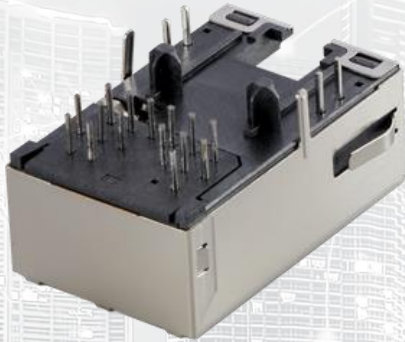




TAOGLAS®



Datasheet

RJ45 ICM 10G Base-T Low Profile

Part No:
TMJM95215-9A154NLC

Description:

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

Features:

- 3 Wire + Transformer + 5Ch/Sense
- Low Profile
- Shielded EMI Finger
- 50 μ " Gold
- Industrial grade
- RoHS Compliant

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1. Introduction



The Taoglas TMJM95215-9A154NLC is a 10G Base-T single-port, tab-DOWN RJ45 Integrated Connector with a shielded EMI finger body design and low profile. It features a widely recognized footprint and a compatible package that aligns with industry standards for RJ45 Integrated Connectors, making it popular among users.

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: -1.0
	100-400MHz: -2.0
	400-500MHz: -3
Return Loss (dB Min)	1-100MHz: -22
	100-200MHz: -16
	200-300MHz: -12
	300-400MHz: -10
	400-500MHz: -8
Cross Talk (dB Min)	1-100MHz: -30
	100-500MHz: -20
Common Mode Rejection (dB Min)	1-100MHz: -30
	100-500MHz: -20
Common Mode to Differential Mode Rejection (dB Min)	1-250MHz: -30
	250-500MHz: -22
Isolation PHY SIDE To Line SIDE	1500Vrms

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

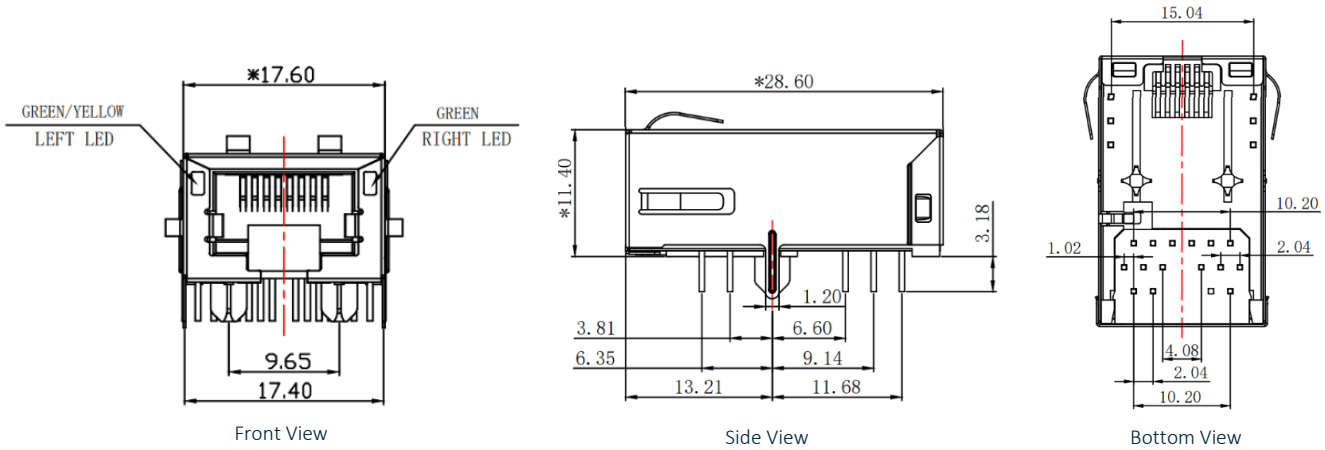
Material Specifications	
Housing	LCP UL94V-0 Black
Insert core	LCP UL94V-0 Black
Contact	Phosphor Bronze, Gold plated on contact area 50u", Tin plated on solder area 80u" min, overall nickel plating 30u" min.
Input Terminal	CP Wire
Metal shielding	Copper alloy with Nickel plated
Wave solder tip temperature	260°C Max, 5 Sec

