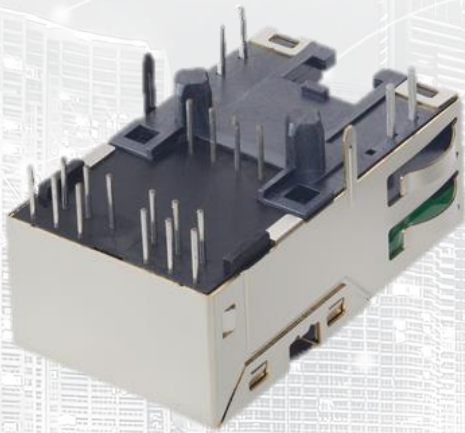




# TAOGLAS®



# Datasheet

## RJ45 ICM 10G Base-T PoE++ Low Profile

**Part No:**  
TMJM84285-9AGNLCK

**Description:**

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

**Features:**

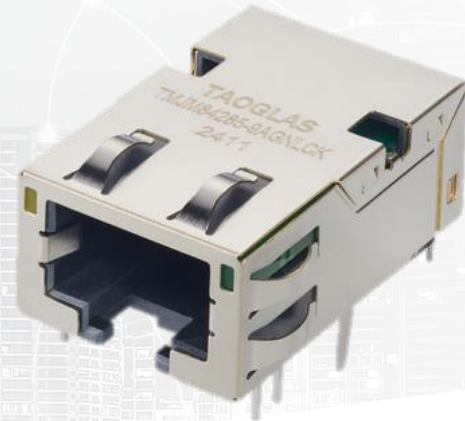
- PoE++ (1A)
- Long Body
- Low Profile
- Shielded EMI Finger
- 3 Wire + Transformer
- Industrial grade

1. Introduction	3
2. Specifications	4
3. Mechanical	5
4. Electrical	7
5. Packaging	8
<hr/>	
Changelog	9

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# 1. Introduction



The Taoglas TMJM84285-9AGNLCK is a single-port, tab-down RJ45 Integrated Connector with a shielded EMI Finger short body design. It features a widely recognized footprint and a compatible package that aligns with industry standards for RJ45 Integrated Connectors, making it popular among users. This connector supports 10G Base-T connections and is capable of PoE ++ applications,

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	1CT:1CT(±5%)
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
Balance DC Line current	1000mA MAX, @57VDC Continuous

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

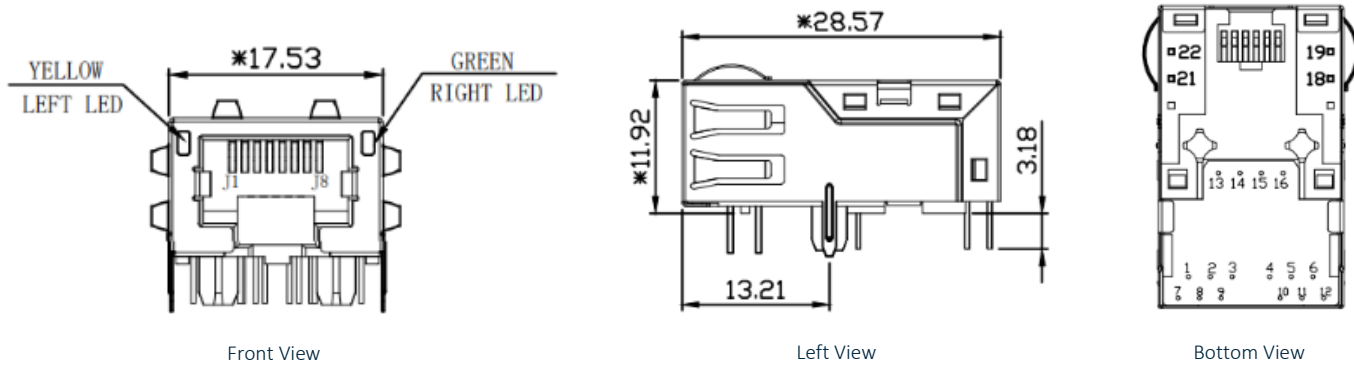
Material Specifications	
Housing	LCP BLACK UL94 V-0
Insertor	LCP BLACK UL94 V-0
Shield	Brass
Shield Plating	Nickel
Contact	Phosphor Bronze
Contact Plating	Selective Gold,50 Micro-Inches Min in Contact Area
Wave solder tip temperature	260°C, 10 Sec Max

