# TAOGLAS®

# Datasheet

## RJ45 ICM 10/100 Base-T Dual Port

**Part No:**
**TMJ26204AENL**

**Description:**

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

**Features:**

1x2 Configuration

Short Body

Transformer + CMC

Shielded EMI Finger

RoHS Compliant

Ireland
ISO 9001: 2015
Certified

ISO 9001 CERTIFICATION EUROPE

Taiwan
ISO 9001: 2015
Certified

QA RNATIONAL

UKAS QUALITY MANAGEMENT 046

QUALITY MANAGEMENT SYSTEM
IATF16949

# 1. Introduction



The Taoglas TMJ26204AENL is a 10/100 Base-T dual-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 | |
|---|---|
| Inductance OCL | 350uH Min @100KHz, 0.1V, 8mA DC Bias |
| Turns Ratio （±3%） | 1CT:1CT |
| DCR | 1.2Ω MAX |
| Insertion Loss | 1～100MHz: -1.0dB Max |
| Return Loss | -18dB MIN @ 1-30MHz |
| | -15dB MIN @ 30-60MHz |
| | -12dB MIN @ 60-100MHz |
| Crosstalk | -40dB MIN @ 30MHz |
| | -35dB MIN @ 60MHz |
| | -30dB MIN @ 100MHz |
| Common Mode Rejection | -30dB MIN @ 1-100MHz |
| Hipot | 1500Vrms |

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

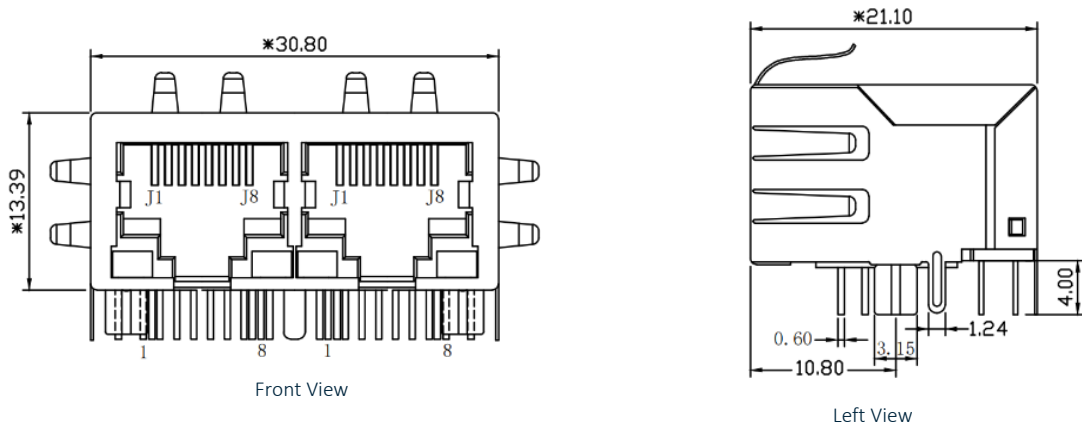| Material Specifications | |
|---|---|
| Housing | Thermoplastic PBT+30%G.F UL94V-0 |
| Contact | Phosphor Bronze C5210R-EH Thickness=0.35mm |
| Pins | Brass C2680R-H Thickness=0.35mm |
| Shield | SUS 201-1/2H Thickness=0.2mm |
| Contact plating | Gold 6 micro-inches min. in contact area. |
| Wave peak temperature | 265℃ 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 | 13.39mm |
| Width | 30.80mm |
| Depth | 21.1mm |
| Weight | 10.2g |
| Mounting Style | Through Hole (THT) |
| Mounting Angle | Right Angle |

