

## 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.



#### TARGET MARKETS



#### 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 mΩ max.
- Insulation Resistance: 500 MΩ 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

## 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 |

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