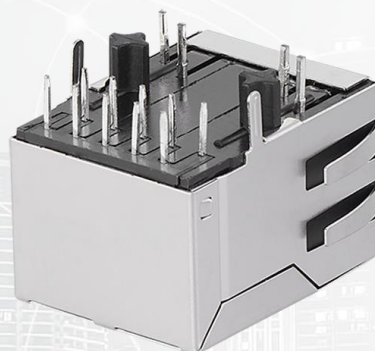




TAOGLAS®



Datasheet

RJ45 ICM 10/100 Base-T PoE

Part No:
TMJ0277AHNL

Description:

RJ45 connector with integrated magnetics 10/100Base-T
Single Port Tab-DOWN with right angle THT mount and LEDs

Features:

- EMI Finger
- PoE (350 mA)
- Short Body
- RoHS & REACH Compliant

1.	Introduction	3
2.	Specifications	4
3.	Mechanical	5
4.	Electrical	6
5.	Packaging & Storage	7
	Changelog	8

Taoglas makes no warranties based on the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Taoglas reserves all rights to this document and the information contained herein. Reproduction, use or disclosure to third parties without express permission is strictly prohibited.



1. Introduction



Featuring a popular footprint and compatible package to industry RJ45 Integrated Connectors standards, the Taoglas TMJ0277AHNL is an RJ45 Integrated Connector 10/100Base-T Single Port Tab Down with EMI Finger, its shielded short body design 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		
Inductance OCL	350μH MIN @ 100KHz 0.1V 8mA DC Bias	
Turns Ratio (±5%)	TX=1CT: 1CT	RX=1CT: 1CT
Insertion Loss	1-100 MHz: -1.2dBMax	
Return Loss (dB Min)	1-30 MHz: -16	
	30-60 MHz: -12	
	60-80 MHz: -10	
Cross talk	1-100 MHz: -30dBMin	
Common Mode Rejection	1-100 MHz: -30dBMin	
DC Current/Voltage Rating - PSE	350 mA @ 57V (continuous)	
Hi-Pot	1500Vrms Min	

Environmental Specifications	
Operating Temperature	0°C TO +70°C

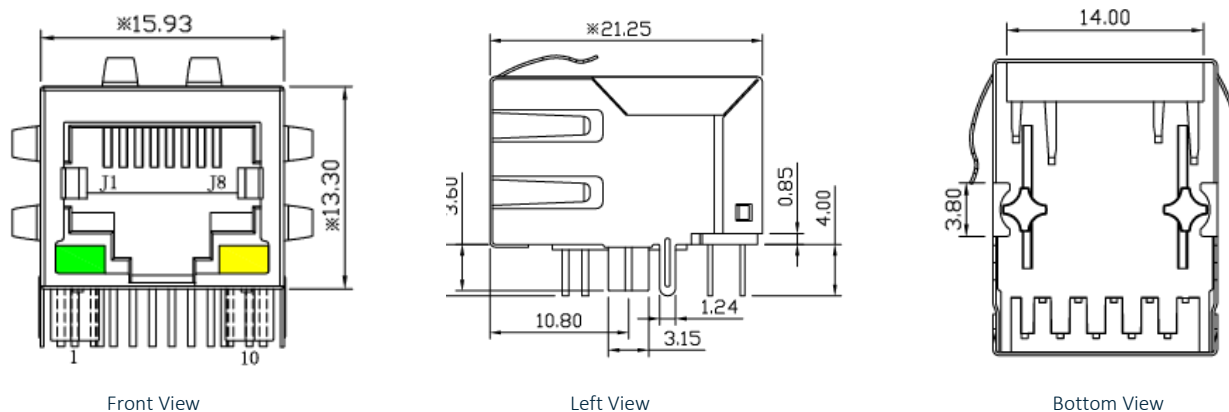
Material Specifications	
Housing	Thermoplastic PBT+30%G. F UL94V-0
Contact	Phosphor Bronze C5210R-EH Thickness = 0.35mm
Contact Plating	Gold Thickness = 6μ" min.
Pins	Brass C2680R-H Thickness = 0.35mm
Shield	Stainless Steel SUS 201-1-1/2H Thickness = 0.2mm

