

# Amphenol ICC

# Modular Jack - RJE48 Series

### CAT5e, RIGHT ANGLE, RECESSED, LOW PROFILE SINGLE PORT CONNECTOR WITH LEDs

The RJE48 series of Modular Jacks meets CAT5e performance per EIA-568-C.2 standards. It supports 1G and 2.5G Ethernet data rates and transmission frequencies up to 100MHz. These Modular Jacks come in right angle, low profile with LEDs for link activity and network speed verification. Made with high temperature composites and coupled with our high temperature resistant LEDs, these connectors are well-suited for the IR reflow solder processes. Shielding options available for increased EMI performance. The connectors also feature inverted latch orientation for easier mating with industry standard plugs.

- Supports 1G and 2.5G Ethernet Protocols
- Meets Cat5e performance on its own without outside assistance
- Same size and footprint as the RJE49 Cat6 series
- Multiple shield and LED options available
- RoHS compliant



#### **FEATURES**

- Variety of LED options
- Standard size
- Accommodates industry standard plugs
- IR Reflow compatible
- Various shield options available
- Meets CAT5e or CAT6 performance per EIA-568-C.2

#### BENEFITS

- Customers can opt for the LED color of their choice
- Optimizes the PCB
- Can mate successfully with all types of standard plugs
- Single process for soldering to PCB, saving time and money
- Accommodates a wide range of EMI needs
- Supports up to 2.5G Ethernet

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## **TECHNICAL INFORMATION**

#### **MATERIAL**

- Insulator: High temperature engineering thermoplastic; Complies with UL94V-0, Black
- Contacts: Phosphor bronze hard temper with gold thickness options (6u", 15u", 30u", 50u") over 50u" min. nickel on contact mating area. 100u" min. matte tin plating on soldering tail
- Shield: Copper alloy, nickel plated with tin dipped tail or stainless steel with tin dipped tail
- . LED: Pure tin plating on LED tails

#### **ELECTRICAL PERFORMANCE**

- Contact Resistance: 20mΩ max.
- Insulation Resistance: 500MΩ min. at 500V DC for 2 minutes max.
- Current Rating: 1.5A
- Voltage Rating: 125V AC
- DWV: 1000V AC, 60Hz., 1 minute
- LED Forward DC Current: 20mA typical
- LED Forward Voltage: 1.9V max. @ 2mA (for single colors), 2.6V max. @ 20mA (for bicolors)
- LED Reverse Voltage: 5V min.
- LED Light Intensity: 0.4 to 1.5mcd @ 2mA (for single colors), 0.5mcd min. @ 2mA (for bicolors)
- LED Wave Length: Yellow 587 ± 7nm measured @ 20mA, Green - 565 ± 7nm measured @ 20mA, Red - 625 ± 5nm measured @ 20mA

#### MECHANICAL PERFORMANCE

- Insertion Force: 5lbs max.
- Pull Retention Force: 20lbs min.
- Durability: 750 mating and unmating cycles
- Operating Temperature: -55°C to +85°C
- Recommended Soldering Temperature: Wave soldering peaked at 260°C for 5 seconds max.

#### **APPROVALS AND CERTIFICATIONS**

- RoHS
- REACH
- UL

#### PACKAGING

Available in tray and tape and reel packaging

#### **TARGET MARKETS/APPLICATIONS**



**5G Wireless** Telephones Modems **Fax Machines** Copiers/printers



Security Systems Set Top Boxes Video Game Systems PCs

Laptops



Servers Routers

Hubs



Uninterruptible Power Supply (UPS)

ATMs Vending Machines **POS** Terminals Industrial IoT Platforms



Analysis equipment **Mass Spectrometers** 

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#### Disclaimer



### Modular Jack - RJE48 Series

## **PART NUMBERS**

Product	Description	Part Numbers
RJE48 Modular Jack Series	Shield with top and side EMI tabs, with LEDs	RJE48-188-1441
RJE48 Modular Jack Series	Shield with top EMI tabs, no LEDs	RJE48-188-3401
RJE48 Modular Jack Series	Shield with top EMI tabs, with LEDs	RJE48-188-3411
RJE48 Modular Jack Series	Shield with top EMI tabs, with LEDs	RJE48-188-3441
RJE48 Modular Jack Series	No shield and no LEDs	RJE48-188-0401
RJE48 Modular Jack Series	No shield with LEDs	RJE48-188-0411
RJE48 Modular Jack Series	No shield with LEDs	RJE48-188-0441
RJE48 Modular Jack Series	Shield with top and side EMI tabs, no LEDs	RJE48-188-1401
RJE48 Modular Jack Series	Shield with top and side EMI tabs, with LEDs	RJE48-188-1411

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#### Disclaimer

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Authorized Distributor

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### Amphenol:

RJE48-488-1481 RJE48-188-1461 RJE48-188-1431 RJE48-488-1411 RJE48-488-14A1 RJE48-488-1401 RJE48-		
<u>188-1451</u> RJE48-488-1301 RJE48-488-1451 RJE48-188-1441 RJE48-488-1471 RJE48-488-1461 RJE48-188-1421		
RJE48-188-14B1 RJE48-488-1441 RJE48-188-14A1 RJE48-188-1411 RJE48-188-1401 RJE481883401		
RJE481883411 RJE481883421 RJE481883431 RJE481883441 RJE481883451 RJE481883461 RJE481883471		
RJE4818834V1 RJE4818834K1 RJE4818834L1 RJE4818834M1 RJE4818834N1 RJE4818834N1 RJE4818834P1 RJE4818834R1		
RJE4818834D1 RJE4818834E1 RJE4818834F1 RJE4818834G1 RJE4818834H1 RJE4818834J1 RJE4818834J1 RJE481883471		
RJE481883481 RJE481883491 RJE4818834A1 RJE4818834B1 RJE4818834C1 RJE481881471 RJE481881481		
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