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

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

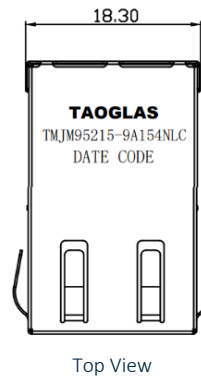
3. Mechanical

3.1 Mechanical Drawings



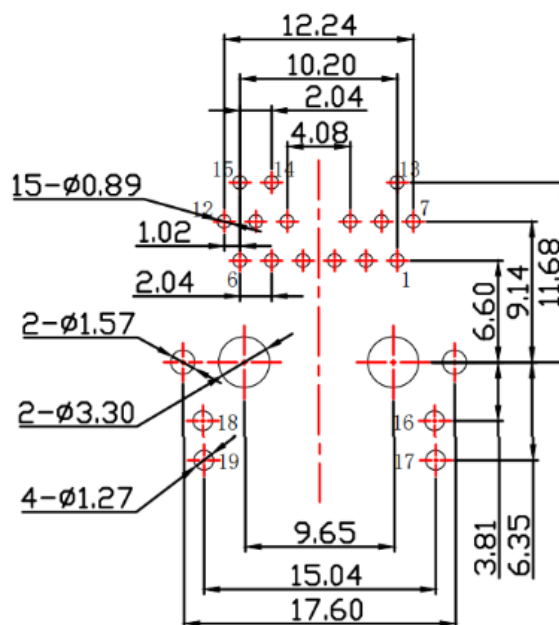
Mechanical Specifications	
Height	11.40 mm
Width	17.60 mm
Depth	28.60 mm
Weight	8.35 g
Mounting Style	Through Hole (THT)
Mounting Angle	Right Angle

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



Top View

3.2 PCB Layout

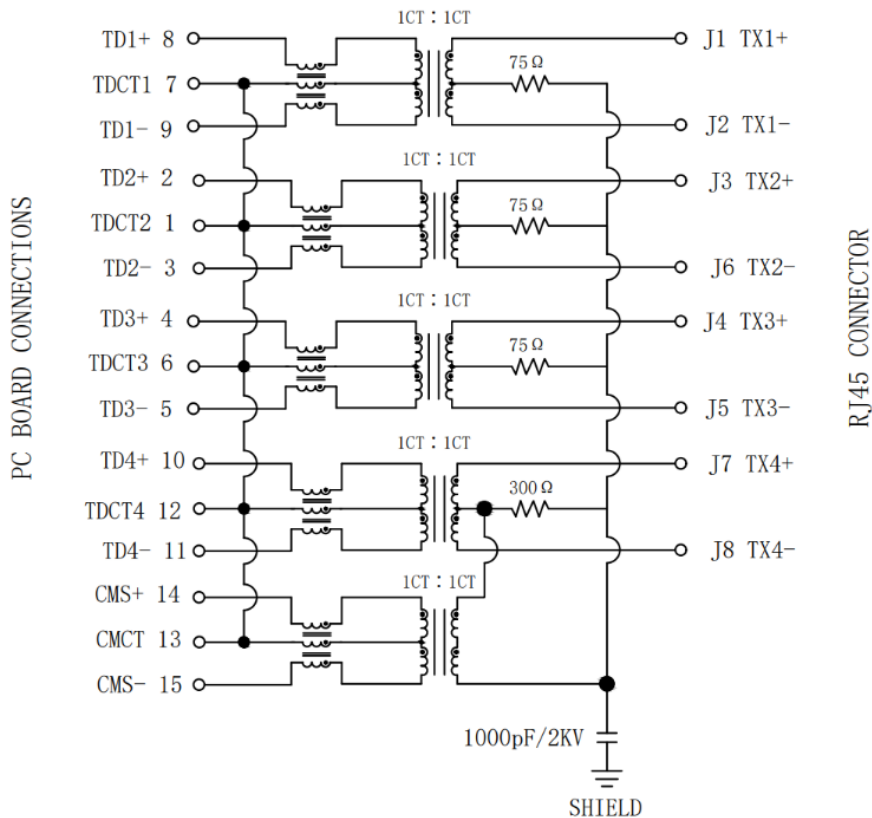


Suggested PCB Layout (Top View)