Compliance	
IEEE 802.3	
RoHS Compliant	

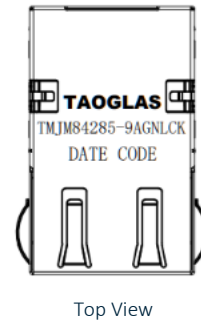
Storage requirements	
Humidity	MSL - 1
Storage Temperature	-40°C TO +85°C

### 3. Mechanical

#### 3.1 Mechanical Drawings

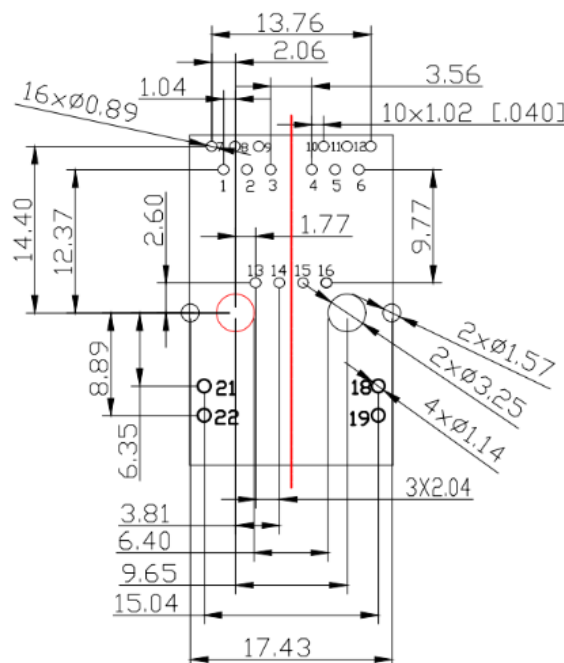


Mechanical Specifications	
Height	11.92 mm
Width	17.53 mm
Depth	28.57 mm
Weight	7.8 g
Mounting Style	Through Hole (THT)
Mounting Angle	Right Angle



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

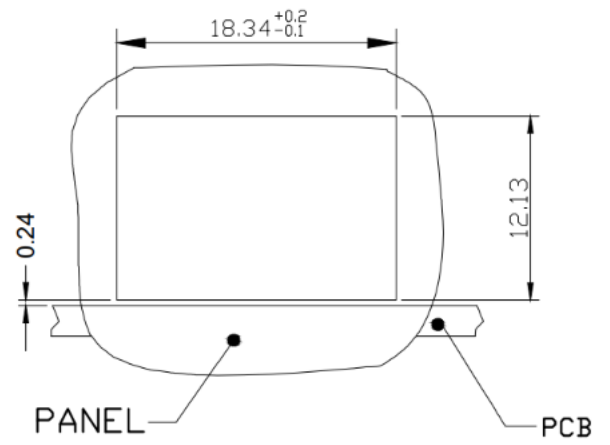
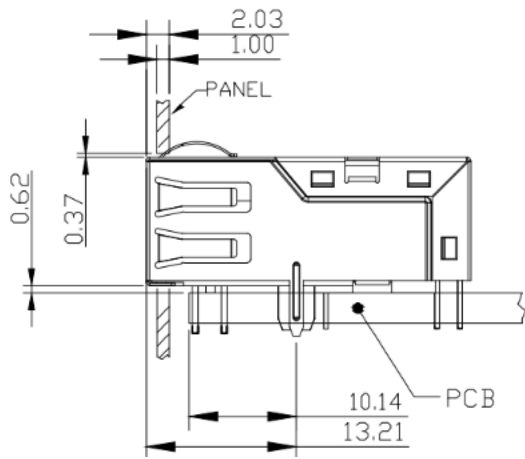
#### 3.2 PCB Layout



Suggested PCB Layout (Top View)

