

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



TARGET MARKETS



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

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 bicolours)
- LED Reverse Voltage: 5V min.
- LED Light Intensity: 0.4 to 1.5mcd @ 2mA (for single colors), 0.5mcd min. @ 2mA (for bicolours)
- 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



Storage
Servers
Routers
Switches
Hubs



Uninterruptible Power Supply (UPS)
ATMs
Vending Machines
POS Terminals
Industrial IoT Platforms



Analysis equipment
Mass Spectrometers

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