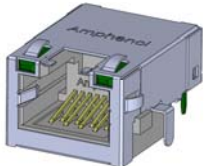


About Amphenol Commercial Products

Amphenol's commercial connector products are used in a variety of end user applications including networking, telecom, server & computer, storage & HDD, consumer electronics and entertainment, professional audio & Industrial & Military/Aerospace.

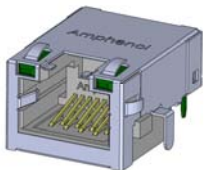
Related Products

RJE72

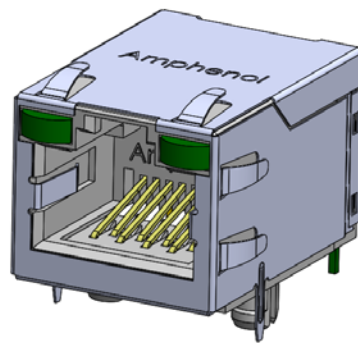


P/N RJE72-188-1XXXX SHOWN
SINGLE PORT, 8 POSITION, WITH
SHIELD AND LED^s CAT5e

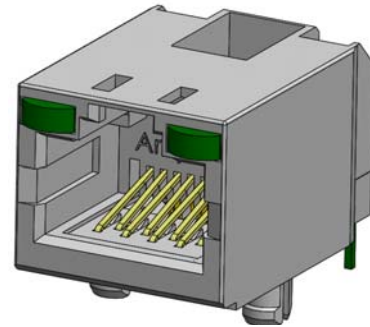
RJE71



P/N RJE71-188-1XXXX SHOWN
SINGLE PORT, 8 POSITION, WITH
SHIELD AND LED^s CAT6



P/N RJE59-188-5XX1 SHOWN
SINGLE PORT, 8 POSITION,
WITH SHIELD AND LED^s



P/N RJE59-188-0XX1 SHOWN
SINGLE PORT, 8 POSITION,
UNSHIELDED WITH LED^s

OVERVIEW

This product specification defines the general use and performance parameters for Amphenol's RJE59 series of modular jacks.

Availability: Single port connectors available with a wide variety of LED and shielding options.

USAGE

The RJE59 series of modular jacks meet CAT6 performance per EIA-568-C.2. It supports Gigabit Ethernet Protocols and 10Gig links in applications up to 50m. Shielding available for increased EMI performance and LEDs for Link Activity and Network Speed verification

APPLICATIONS

Intended for use in applications such as:

Data

- Storage
- Servers
- Routers
- Switches
- Hubs

Consumer Goods

- Security Systems
- Set Top Boxes
- Video Game Systems
- PCs, Laptops
- Copiers, Printers

Industrial and Instrumentation

- Uninterruptible Power Supply (UPS)
- ATMs
- Vending Machines
- POS Terminals
- Industrial IoT Platforms

Networking & Telecom

- 5G Wireless
- Telephones
- Modems
- Fax Machines

Medical

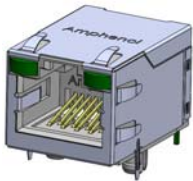
- Analysis Equipment
- Mass Spectrometers

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Related Products

RJES8



P/N RJES8-188-5XX1 SHOWN SINGLE PORT, 8 POSITION, WITH SHIELD AND LEDs CAT5e

RJE60



P/N RJE60-188-5XX1 SHOWN SINGLE PORT, 8 POSITION, WITH SHIELD AND LEDs CAT6A

ELECTRICAL CHARACTERISTICS

Contact Resistance	20 mΩ maximum
Insulation Resistance	500 MΩ minimum at 500V DC for 2 minutes maximum
Current Rating	1.25 Amps per contact
Voltage Rating	125 Volts AC
DWV	1000 VAC, 60 HZ. 1 min
LED Forward DC Current	20 mA typical
LED Forward Voltage	1.9 Volts max. @ 2mA (for single colours) 2.6 Volts max @ 20mA (for Bi-colours)
LED Reverse Voltage	5 Volts minimum
LED Light Intensity	0.4 to 1.5 mcd @ 2mA (for single colours) 0.5 @ 2mA (for Bi-colours)
LED wavelength	Yellow: 587 ± 7nm measured @20mA Green: 565 ± 6nm measured @20mA Red: 625 ± 5nm measured @ 20mA

Supports PoE, PoE+, and PoE++ per IEEE PoE standards
IP20 rated per IEC 60529

CATEGORY 6 CHARACTERISTICS

Frequency MHz	Near-end Crosstalk dB Min.	Return Loss dB Min.	Attenuation dB Max.
1.0	75.0	30.0	0.1
4.0	75.0	30.0	0.1
8.0	75.0	30.0	0.1
10.0	74.0	30.0	0.1
16.0	69.9	30.0	0.1
20.0	68.0	30.0	0.1
25.0	66.0	30.0	0.1
31.25	64.1	30.0	0.11
62.5	58.1	28.1	0.16
100.0	54.0	24.0	0.20
200.0	48.0	18.0	0.28
250.0	46.0	16.0	0.32

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MECHANICAL CHARACTERISTICS

Mating Connector Insertion Force	5.0 lbs maximum
Mating Connector Pull Retention Force	20.0 lbs minimum
Durability	750 mating and unmating cycles for 50µ" gold plating
Recommended Soldering Temperature	Wave soldering peaked at 260°C for 5 seconds maximum for 1 cycle with an LED defect rate of no more than 1000ppm (Multiple exposures are not recommended)
Operating Temperature	-40°C to +85°C

UL File #: E135615

Connectors without LEDs are suitable for IR Reflow. Consult sales for LED versions suitable for Reflow.

MATERIAL REQUIREMENTS

RJE59 connectors are RoHS compliant,

Unless otherwise specified, the materials for each component shall be:

Insulator	High temperature thermoplastic, complies with UL 94V-0
Contacts	-Phosphor Bronze hard temper with gold thickness options (6µ", 15µ" 30µ", 50µ") over 50µ" minimum Nickel on contact mating area -100µ" minimum matte Tin plating on solder tails
Shield	Stainless Steel with Tin dipped tails
LED	Tin plating on LED tails

AVAILABLE DOCUMENTS

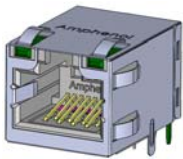
Below is a list of the most popular standard sales drawings:

Contact our website, sales, or an authorized Amphenol representation for additional drawings.

RJE59-188-0X01	Single port, standard profile, without shield, without LEDs
RJE59-188-0XX1	Single port, standard profile, without shield, with LEDs
RJE59-188-3XX1	Single port, standard profile, with shield, with LEDs
RJE59-188-5X01	Single port, standard profile, with shield, without LEDs
RJE59-188-6XX1	Single port, standard profile, with shield, with LEDs

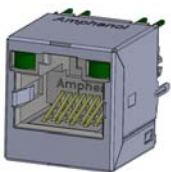
Related Products

RJE1A



P/N RJE1A-188-5XX1 SHOWN SINGLE PORT, 8 POSITIONS, WITH SHIELD AND LEDs CAT5e

RJE45



P/N RJE45-188-2XX1 SHOWN SINGLE PORT, 8 POSITION, WITH SHIELD AND LEDs CAT6