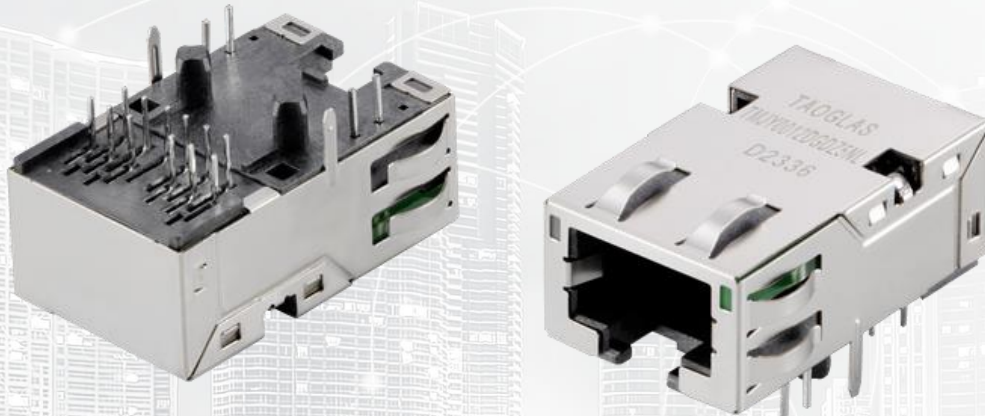




TAOGLAS®



Datasheet

RJ45 ICM 10G Base-T Low Profile

Part No:
TMJY0012DGDZ5NL

Description:

RJ45 connector with integrated magnetics 10G Base-T
Low Profile Single Port Tab-DOWN with right angle THT mount and LEDs

Features:

- Low Profile
- 3 Wire+ Transformer
- Shielded EMI Finger
- Industrial grade
- RoHS Compliant

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1. Introduction



Featuring a popular footprint and compatible package to industry RJ45 Integrated Connectors standards, the Taoglas TMJY0012DGDZ5NL is an RJ45 Integrated Connector 10G Base-T Low Profile Single Port Tab Down with shielded EMI finger.

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 (100KHz/0.1V)	120uH Min
Turn Ratio (±2%)	1CT:1CT
Insertion Loss (dB MAX)	-3.0dB (100KHz)
	-2.0dB (1-400MHz)
Return Loss (dB MIN)	-16dB (1-40MHz)
	-18dB (200MHz)
	-15dB (300MHz)
	-10dB (400MHz)
	-8dB (500MHz)
Cross talk (dB MIN)	-30dB (1-100MHz)
	-20dB (100-500MHz)
Common Mode Rejection (dB MIN)	-30dB (1-250MHz)
	-22dB (250-500MHz)
Hi-Pot	2250VDC/0.5mA/2Sec

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

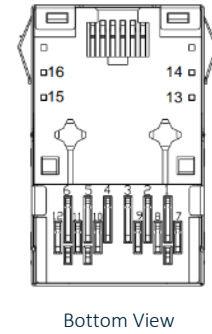
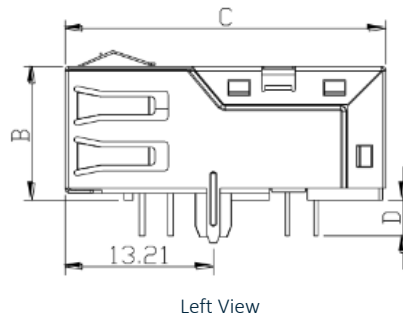
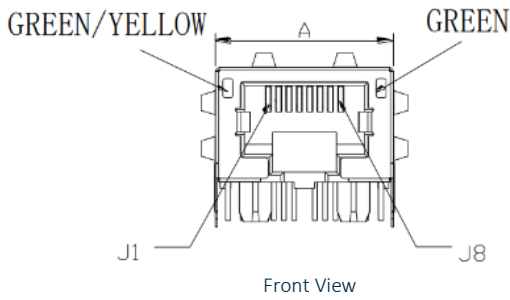
Material Specifications	
Housing	LCP Black UL94V-0
Contact	Phosphor Bonze
Shield	Brass
Shield Plating	Nickel
Contact plating	Selective Gold 50 micro-inches min. in contact area.
Wave solder tip temperature	260°C Max, 10 Sec Max

