

# Modular Jack - RJE03 Series

# CAT5, RIGHT ANGLED, LOW PROFILE THT, SINGLE PORT CONNECTOR

The RJE03 single port series of Modular Jacks meets CAT5E performance per EIA-568-C.2 standards. It supports 100 BaseT Ethernet data rate and transmission frequencies up to 100MHz. The available shielding enhances EMI performance and network speed verification. These connectors are 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 CAT3/5 Ethernet Protocols
- Tab Down Through Hole
- RoHS compliant



#### **FEATURES**

- Available in 6P6C and 8P8C
- Standard size
- Accommodates industry standard plugs
- Wave / Reflow compatible
- Board Lock Option
- Meets CAT5 as per EIA-568-C.2

#### **BENEFITS**

- Customers can opt for RJ11 and RJ45 applications
- Optimizes the PCB
- Can mate successfully with all types of standard plugs
- Economical process for soldering to PCB, saving time and money
- Accommodates a wide range of EMI needs
- Supports up to 100 BaseT Ethernet

### **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

#### - 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.

#### **ELECTRICAL PERFORMANCE**

- Contact Resistance: 20mΩ max.
- Insulation Resistance: 500M $\Omega$  min. at 500VDC for 2 minutes max.
- Current Rating: 1.5AVoltage Rating: 125VAC
- Dielectric Withstanding Voltage: 1000VAC, 60Hz, 1 minute

#### **PACKAGING**

- Tray and Tape
- Reel

#### **APPROVALS AND CERTIFICATIONS**

- RoHS
- REACH
- UL

#### 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
RJE03 Modular Jack Series	Single port, 8P8C, unshielded, with side flanges	RJE03-188-0X20
RJE03 Modular Jack Series	Single port, 6P4C, with partial shield, with side flanges	RJE03-164-2X20
RJE03 Modular Jack Series	Single port, 6P6C, unshielded, with side flanges	RJE03-166-0X20
RJE03 Modular Jack Series	Single port, 8P8C, with partial shield, with side flanges	RJE03-188-2X20
RJE03 Modular Jack Series	Single port, 6P4C, without shield, with side flanges, epoxy cover	RJE03-164-0X23
RJE03 Modular Jack Series	Single port, 8P8C, without shield, without side flanges, high temp plastic	RJE03-188-0X10-H

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