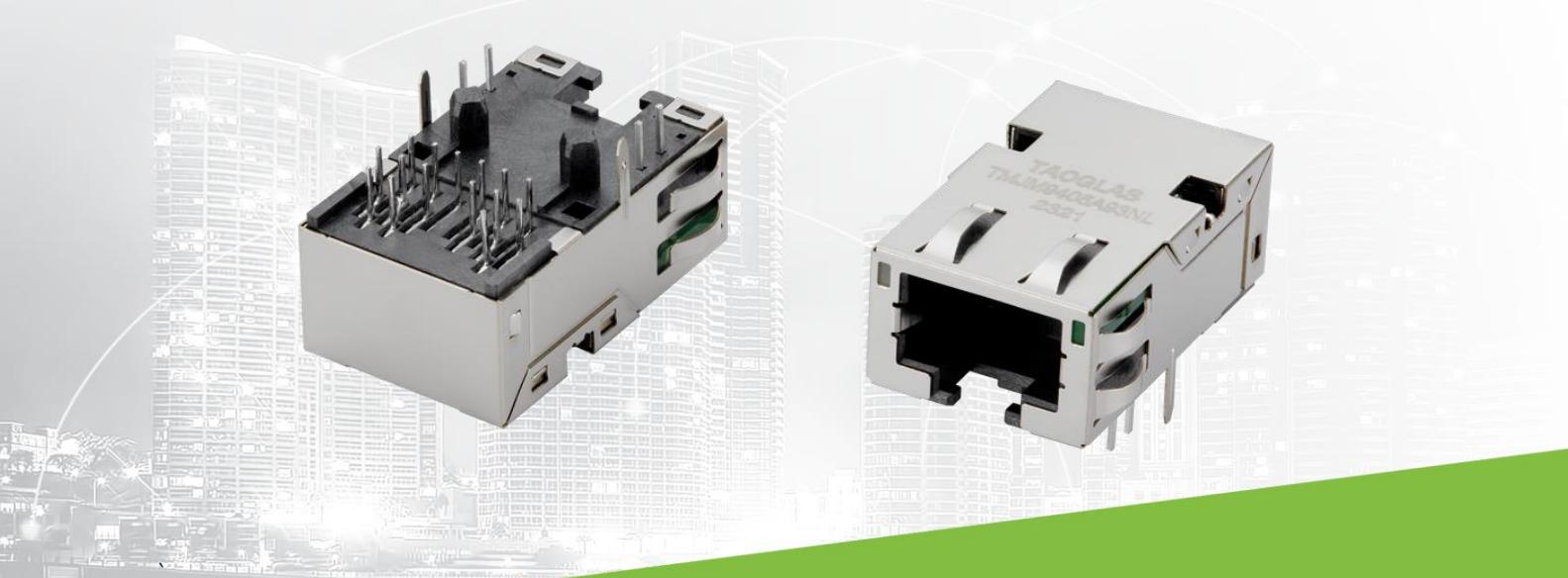


Datasheet



RJ45 ICM 10G Low Profile

Part No:
TMJM9405A93NL

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

Features:
Industrial grade
Shielded EMI Finger
3Wire + Transformer
Low Profile
PCI Express
RoHS Compliant

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Ireland
ISO 9001: 2015
Certified



Taiwan
ISO 9001: 2015
Certified



QUALITY MANAGEMENT SYSTEM
IATF16949

1. Introduction



Featuring a popular footprint and compatible package to industry RJ45 Integrated Connectors standards, the Taoglas TMJM9405A93NL is an RJ45 Integrated Connector 10G Base-T Single Port Tab Down with shielded EMI Finger and low-profile body design that offers extra space.

