



RJ45 ICM 1G Base-T Short Body

Part No:

TMJG4820GENL

Description:

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

Features:

EMI Fingers

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 TMJG4820GENL is an RJ45 Integrated Connector 1G Base-T Single Port Tab Down with EMI Finger and shielded short body design that 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		
DCR	1.2 Ω MAX		
Turns Ratio (±3%)	TX=1CT: 1CT	RX=1CT: 1CT	
Insertion Loss	-1.0dB MAX @ 1-65Mhz		
Return Loss	-20dB MIN @ 1-10Mhz		
	-16dB MIN (@ 10-30Mhz	
	-12dB MIN (@ 30-60Mhz	
Cross talk	-40dB MIN @ 1-30Mhz		
	-35dB MIN (@ 30-60Mhz	
	-30dB MIN @	9 60-100Mhz	
Common Mode Rejection	-30dB MIN	@ 1-50Mhz	
	-20dB MIN @	9 50-150Mhz	
Hi-Pot	1500Vr	ms 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		

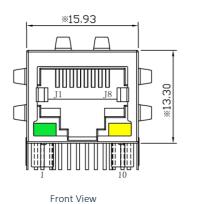
Compliance		
UL recognized - FILE NO. E528697		
RoHS Compliant		

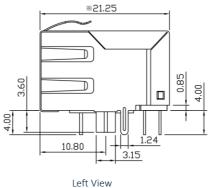
Storage requirements			
Humidity	Storage Temperature		
MSL - 1	-40°C TO +85°C		

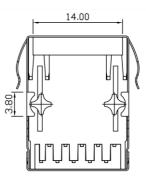


3. Mechanical

3.1 Mechanical Drawings







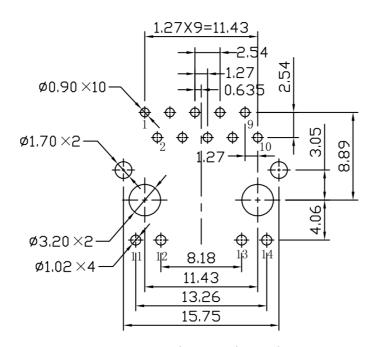
w Bottom View

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: $X.XX = \pm 0.25$

3.2 PCB Layout

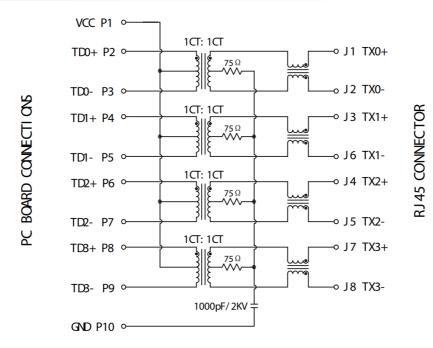


 $\label{eq:Suggested PCB Layout (Top View)}$ Dimensions are in millimeters with the following tolerances: X.XX = ± 0.10



4. Electrical

4.1 Electrical Drawings

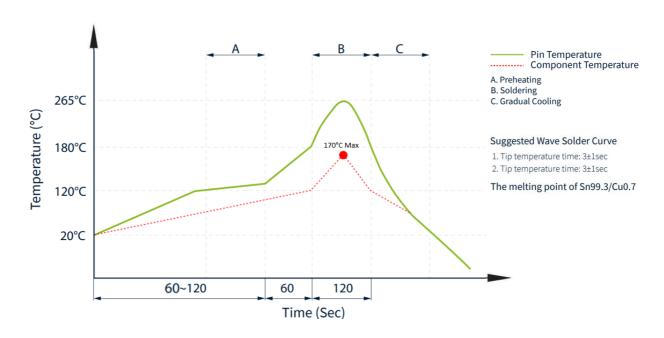


LED Electrical Specification			
Standard LED	Wavelength (nm)	V_F (I_F =20mA)	$I_R (V_R=5v)$
Green	565	1.8~2.6v	10 μA Max
Yellow	585	1.8~2.6v	10 μA Max





4.2 Profile of Wave Solder





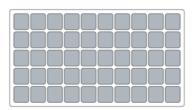
5. Packaging and Storage

5.1 SPQ

50 pcs/tray

Tray dimension: 290x176x28mm

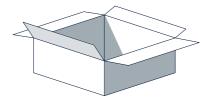
Tray Weight: 429g



1 CTN = 24 trays = 1200 pcs

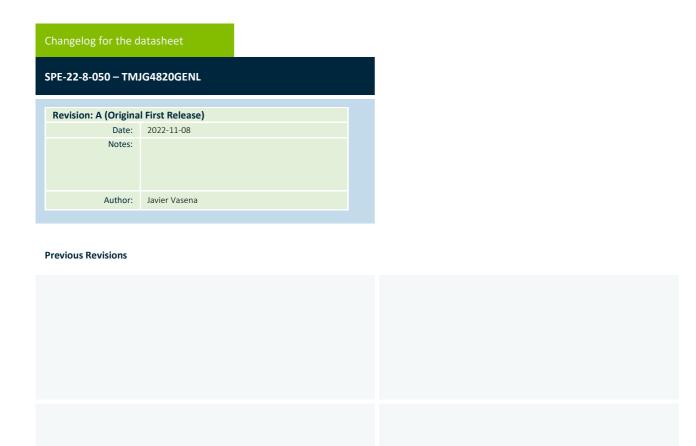
Carton dimensions: 320*300*301mm

Carton Weight: 9kg





Changelog







www.taoglas.com