Compliance	
UL recognized - FILE NO. E528697	
RoHS Compliant	

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

3. Mechanical

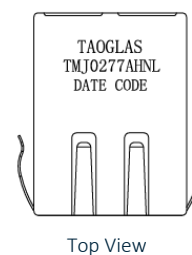
3.1 Mechanical Drawings



Mechanical Specifications

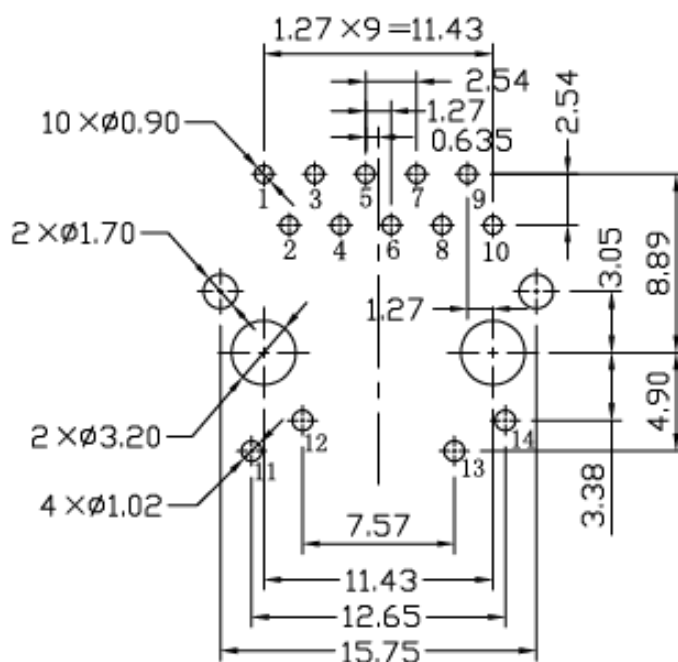
Height Above Board	0.52" (13.3mm)
Width	0.627" (15.93mm)
Depth	0.837" (21.25mm)
Mounting Style	Through Hole (THT)
Mounting Angle	Right Angle

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



Top View

3.2 PCB Layout

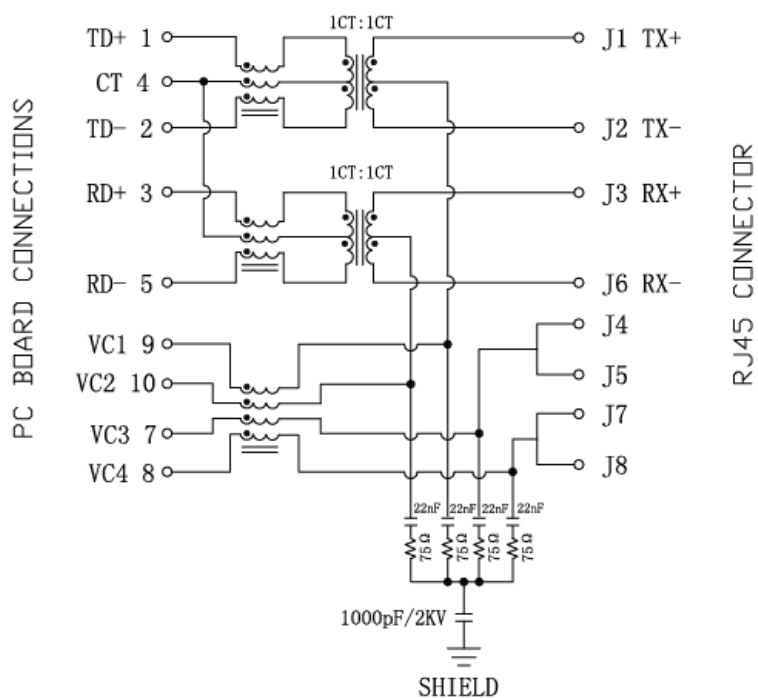


Suggested PCB Layout (Top View)