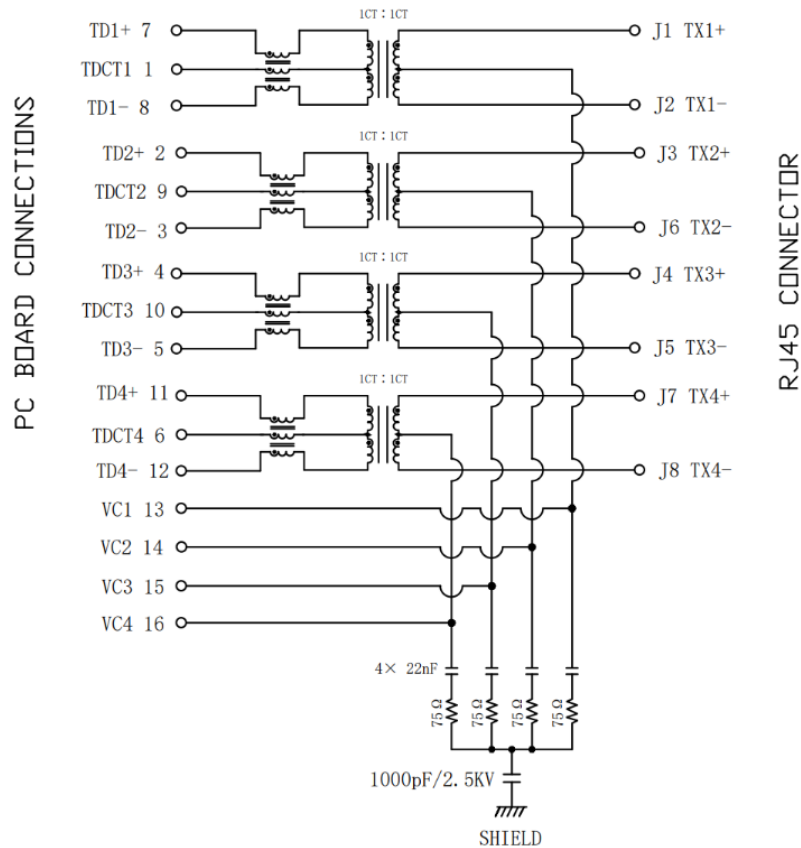
Dimensions are in millimeters with the following tolerances: X.XX = ±0.10

### 3.3 Panel cutout

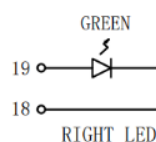
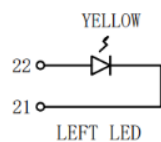


## 4. Electrical

### 4.1 Electrical Drawings



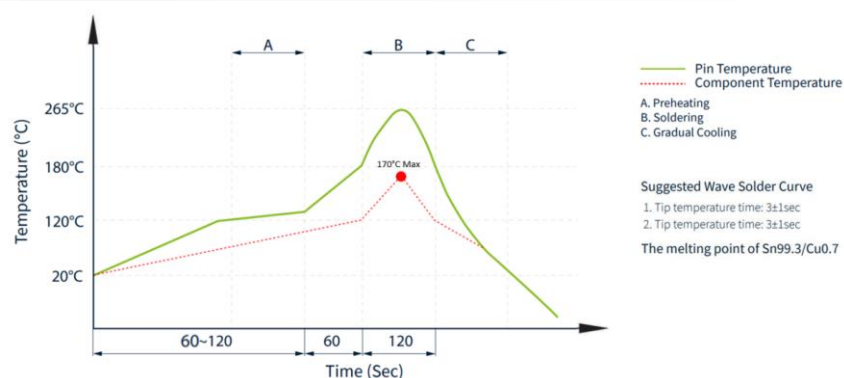
### 4.2 LED



LED POLARITY		COLOR
PIN 21	PIN 22	
-	+	YELLOW

LED POLARITY		COLOR
PIN 18	PIN 19	
-	+	GREEN

### 4.3 Profile of Wave Solder

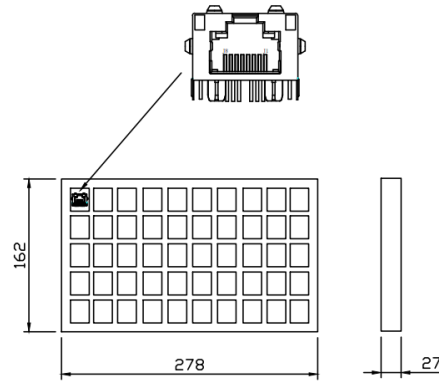


## 5. Packaging

### 5.1 SPQ

1 tray = 50 pcs

Tray weight = 448g

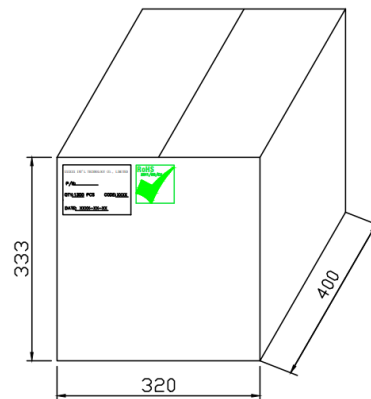


### 5.2 Carton

1 Carton = 26 trays = 1300 pcs

Carton dimensions = 320\*400\*333 mm

Carton Weight = 12.65 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-24-8-037 – TMJM84285-9AGNLCK**

**Revision: A (Original First Release)**

Date:	2024-03-31
Notes:	
Author:	Javier Vasena

**Previous Revisions**




[www.taoglas.com](http://www.taoglas.com)

