RJE59 Modular Jack Series

CAT6, RIGHT ANGLE, SINGLE PORT CONNECTOR WITH AVAILABLE LEDS

The RJE59 series of Modular Jacks meet CAT6 performance per EIA-568-C.2. It meets the 5G and 10G standards and supports a transmission rates up to 250MHz. These Modular Jacks come in right angle and standard 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 reflow soldering process.

Shielding is available for increased EMI performance. The connectors also feature inverted latch orientation for easier mating with industry standard plugs.

- Supports 5G and 10G Ethernet Protocols
- Meets CAT6 performance on its own without outside assistance
- Same size and footprint as RJE58 and RJE60 series
- Multiple shield and LED options available
- RoHS compliant



FEATURES

- Variety of LED options
- Standard size
- Accommodates industry standard plugs
- Reflow compatible
- Available with and without shielding
- Meets CAT6 performance per EIA-568-C.2.

BENEFITS

- Customers can opt for the LED color of their choice
- Optimizes the PCB space
- Can mate successfully with all types of standard plugs
- Single process for soldering to PCB, saving time and cost
- Accommodates a wide range of EMI needs
- Supports 5G and 10G 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: 20 m Ω max.
- Insulation Resistance: 500 M Ω min. at 500V DC for 2 minutes max.
- Current Rating: 1.5 Amps
- Voltage Rating: 125V AC
- Dielectric Withstanding Voltage: 1000V AC, 60 Hz., 1 minute
- LED Forward DC Current: 20mA typical
- LED Forward Voltage: 1.9 Volts max. @ 2 mA (for single colors), 2.6 Volts max. @ 20 mA (for bicolors)
- LED Reverse Voltage: 5 Volts min.
- LED Light Intensity: 0.4 to 1.5 mcd @ 2 mA (for single colors), 0.5 mcd min. @ 2 mA (for bicolors)
- LED Wave Length: Yellow 587 +/- 7 nm measured @ 20 mA, Green – 565 +/- 7 nm measured @ 20 mA, Red – 625 +/- 5 nm measured @ 20 mA

MECHANICAL PERFORMANCE

- Insertion Force: 5 lbs max.
- Pull Retention Force: 20 lbs min.
- Durability: 750 mating and unmating cycles

SPECIFICATION

Amphenol Product Specification: S6102C

APPROVALS AND CERTIFICATIONS

- RoHS
- REACH
- UL

ENVIRONMENTAL

- Operating Temperature: -55°C to +85°C
- Recommended Soldering Temperature: Wave soldering peaked at 260°C for 5 seconds max.

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

► RJE59 Modular Jack Series

PART NUMBERS

Product	Description	Part Numbers
RJE59 Modular Jack Series	Shield with top and side EMI tabs, no LEDs	RJE59-188-5401
RJE59 Modular Jack Series	Shield with top and side EMI tabs, with LEDs	RJE59-188-5441
RJE59 Modular Jack Series	Shield with top and side EMI tabs, with LEDs	RJE59-188-5411
RJE59 Modular Jack Series	Shield with no EMI tabs, no LEDs	RJE59-188-6401
RJE59 Modular Jack Series	Shield with no EMI tabs, with LEDs	RJE59-188-6441
RJE59 Modular Jack Series	Shield with no EMI tabs, with LEDs	RJE59-188-6411
RJE59 Modular Jack Series	Shield with no EMI tabs, with LEDs	RJE59-188-64A1
RJE59 Modular Jack Series	Shield with top and side EMI tabs, with LEDs	RJE59-188-5411
RJE59 Modular Jack Series	Shield with top EMI tabs, no LEDs	RJE59-188-3401
RJE59 Modular Jack Series	Shield with top EMI tabs, with LEDs	RJE59-188-3411
RJE59 Modular Jack Series	Shield with top EMI tabs, with LEDs	RJE59-188-3441
RJE59 Modular Jack Series	Shield with top EMI tabs, with LEDs	RJE59-188-34A1