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	120uH Min @100KHz, 0.1V
Turns Ratio (±5%)	1CT:1CT
Insertion Loss (dB Max)	1~100MHz: -3.0 100~400MHz: -5.0
Return Loss (dB Min)	1~100MHz: -22 100-200MHz: -16.5 200~300MHz: -13.2 300~500MHz: -9
Crosstalk (dB Min)	1~100MHz: -28 100~500MHz: -19
Common Mode to Differential Mode Rejection (dB Min)	1~300MHz: -30 300~500MHz: -22
Isolation Hi-Pot	2250VDC Min

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

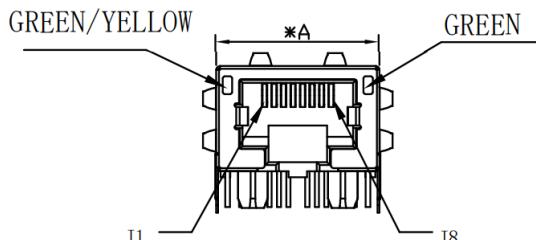
Material Specifications	
Housing	LCP BLACK UL94 V-0
Insert	LCP BLACK UL94 V-0
Shield	Brass
Shield plating	Nickel
Contact	Phosphor Bronze
Contact Plating	Selective Gold, 6 micro-inch Min in contact area
Wave solder tip temperature	260°C Max, 5 Sec

Compliance	
IEEE 802.3	
RoHS Compliant	

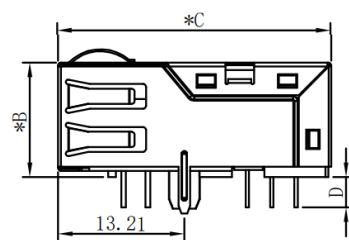
Storage requirements	
Humidity	MSL - 1
Storage Temperature	-40°C TO +85°C

3. Mechanical

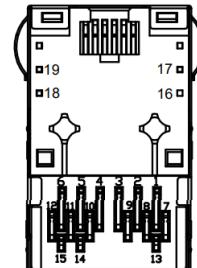
3.1 Mechanical Drawings



Front View



Left View



Bottom View

Mechanical Specifications

Height	11.92mm
Width	17.53mm
Depth	28.57mm
Mounting Style	Through Hole (THT)
Mounting Angle	Right Angle

