



### RJ45 ICM 1G Base-T Short Body PoE++

#### Part No:

TMJG4926HENL

#### **Description:**

RJ45 connector with integrated magnetics 1G Base-T

Single Port Tab-DOWN with right angle THT mount and LEDs

#### **Features:**

Short Body

3Wire + Transformer

PoF++ (720mA)

Shielded

Industrial grade

RoHS Compliant



1.	Introduction	3
2.	Specifications	4
3.	Mechanical	5
4.	Electrical	6
5.	Packaging	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



The Taoglas TMJG4926HENL is a 1G Base-T single-port, tab-DOWN RJ45 Integrated Connector with a shielded short body design, offering extra space. 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			
Inductance OCL	350uH MIN @100KHz/0.1V,8mA DC Bias		
	120uH MIN @100KHz/0.1V,18mA DC Bias		
Turns Ratio (±5%)	1CT:1CT		
Insertion Loss	-1.0dB MAX @ 1-100MHz		
	-1.2dB MAX @ 100-125MHz		
Return Loss	-16dB MIN @ 1-40MHz		
	-12dB MIN @ 40-60MHz		
	-10dB MIN @ 60-80MHz		
	-8dB MIN @ 80-100MHz		
Crosstalk	-30dB MIN @ 1-100MHz		
Common Mode Rejection	-30dB MIN @ 1-100MHz		
DC Current/Voltage Rating pse Pins	720mA MAX@57VDC (Continuous)		
Hipot	1500Vrms MIN		

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

Material Specifications			
Housing	Thermoplastic PBT+30%G.F UL94V-0		
Contact	Phosphor Bronze C5210R-EH Thickness=0.35mm		
Pins	Brass C2680R-H Thickness=0.35mm		
Shield	SUS 304-1/2H Thickness=0.2mm		
Contact plating	Gold 6 micro-inches min. in contact		
	area.		
Wave peak temperature	250°C Max, 5 Sec		

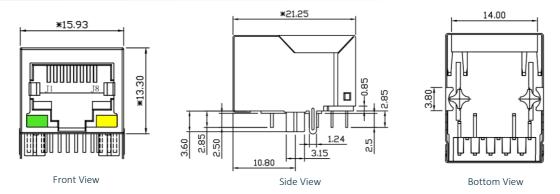
Compliance		
UL recognized - FILE NO. E528697		
IEEE 802.3		
RoHS Compliant		

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



## 3. Mechanical

#### 3.1 Mechanical Drawings



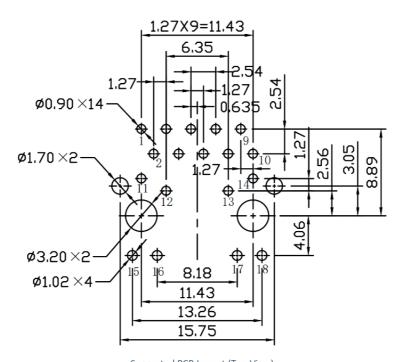
Mechanical Specifications			
Height	13.30mm		
Width	15.93mm		
Depth	21.25mm		
Weight	6.05g		
Mounting Style	Through Hole (THT)		
Mounting Angle	Right Angle		



Dimensions are in millimeters with the following tolerances:  $X.XX = \pm 0.25$ 

Top View

### 3.2 PCB Layout

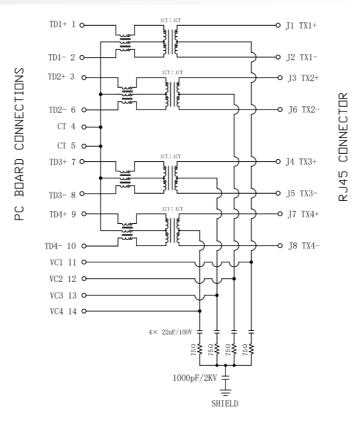


 $\label{eq:Suggested} Suggested\ PCB\ Layout\ (Top\ View)$  Dimensions are in millimeters with the following tolerances: X.XX =  $\pm 0.10$ 

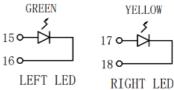


## 4. Electrical

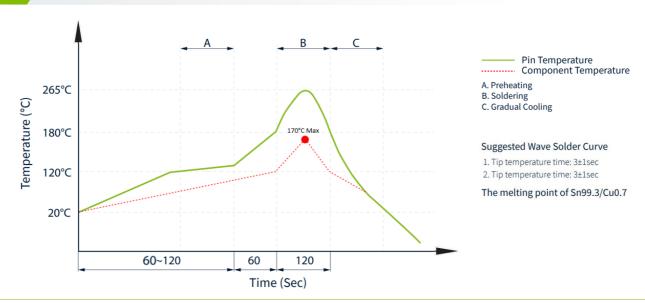
#### 4.1 Electrical Drawings



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



#### 4.2 Profile of Wave Solder





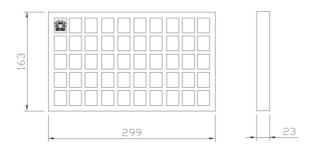
## 5. Packaging

#### **5.1** SPQ

50 pcs/tray

Tray dimension: 299\*163\*23 mm

Tray Weight: 365g



1 Carton = 24 trays = 1200 pcs

Carton dimensions: 320\*300\*310mm

DATE: XXXX-XX-XX

Carton Weight: 9kg



#### 5.2 Label

Taoglas Limited				
P/N NO: XXXXXXXX				
QYT: XXX PCS	DC:	xxxx		

SPQ Label (8x4cm)

Taoglas Limited

P/N NO: XXXXXXXX

PO: XXXXXXXX

QYT: XXX PCS

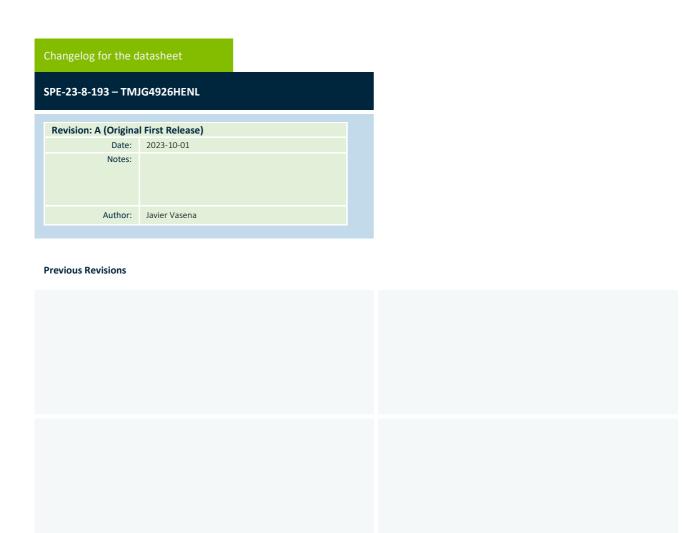
DC: XXXX

DATE: XXXX-XX-XX

Carton Label (8x4cm)



# Changelog







www.taoglas.com

