# Modular Jack – RJE44 Series

## CAT5E, VERTICAL, LOW PROFILE, SINGLE PORT CONNECTOR WITH LEDS

The RJE44 single port series of Modular Jacks meet CAT5E performance per EIA–568–C.2 standards. It supports 2.5G Ethernet data rate and transmission frequencies up to 100MHz. The available shielding enhances EMI performance and LEDs support link activity and network speed verification. These connectors are made with high temperature composites and are coupled with high temperature resistant LEDs. Highly durable with 750 mating and unmating cycles, they support an operating temperature of –55°C to + 85°C, making them suitable for a wide range of environmental conditions.

- Supports 1G and 2.5G Ethernet Protocols
- Meets Cat5E performance on its own without outside assistance
- Same size and footprint as the RJE45 (CAT6) and RJE4A (CAT6A) series
- Multiple shield and LED options available
- RoHS compliant

**TARGET MARKETS**

| FEATURES | BENEFITS |
|---|---|
| Variety of LED options | Customers can opt for the LED color of their choice |
| Standard size | Optimizes the PCB |
| Accommodates industry standard plugs | Can mate successfully with all types of standard plugs |
| IR Re–flow compatible | Single process for soldering to PCB, saving time and money |
| Various shield options available | Accommodates a wide range of EMI needs |
| Meets CAT5E as per EIA–568–C.2 | 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 (6μin, 15μin, 30μin, 50μin) over 50μin min. Nickel on contact mating area. 100μin 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 500VDC for 2 minutes max.

- Current Rating: 1.5A

- Voltage Rating: 125VAC

- DWV: 1000VAC, 60Hz., 1 minute

- LED Forward DC Current: 20mA typical

- LED Forward Voltage: 1.9V max. @ 2mA (for single colors), 2.6V max. @ 20mA (for bi–colors)

- LED Reverse Voltage: 5V min.

- LED Light Intensity: 0.4 to 1.5mcd @ 2mA (for single colors), 0.5mcd min. @ 2mA (for bi–colors)

- LED Wave Length: Yellow – 587 ± 7nm measured @ 20mA, Green – 565 ± 7 nm measured @ 20mA, Red – 625 ± 5 nm measured @ 20mA

### APPROVALS & CERTIFICATION

- RoHS

- REACH

- UL

### MECHANICAL PERFORMANCE

- Insertion Force: 5lbs max.

- Pull Retention Force: 20lbs min.

- Durability: 750 mating and unmating cycles

- Operating Temperature Range: –55˚C to +85˚C

- Recommended Soldering Temperature: Wave soldering peaked at 260˚C for 5 seconds max.

### PACKAGING

- Tray and Tape

- Reel

### 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

| Description | Part Numbers | Part Numbers |
|---|---|---|
| RJE44 Modular Jack Series | No shield and no LEDs | RJE44–188–0401 |
| RJE44 Modular Jack Series | No shield with LEDs | RJE44–188–0411 |
| RJE44 Modular Jack Series | No shield with LEDs | RJE44–188–0441 |
| RJE44 Modular Jack Series | Shield without EMI tabs, no LEDs | RJE44–188–2401 |
| RJE44 Modular Jack Series | Shield without EMI tabs, with LEDs | RJE44–188–2411 |
| RJE44 Modular Jack Series | Shield with top and bottom EMI tabs, with LEDs | RJE44–188–1411 |
| RJE44 Modular Jack Series | Shield with top and bottom EMI tabs, no LEDs | RJE44–188–1401 |

Find part number details using the search box on www.amphenol–cs.com

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