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

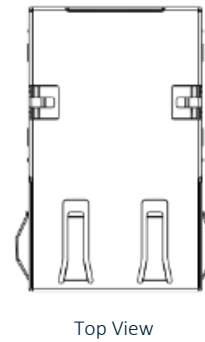
Storage requirements	
Humidity	MSL - 1
Storage Temperature	-40°C TO +85°C

3. Mechanical

3.1 Mechanical Drawings



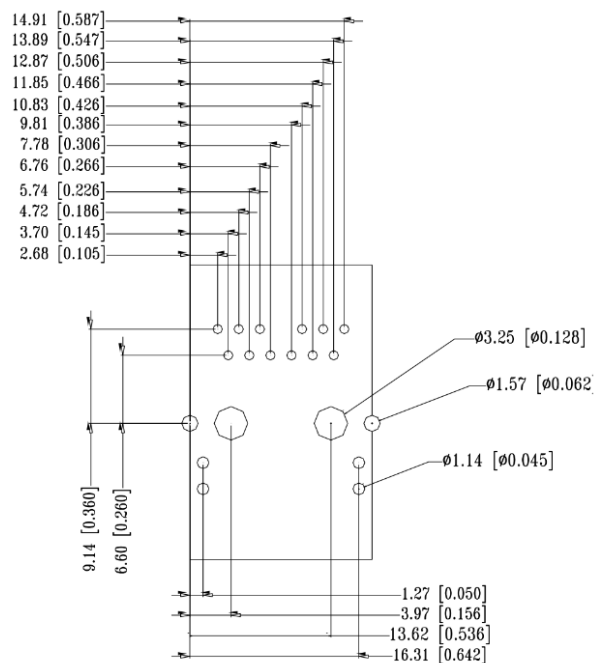
Mechanical Specifications	
Height	11.9mm
Width	17.53mm
Depth	28.57mm
Weight	
Mounting Style	Through Hole (THT)
Mounting Angle	Right Angle



UNIT : mm / inch
 A = 17.53 / 0.690
 B = 11.92 / 0.445
 C = 28.57 / 1.125
 D = 3.18 / 0.125

