

Modular Jack – RJE7B Series

CAT6A, RIGHT ANGLE, RECESSED, LOW PROFILE SINGLE PORT CONNECTOR WITH LEDs

The RJE7B single port series of Modular Jacks meets CAT6A performance per EIA-568-C.2 standards. It supports 10G Ethernet data rate and transmission frequencies up to 500MHz. 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 and supports an operating temperature of -55°C to + 85°C, making them suitable for a wide range of environmental conditions.

- Supports up to 10G Ethernet Protocols
- Meets Cat6A performance on its own without outside assistance
- Same size and footprint as RJE72 and RJE71 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 Cat6A 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 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: 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 ± 7 nm 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
RJE7B Modular Jack Series	Shield with top and side EMI tabs, with LEDs	RJE7B-188-1411
RJE7B Modular Jack Series	Shield with top and side EMI tabs, with LEDs	RJE7B-188-1412
RJE7B Modular Jack Series	Shield with top and side EMI tabs, with LEDs	RJE7B-188-1413
RJE7B Modular Jack Series	Shield with top and side EMI tabs, with LEDs	RJE7B-188-1441
RJE7B Modular Jack Series	Shield with top and side EMI tabs, with LEDs	RJE7B-188-1442
RJE7B Modular Jack Series	Shield with top and side EMI tabs, with LEDs	RJE7B-188-1443
RJE7B Modular Jack Series	Shield with top and side EMI tabs, no LEDs	RJE7B-188-1401
RJE7B Modular Jack Series	Shield with top and side EMI tabs, no LEDs	RJE7B-188-1402
RJE7B Modular Jack Series	Shield with top and side EMI tabs, no LEDs	RJE7B-188-1403