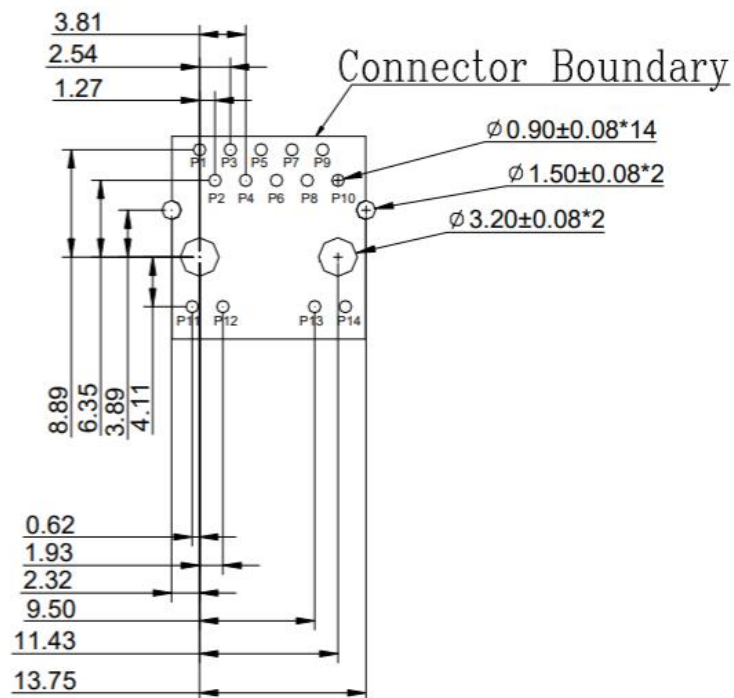
Mechanical Specifications	
Height	16.90 mm
Width	16 mm
Depth	16.82 mm
Mounting Style	Through Hole (THT)
Mounting Angle	Right Angle



Top Side View

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

3.2 PCB Layout

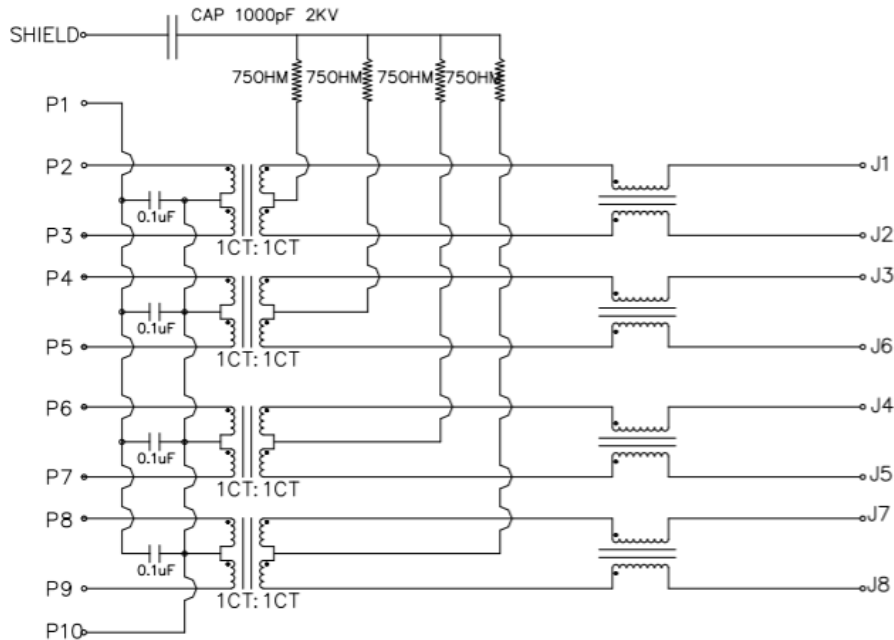


Suggested PCB Layout (Top View)

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

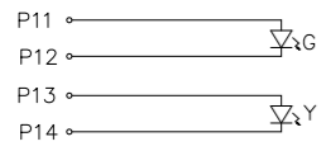
4. Electrical

4.1 Electrical Drawings

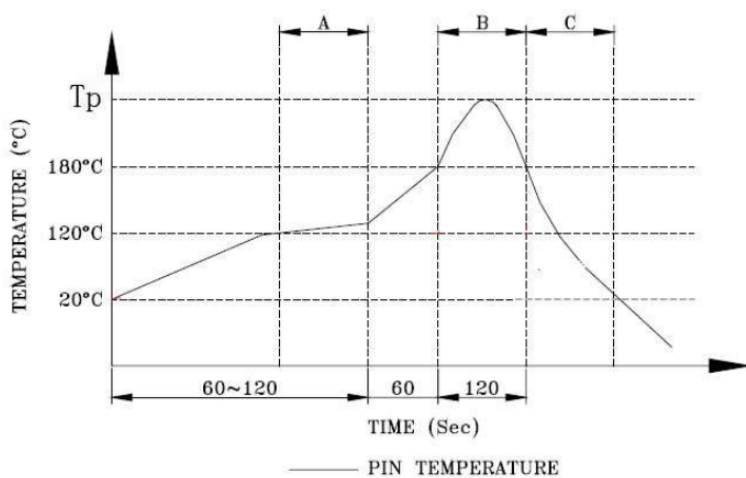


LED Electrical Specification

Standard LED	Wavelength (nm)	V _F (max)	I _F
Green	565	2.4v	20 μA
Yellow	590	2.5v	20 μA



4.2 Profile of Wave Solder



SUGGESTED WAVE SOLDER CURVE

1. Peak temperature(T_p) : 250 ± 10°C
2. Peak temperature(T_p) time : 5sec max

A. Preheating B. Soldering C. Gradual Cooling

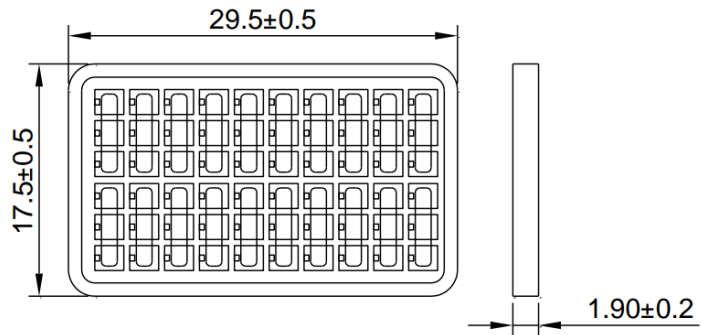
5. Packaging

5.1 SPQ

60 pcs/tray

Tray (mm): 295x175x19

Weight: 400gr



1 Carton = 22 trays = 1320 pcs

Carton dimensions: 380*325*290mm

Carton Weight: 11.5kg



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-23-8-166 – TMJY317YGDZ4NL

Revision: A (Original First Release)

Date:	2023-07-01
Notes:	
Author:	Javier Vasena

Previous Revisions



www.taoglas.com

