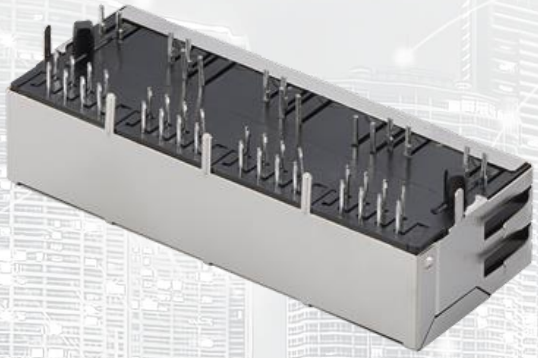
TAOGLAS



Datasheet

RJ45 ICM 10/100 Base-T Quad Port

Part No:
TMJ46204AENL

Description:

RJ45 connector with integrated magnetics 10/100 Base-T

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

Features:

1x4

Short Body

Transformer + CMC

Shielded EMI Finger

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 TMJ46204AENL is a 10/100 Base-T quad-port, tab-DOWN RJ45 Integrated Connector with a shielded EMI Finger 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	
OCL	350uH Min @100KHz, 0.1V, 8mA DC Bias
Turns Ratio（±2%）	1CT:1CT
Insertion Loss	1～100MHz: -1.0dB Max
Return Loss (dB Min)	1～30MHz: -16
	30～60MHz: -12
	60～80MHz: -10
Crosstalk (dB Min)	1～30MHz: -40
	30～60MHz: -35
	60～100MHz: -30
Common Mode Rejection (dB Min)	1～50MHz: -40
	50～150MHz: -30
Hipot	1500V AC 6S 1mA

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

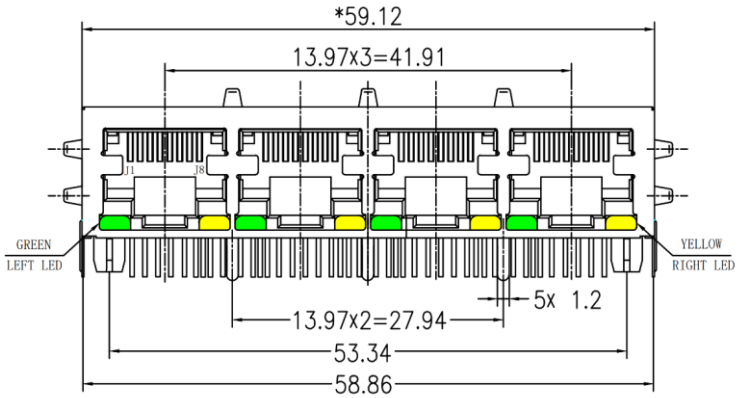
Material Specifications	
Housing	Thermoplastic UL94V-0
Contact/Shield	Copper alloy
Shield plating	Nickel
Contact plating	Gold 6 micro-inches min. in contact area.
Wave peak temperature	260℃ Max, 5 Sec

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

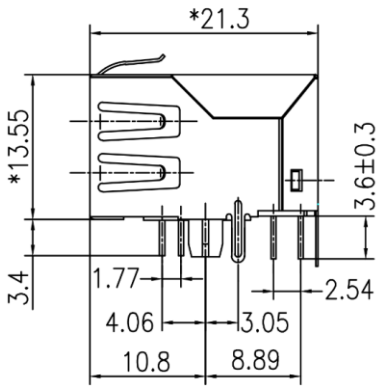
Storage requirements	
Humidity	MSL - 1
Storage Temperature	-40°C TO +85°C

3. Mechanical

3.1 Mechanical Drawings



Front View

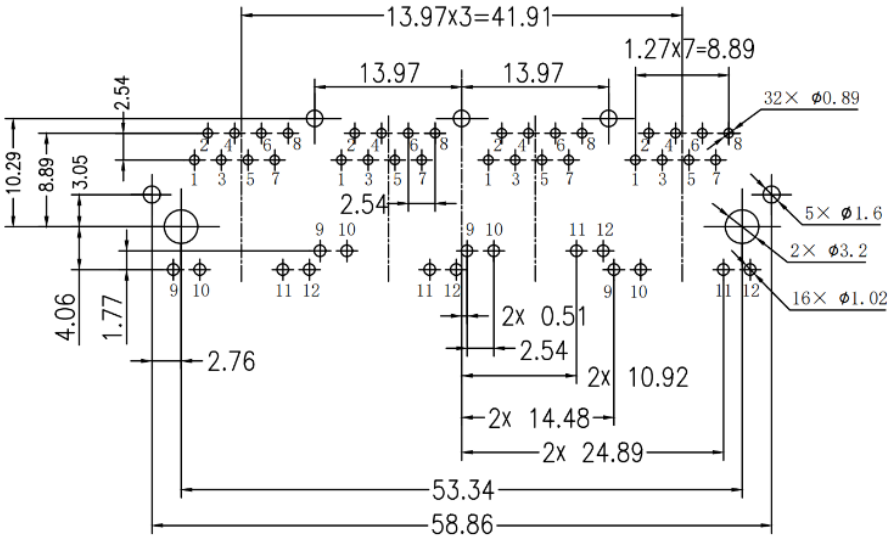


Left View

Mechanical Specifications	
Height	13.55mm
Width	59.12mm
Depth	21.3mm
Weight	18.6g
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