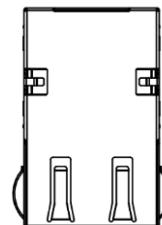
UNIT : mm / Inch

A = 17.53 / 0.690

B = 11.92 / 0.445

C = 28.57 / 1.125

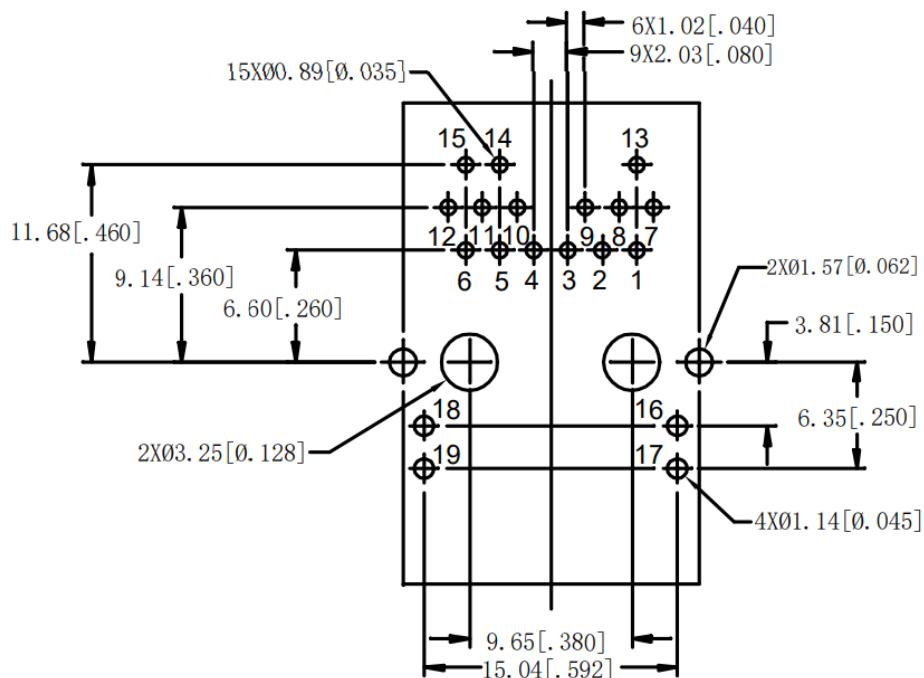
D = 3.18 / 0.125



Top View

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

3.2 PCB Layout

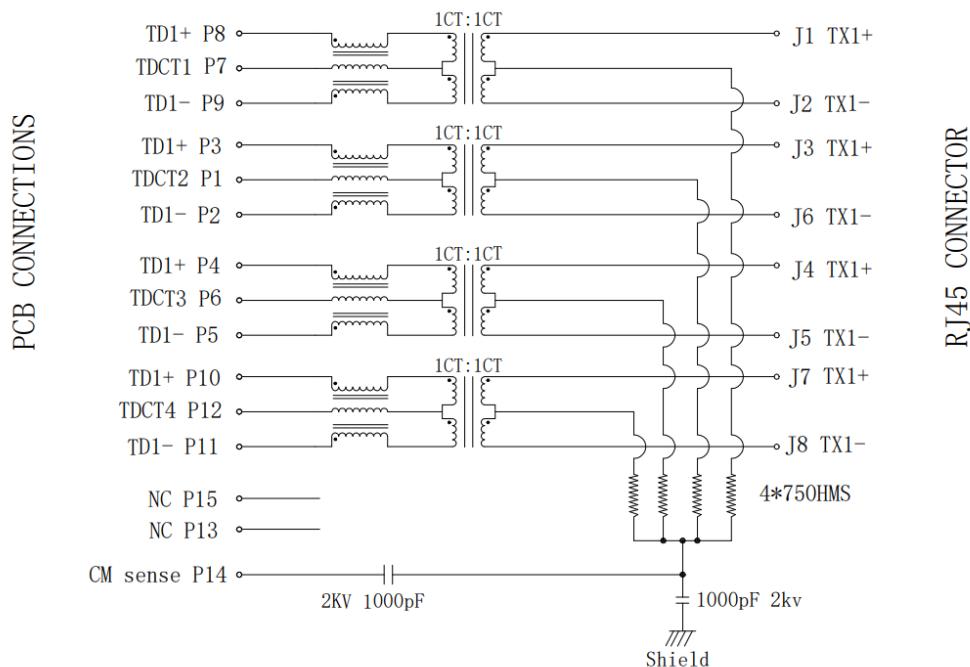


Suggested PCB Layout (Top View)

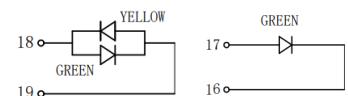
Dimensions are in millimeters with the following tolerances: X.XX = ± 0.10

