Modular Jack – RJE1D Series

CAT5E/CAT6, RIGHT ANGLE, STANDARD PROFILE, TAB DOWN SINGLE–PORT CONNECTOR WITH LEDS

The RJE1D single–port series of Modular Jack meets CAT5E/6 performance per EIA–568–C.2 standards. It supports 5G Ethernet data rate and transmission frequencies up to 250MHz. The shielding enhances EMI performance and the LEDs support link activity and network speed verification. These connectors are made with high–temperature composites and are coupled with high–temperature resistant LEDs. They are highly durable with 750 mating and unmating cycles and support an operating temperature of –55°C to + 85°C, making them suitable for a wide range of environmental conditions.

- Supports 1G ,2.5G, 5G Ethernet Protocols
- Meets CAT5E performance on its own without outside assistance
- Same size and footprint for CAT5E and CAT6
- 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 CAT5E/6 as 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 5G 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

ELECTRICAL PERFORMANCE

▪ Contact Resistance: 20mΩ max.

▪ Insulation Resistance: 500MΩ min. at 500VDC for 2 minutes max.

▪ Current Rating: 1.5A

▪ Voltage Rating: 125VAC

▪ 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 bicolors)

▪ LED Reverse Voltage: 5V min.

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

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

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

Description	Part Numbers	Part Numbers
RJE1D Modular Jack Series	Standard Profile, Tab Down CAT5E RJ45 – 1 Port without LED, without Shield	RJE1D18820401
	Standard Profile, Tab Down CAT5E RJ45 – 1 Port with LED, without Shield	RJE1D18820411
	Standard Profile, Tab Down CAT5E RJ45 – 1 Port with LED, without Shield	RJE1D18820441
	Standard Profile, Tab Down CAT5E RJ45 – 1 Port without LED, with Shield with EMI Tabs	RJE1D18821401
	Standard Profile, Tab Down CAT5E RJ45 – 1 Port with LED, with Shield with EMI Tabs	RJE1D18821411
	Standard Profile, Tab Down CAT5E RJ45 – 1 Port with LED, with Shield with EMI Tabs	RJE1D18821441
	Standard Profile, Tab Down CAT5E RJ45 – 1 Port without LED, with Shield without EMI Tabs	RJE1D18826401
	Standard Profile, Tab Down CAT5E RJ45 – 1 Port with LED, with Shield without EMI Tabs	RJE1D18826411
	Standard Profile, Tab Down CAT5E RJ45 – 1 Port with LED, with Shield without EMI Tabs	RJE1D18826441

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

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Disclaimer
Please note that the above information is subject to change without notice.