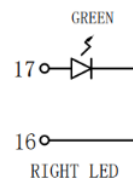
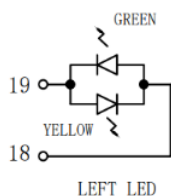
Dimensions are in millimeters with the following tolerances: X.XX = ± 0.10

4. Electrical

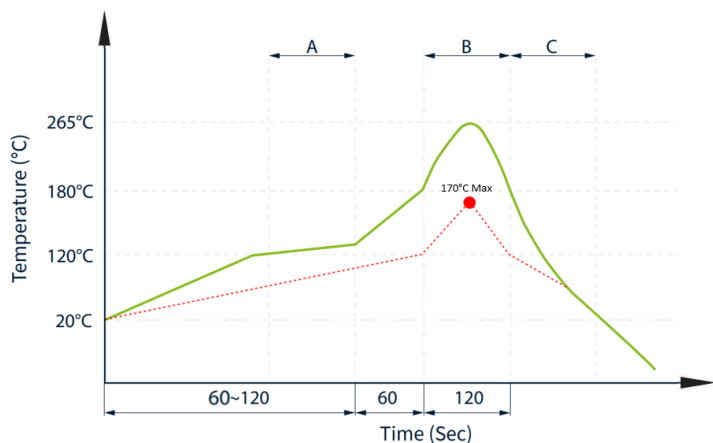
4.1 Electrical Drawings



Emitting Color	λ_p (nm)	VF@IF=20mA	IR @VR=5V
GREEN	565	1.8~2.6V	10 μ A max
YELLOW	585	1.8~2.6V	10 μ A max



4.2 Profile of Wave Solder



— Pin Temperature
- - - Component Temperature
 A. Preheating
 B. Soldering
 C. Gradual Cooling

Suggested Wave Solder Curve

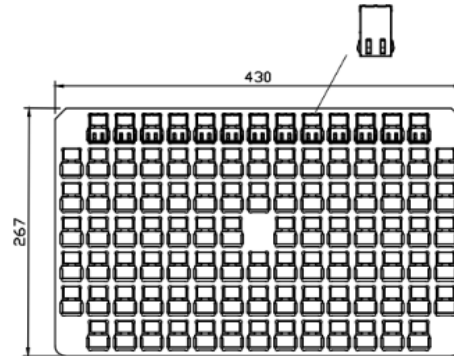
1. Tip temperature time: 3±1sec
2. Tip temperature time: 3±1sec

The melting point of Sn99.3/Cu0.7

5. Packaging

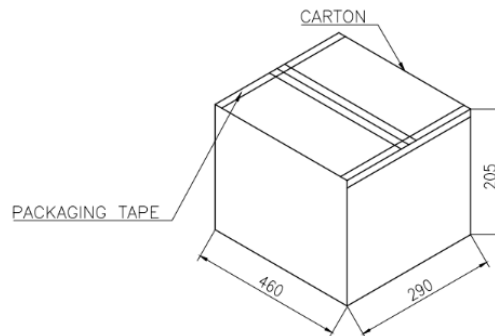
5.1 SPQ

- 100 pcs/tray
- Tray dimension: 430*267 mm
- Tray Weight: 0.96 kg



5.2 Carton

- 1 Carton = 10 trays = 1000 pcs
- Carton dimensions: 460*290*205 mm
- Carton Weight: 10 kg



5.3 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-23-8-370 – TMJM95215-9A154NLC

Revision: A (Original First Release)

Date:	2024-01-01
Notes:	
Author:	Javier Vasena

Previous Revisions



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