

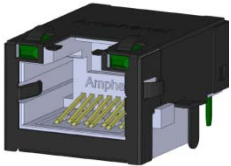
*Now you're connected!*

### 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.

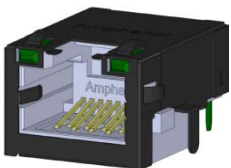
### Related Products

#### RJE72

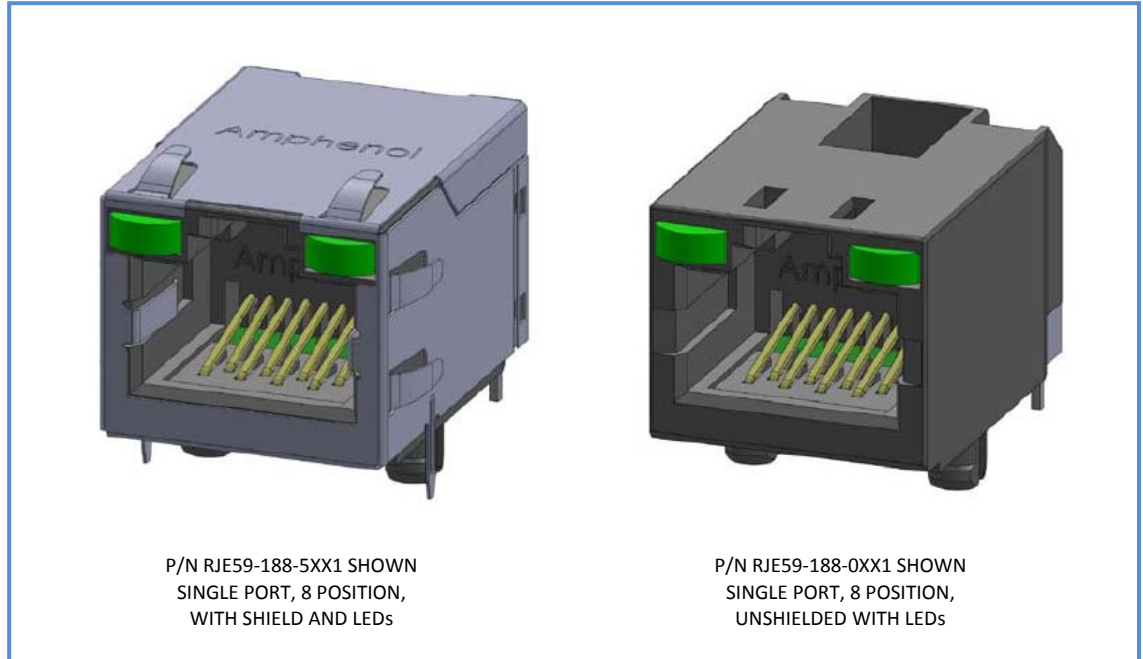


P/N RJE72-188-1153 SHOWN  
SINGLE PORT, 8 POSITION,  
WITH SHIELD AND LEDS  
CAT5e

#### RJE71



P/N RJE71-188-1452 SHOWN  
SINGLE PORT, 8 POSITION,  
WITH SHIELD AND LEDS  
CAT6



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

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

### 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:

#### Networking & Telecom

- Wireless (WiMAX)
- Network servers
- Hubs, routers, switches

#### Office & Home Equipment

- PC's, Laptops, Copiers/Printers
- Telephones, modems
- Surge Protectors
- ATMs, Vending Machines

#### Consumer Goods

- Security Systems
- Set Top Boxes
- Video Game Systems

#### Miscellaneous

- Multi-Media Equipment
- Industrial Equipment
- POS Terminals

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## Related Products

### RJE58



P/N RJE58-188-5XX1 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 max.
Insulation resistance:	500 MΩ minimum at 500V DC for 2 minutes max.
Current rating:	1.25 Amps
Voltage rating:	125 Volts AC
DWV	1000 VAC, 60 Hz. 1 min.
LED forward DC current:	20mA typical
LED forward Voltage:	1.9 Volts max. @ 2mA (for single colors) 2.6 Volts max. @ 20mA (for Bi-colors)
LED reverse voltage:	5 Volts minimum
LED light intensity:	0.4 to 1.5 mcd @ 2mA (for single colors) 0.5 mcd @ 2mA (for Bi-colors)
LED wave length:	Yellow: 587± 7 nm measured @ 20mA Green: 565± 6 nm measured @ 20mA Red: 625± 5 nm measured @ 20mA

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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## Related Products

### RJE45



P/N RJE45-188-1X51T SHOWN  
SINGLE PORT, 8 POSITION,  
WITH SHIELD AND LEDS  
CAT6

### RJE1A



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

## Mechanical Characteristics

Mating connector insertion force: 5.0 lbs. Maximum.

Mating connector pull retention force: 20 lbs Minimum.

Durability: 750 mating & unmating cycles

Operating temperature: -55° C to +85° C

Recommended soldering temperature:

Wave soldering peaked at 260° C for 5 seconds maximum for one cycle with an LED defect rate of no more than 1000ppm.

(Multiple exposures are not recommended)

*Note: IR reflow compatible version also available. Consult factory for details.*

## Material Requirements

RJE59 connectors are RoHS compliant.

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

Insulator:

- High Temp thermoplastic. Complies with UL 94V-0, Black color

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

### Drawing Numbers:

P-RJE59-188-5XX1	Single port Cat6 Modular Jack, 8 Position, with LEDs, Full Shield with top and side tabs.
P-RJE59-188-5X01	Single port Cat6 Modular Jack, 8 Position, Non LEDs, Full Shield with top and side tabs.
P-RJE59-188-6XX1	Single port Cat6 Modular Jack, 8 Position, with LEDs, Full Shield without tabs.
P-RJE59-188-6X01	Single port Cat6 Modular Jack, 8 Position, Non LEDs, Full Shield without tabs.
P-RJE59-188-0XX1	Single port Cat6 Modular Jack, 8 Position, with LEDs and Unshielded.
P-RJE59-188-0X01	Single port Cat6 Modular Jack, 8 Position, NON LEDs and Unshielded.

Contact factory or Authorized Amphenol representative for additional configurations.