## **Product Specification S6159C Rev 1.2**

### 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**

### RJE58



P/N RJE58-188-5XX1 SHOWN SINGLE PORT, 8 POSITIONS, WITH SHIELD AND LEDS CATSE

### RJE45



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

# Amphe Amphe Amphe P/N RJE4W-488-XXXX SHOWN, 4 PORTS 8 POSITIONS, 8 CONTACTS, Through hole VERSION,

### **OVERVIEW**

This product specification defines the general use and performance parameters for Amphenol's RJE4W series of modular jacks.

WITH SHIELD AND LEDs

Availability: 2X2 port connectors available with a wide variety of LED and shielding options.

### **USAGE**

The RJE4W series of modular jacks meet CAT5e performance per EIA-568-C.2. It supports Gigabit Ethernet Protocols. 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

### **Networking & Telecom**

- 5G Wireless
- Telephones
- Modems
- Fax Machines

### **Consumer Goods**

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

### Medical

- Analysis Equipment
- Mass Spectrometers

### **Industrial and Instrumentation**

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

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### **ELECTRICAL CHARACTERISTICS**

<b>Contact Resistance</b>	20 mΩ maximum
Insulation Resistance	$500~\text{M}\Omega$ minimum at $500\text{V}$ DC for $2$ minutes maximum
Current Rating	1.25 Amps per contact
Voltage Rating	125 Volts AC
DWV	Contact to contact, 1000 VAC, 60 HZ. 1 min Contact to LED, 1500 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 mcd minimum @ 2mA (for Bi-colours)
LED Wavelength	Yellow: $587 \pm 7$ nm measured @20mA Green: $565 \pm 6$ nm measured @20mA Red: $625 \pm 5$ nm measured @ 20mA

### **RJE1A**



**Related Products** 

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

### RJE71



P/N RJE71-188-1XXX SHOWN SINGLE PORT, 8 POSITION, WITH SHIELD AND LEDs CAT6 Supports PoE, PoE+, and PoE++ per IEEE PoE standards IP20 rated per IEC 60529

### **CATEGORY 5e CHARACTERISTICS**

Frequency MHz	Near-end Crosstalk dB Min.	Return Loss dB Min.	Attenuation dB Max.
1.0	65	30	0.1
4.0	65	30	0.1
8.0	64.9	30	0.1
10.0	63	30	0.1
16.0	58.9	30	0.2
20.0	57	30	0.2
25.0	55	30	0.2
31.25	53.1	30	0.2
62.5	47.1	24.1	0.3
100.0	43	20	0.4

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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 $50\mu^{\prime\prime}$ gold plating
Recommended Soldering Temperature	Wave soldering peaked at 260°C for 5 seconds maximum
Operating Temperature	-40°C to +85°C

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

### **MATERIAL REQUIREMENTS**

RJE4W connectors are RoHS compliant,

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

### **Related Products**

### **RJE1B**



P/N RJE1B-188-5XX1 SHOWN SINGLE PORT, 8 POSITIONS, WITH SHIELD AND LEDs CAT6

### RJE60



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

Insulator	High temperature thermoplastic, complies with UL 94V-0
Contacts	-Phosphor Bronze hard temper with gold thickness options (6 $\mu$ ", 15 $\mu$ " 30 $\mu$ ", 50 $\mu$ ") over 50 $\mu$ " minimum Nickel on contact mating area -100 $\mu$ " 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.

RJE4W-488-6X01	Two x Two port, with shield without EMI tabs, without LEDs
RJE4W-488-6XX1	Two x Two port, with shield without EMI tabs, with LEDs
RJE4W-488-7X01	Two x Two port, shielded with EMI, without LEDs
RJE4W-488-7XX1	Two x Two port, shielded with EMI springs, with LEDs

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