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



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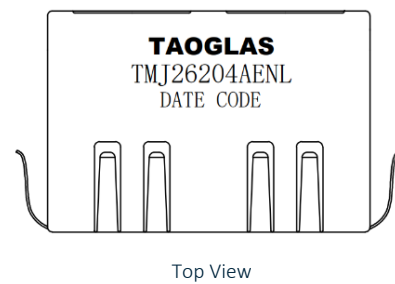
Top View
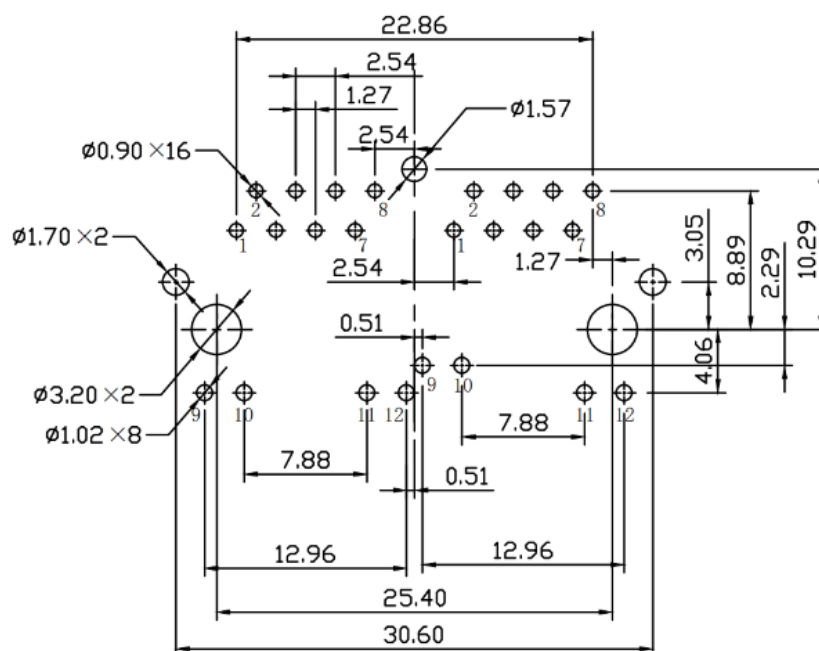
## 3.2 PCB Layout


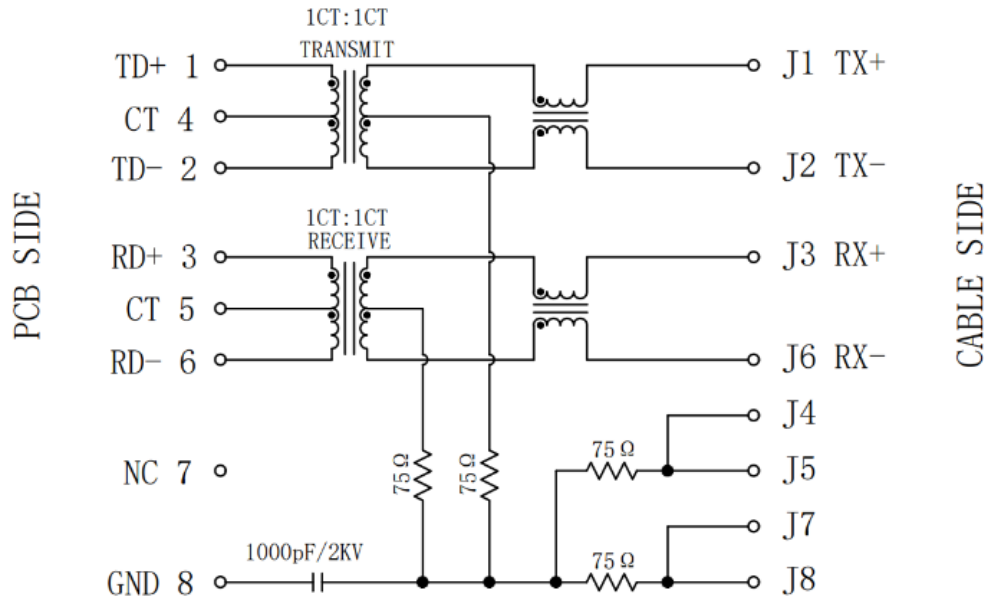
Suggested PCB Layout (Top View)
Dimensions are in millimeters with the following tolerances: X.XX = ±0.10