4. Electrical

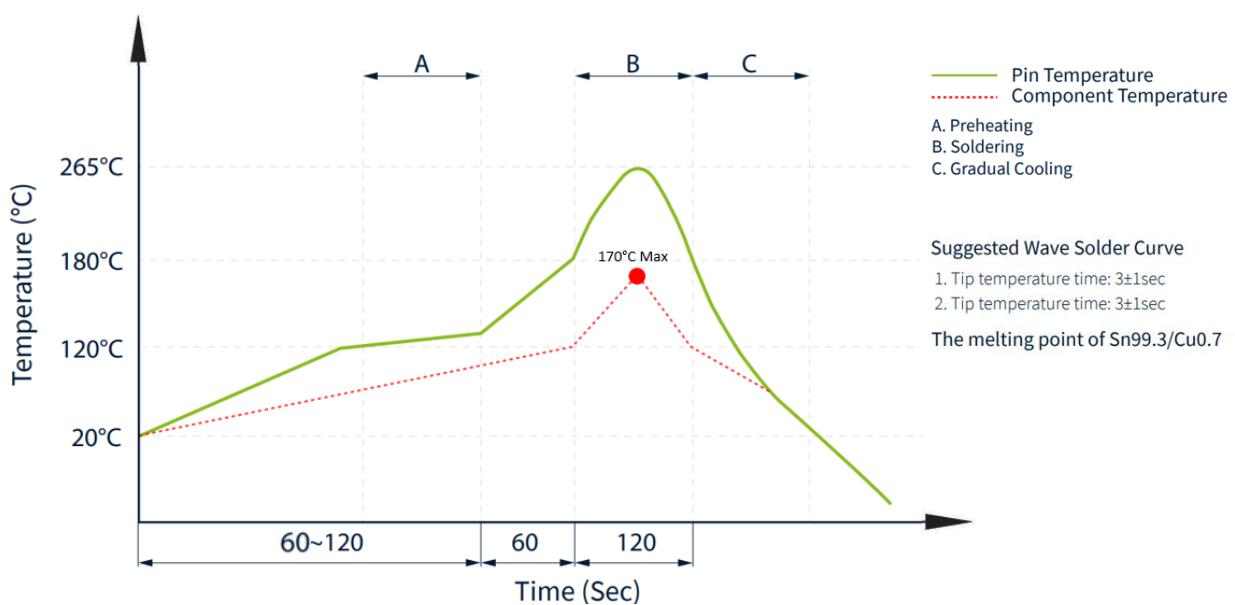
4.1 Electrical Drawings



LED Electrical Specification				
Standard LED	Wavelength (nm)	V_F ($I_F=20mA$)	Power Diss. (Pd)	I_R ($V_R=5v$)
Green	565	2.2v	105 mW MAX	25 μA Max
Yellow	585	2.1v	100 mW MAX	30 μA Max



4.2 Profile of Wave Solder



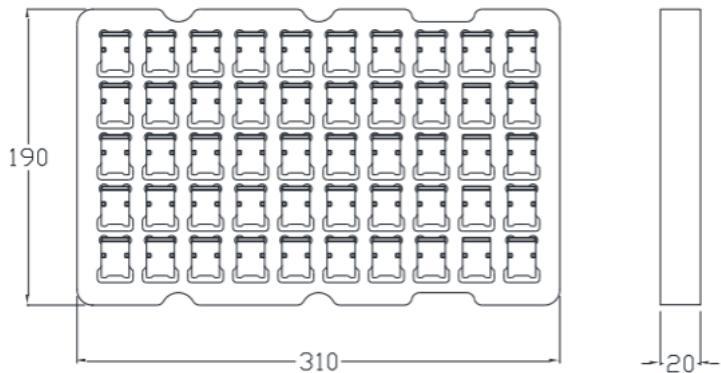
5. Packaging

5.1 SPQ

50 pcs/tray

Tray dimension: 310*190*20 mm

Tray Weight: 500g



1 Carton = 26 trays = 1300 pcs

Carton dimensions: 400*320*333mm

Carton Weight: 13.5kg



5.2 Label

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-23-8-163 – TMJM9405A93NL

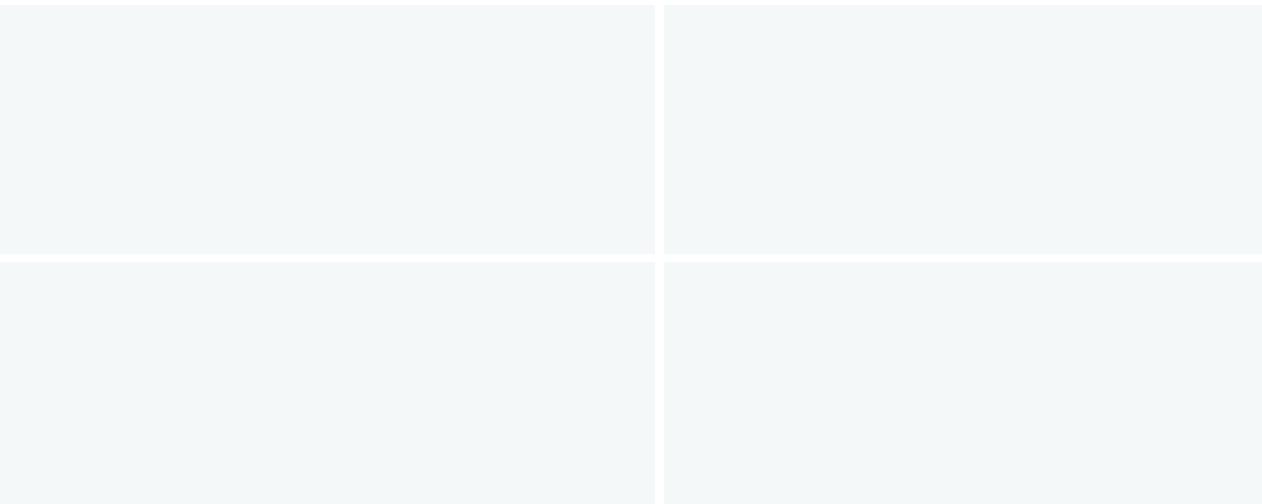
Revision: A (Original First Release)

Date: 2023-07-01

Notes:

Author: Javier Vasena

Previous Revisions





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