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

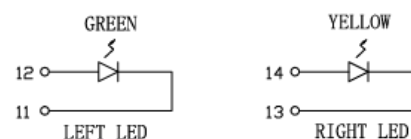
4. Electrical

4.1 Electrical Drawings

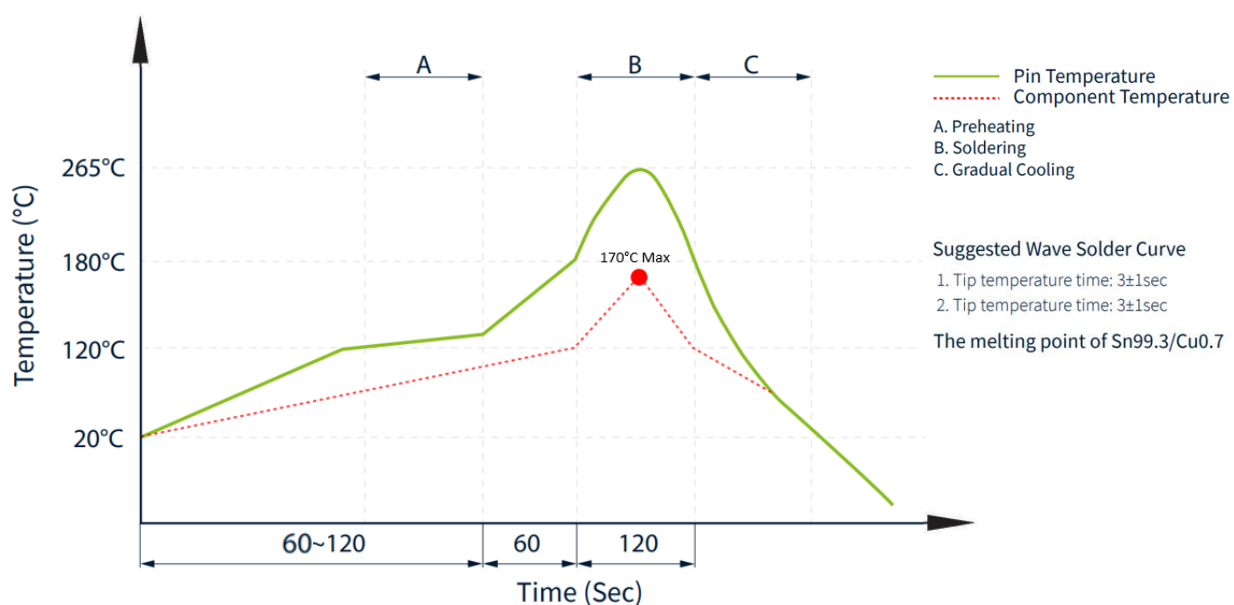


LED Electrical Specification

Standard LED	Wavelength (nm)	V_F ($I_F=20\text{mA}$)	I_R ($V_R=5\text{v}$)
Green	565	1.8~2.6v	10 μA Max
Yellow	585	1.8~2.6v	10 μA Max



4.2 Profile of Wave Solder



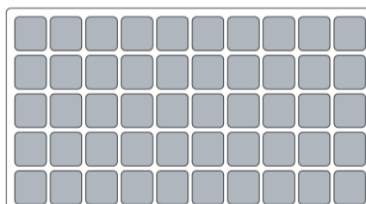
5. Packaging and Storage

5.1 SPQ

50 pcs/tray

Tray dimension: 283*146*24 mm

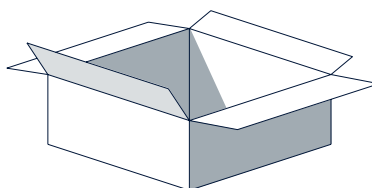
Tray Weight: 347g



1CTN = 24 trays = 1200 pcs

Carton dimensions: 320*300*301 mm

Carton Weight: 9kg



Changelog

Changelog for the datasheet

SPE-22-8-056 – TMJ0277AHNL

Revision: A (Original First Release)

Date: 2022-11-08

Notes:

Author: Javier Vasena

Previous Revisions



www.taoglas.com



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Taoglas:](#)

[TMJ0277AHNL](#)