



## RJ45 ICM 1G Base-T Short Body

#### Part No:

TMJG4933HENL

#### **Description:**

RJ45 connector with integrated magnetics 1G Base-T Single Port Tab-DOWN with right angle THT mount and LED

#### Features:

**AutoMDIX** 

Industrial grade

Short Body

**RoHS & REACH Compliant** 



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### 1. Introduction



Featuring a popular footprint and compatible package to industry RJ45 Integrated Connectors standards, the Taoglas TMJG4933HENL is an RJ45 Integrated Connector 1G Base-T Single Port Tab Down, its shielded short body design offers extra space, and with a schematic that enables AutoMDIX feature.

**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.

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# 2. Specifications

Electrical Performance @25°C			
Inductance OCL	L 350μH MIN @ 100KHz 0.1V 8mA DC Bias		
DCR	1.2 Ω MAX		
Turns Ratio (±5%)	TX=1CT: 1CT	RX=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		
Cross talk	-30dB MIN @ 1-100Mhz		
Common Mode Rejection	-30dB MIN @ 1-100Mhz		
Hi-Pot	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	
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		

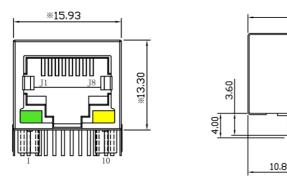
Storage requirements			
Humidity	Storage Temperature		
MSL - 1	-40°C TO +85°C		

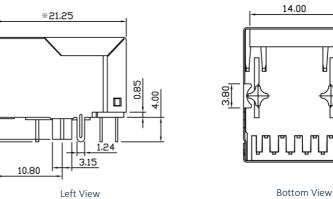
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## Mechanical

### **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) Right Angle Mounting Angle

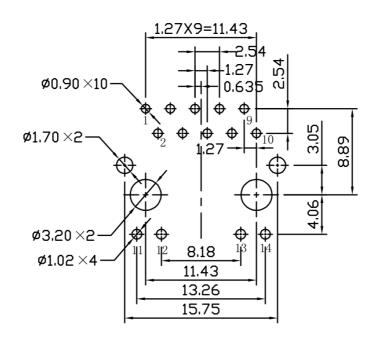
Dimensions are in millimeters with the following tolerances:  $X.XX = \pm 0.25$ 

Top View

TAOGLAS TMJG4933HENL DATE CODE

#### **PCB** Layout

Front View



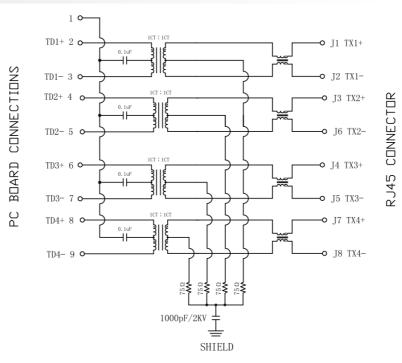
Suggested PCB Layout (Top View) Dimensions are in millimeters with the following tolerances:  $X.XX = \pm 0.10$ 

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## 4. Electrical

#### 4.1 Electrical Drawings

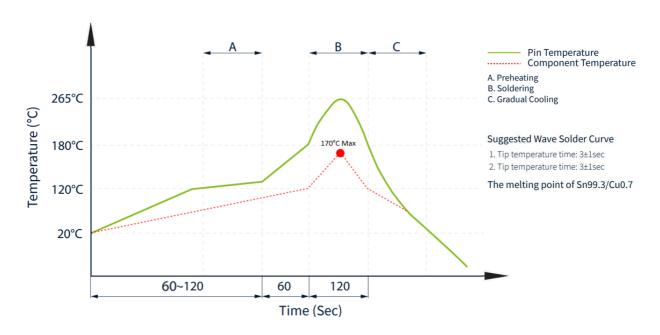


LED Electrical Specification			
Standard LED	Wavelength (nm)	$V_F$ ( $I_F$ =20mA)	$I_R (V_R=5v)$
Green	565	1.8~2.6v	10 μA Max
Yellow	585	1.8~2.6v	10 μA Max





### 4.2 Profile of Wave Solder





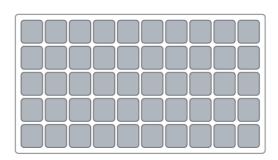
# 5. Packaging and Storage

**5.1** SPQ

50 pcs/tray

Tray dimension: 299\*163\*23 mm

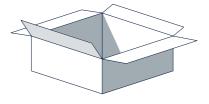
Tray Weight: 349g



1 CTN = 24 trays = 1200 pcs

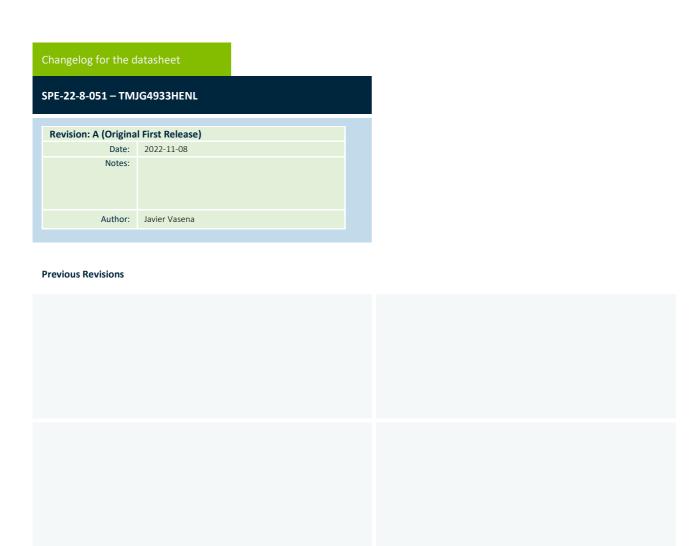
Carton dimensions: 320\*300\*301 mm

Carton Weight: 9kg





# Changelog



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