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

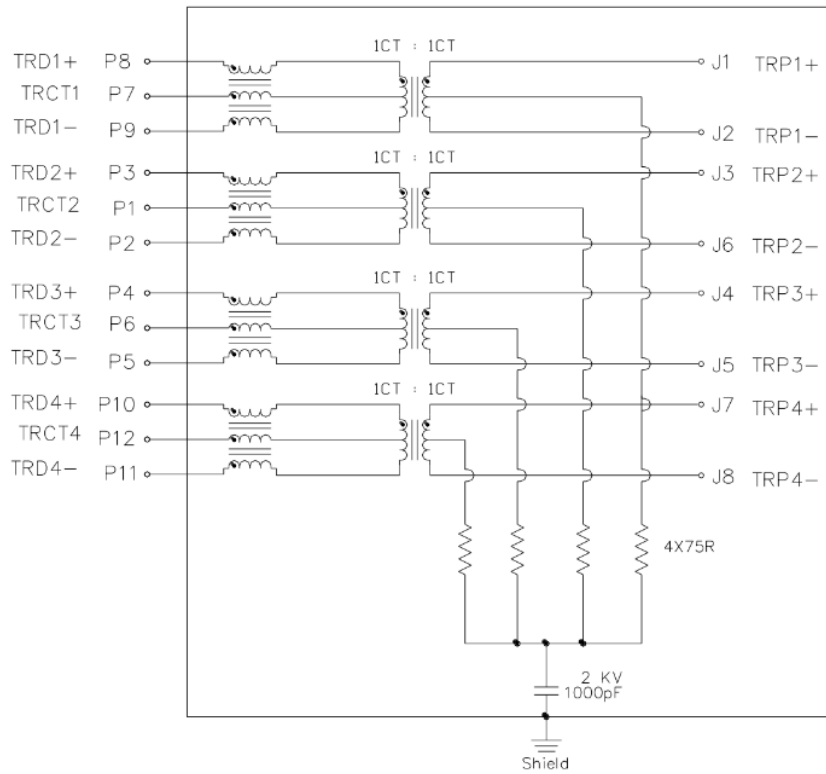
3.2 PCB Layout



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

4. Electrical

4.1 Electrical Drawings

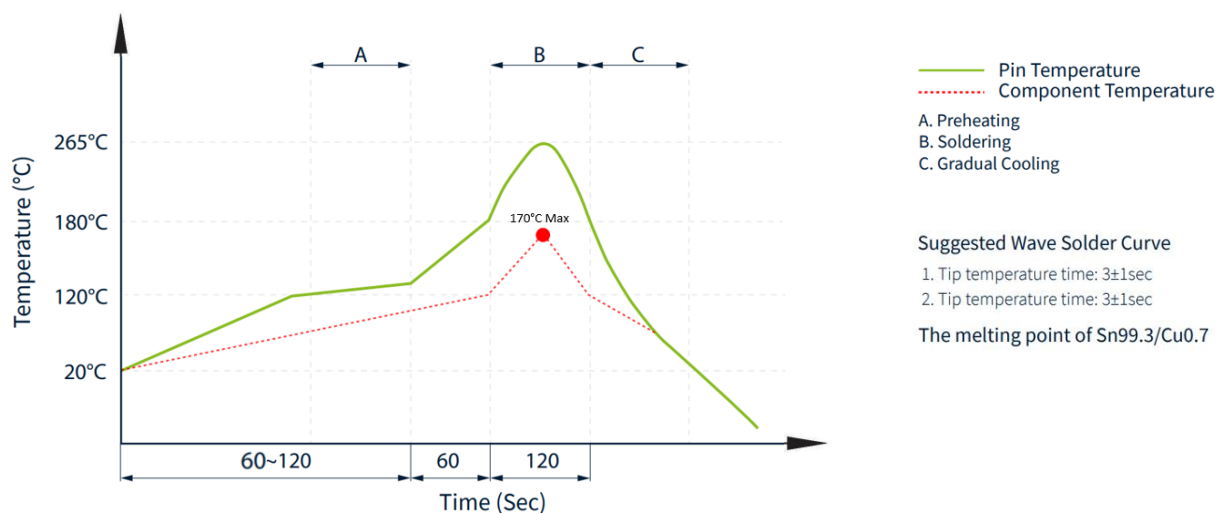


LED Electrical Specification

Standard LED	Wavelength (nm)	Forward V(MAX)	TYP
Green	565	2.4v	2.2v
Yellow	590	2.4v	2.1v



4.2 Profile of Wave Solder



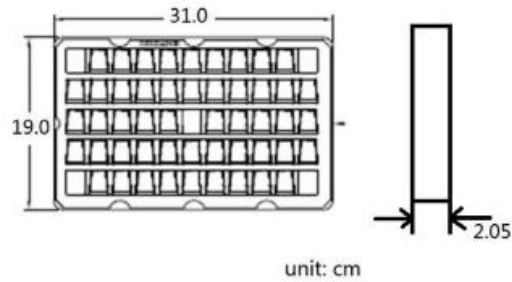
5. Packaging

5.1 SPQ

50 pcs/tray

Tray dimension: 310*190*20.5 mm

Tray Weight: 400g



1 Carton = 26 trays = 1300 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-23-8-204 – TMJY0012DGDZ5NL

Revision: A (Original First Release)

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

Previous Revisions



www.taoglas.com