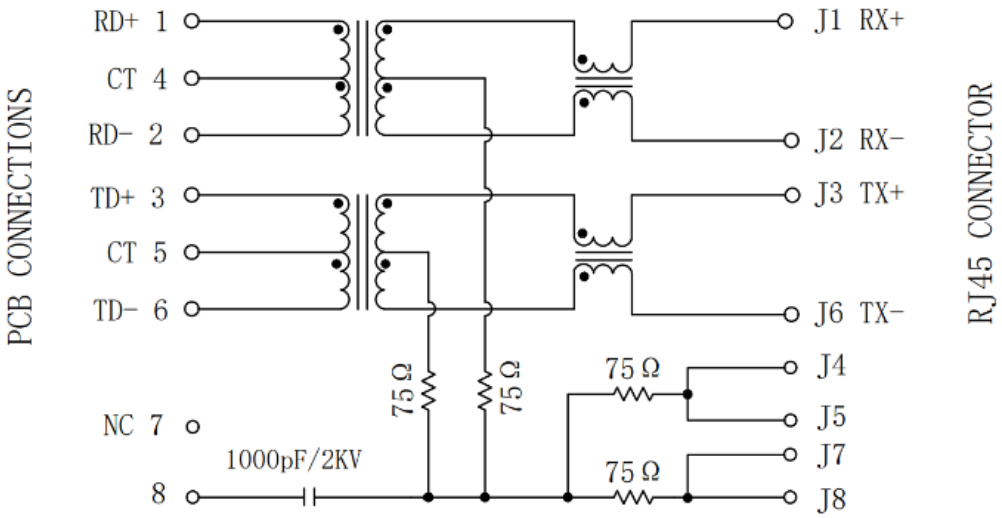


Suggested PCB Layout (Top View)

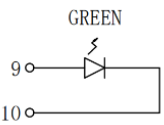
Dimensions are in millimeters with the following tolerances: X.XX = ±0.10

4. Electrical

4.1 Electrical Drawings

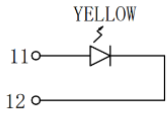


LED Electrical Specification			
Standard LED	Wavelength (nm)	V_F (I_F=20mA)	I_R (V_R=5v)
Green	565	1.8~2.6v	10 μA Max
Yellow	585	1.8~2.6v	10 μA Max



LEFT LED

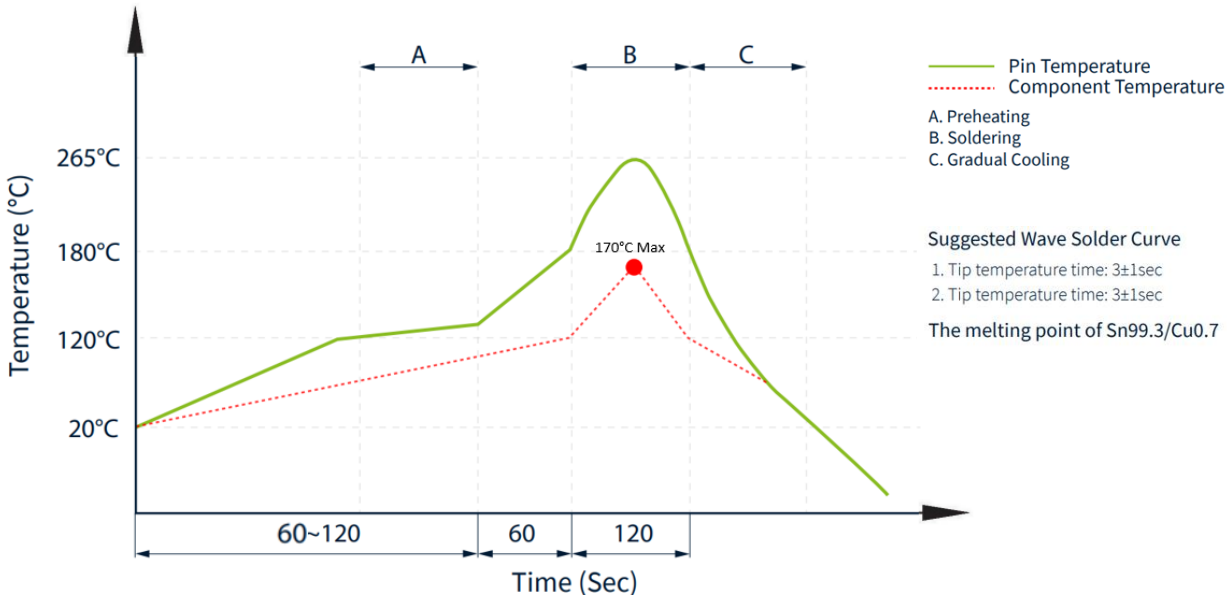
LED POLARITY		COLOR
PIN 9	PIN 10	
+	-	GREEN



RIGHT LED

LED POLARITY		COLOR
PIN 11	PIN 12	
+	-	YELLOW

4.2 Profile of Wave Solder



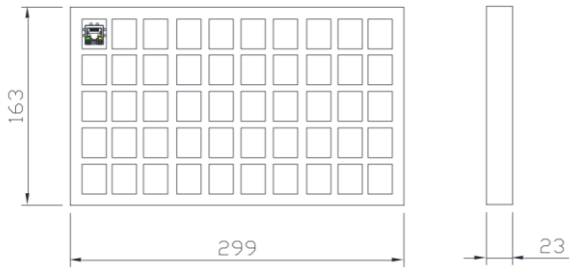
5. Packaging

5.1 SPQ

50 pcs/tray

Tray dimension: 299*163*23 mm

Tray Weight: 370g



1 Carton = 24 trays = 1200 pcs

Carton dimensions: 320*300*310mm

Carton Weight: 8.7kg

5.2 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-23-8-213 – TMJ46204AENL

Revision: A (Original First Release)	
Date:	2023-10-01
Notes:	
Author:	Javier Vasena

Previous Revisions

TAOGLAS®

www.taoglas.com

© Taoglas