# 4. Electrical

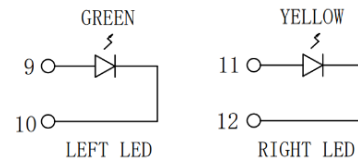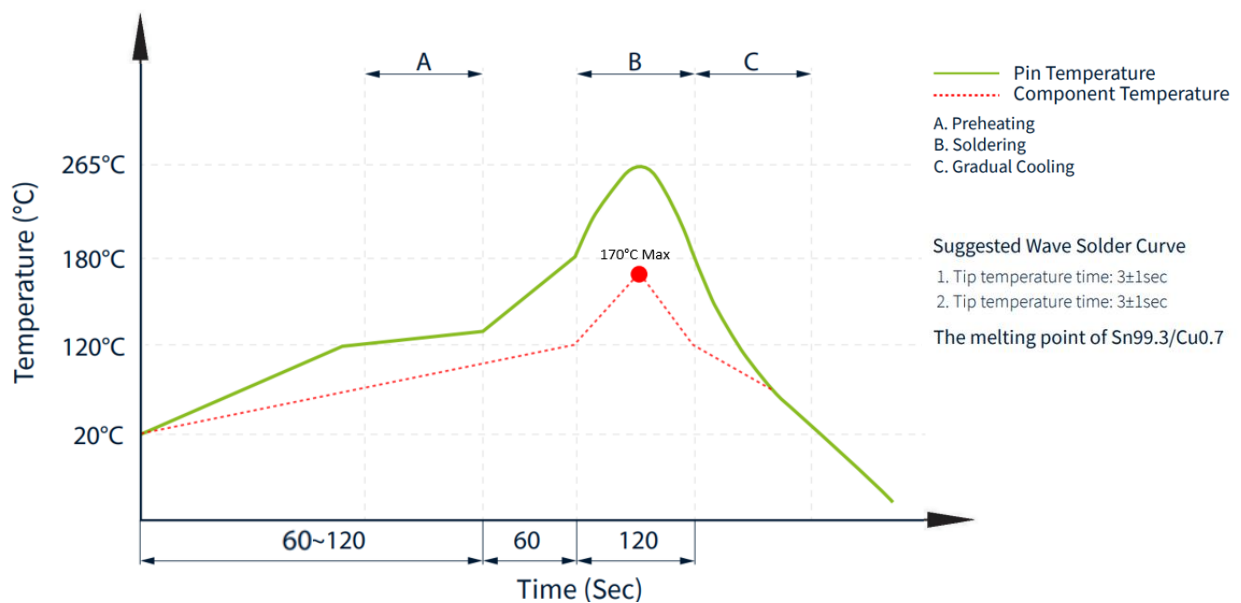## 4.1 Electrical Drawings



| LED Electrical Specification | | | |
|---|---|---|---|
| Standard LED | Wavelength (nm) | $V_F$ ($I_F$=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



Pin Temperature
Component Temperature

A. Preheating
B. Soldering
C. Gradual Cooling

Suggested Wave Solder Curve

1. Tip temperature time: 3±1sec
2. Tip temperature time: 3±1sec
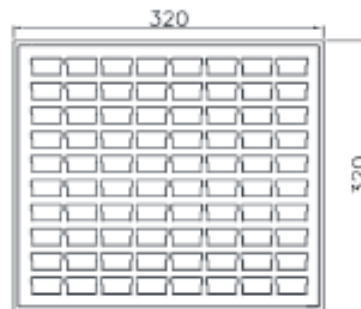
The melting point of Sn99.3/Cu0.7

# 5. Packaging

## 5.1 SPQ

70 pcs/tray

Tray dimension: 320*320

Tray Weight: 370g

1 Carton = 9 trays = 630 pcs

Carton dimensions: 320*330*215mm

Carton Weight: 8.3kg

## 5.2 Label

SPQ Label (8x4cm)

**Taoglas Limited**

P/N NO:   XXXXXXXX

QYT:   XXX PCS          DC:   XXXX

DATE:   XXXX-XX-XX

Carton Label (8x4cm)

**Taoglas Limited**

P/N NO:   XXXXXXXX

PO:   XXXXXXXX          B/N:   XXXXXXXX

QYT:   XXX PCS          DC:   XXXX

DATE:   XXXX-XX-XX

# Changelog

## Changelog for the datasheet

### SPE-23-8-194 – TMJ26204AENL

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

**Previous Revisions**

www.taoglas.com