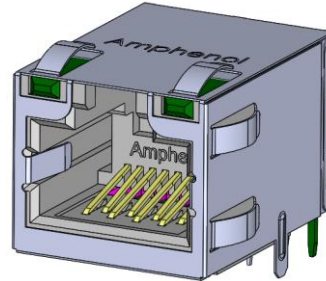


### About Amphenol Commercial Products

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.



**P/N RJE1A-188-5X51 SHOWN**  
SINGLE PORT, 8 POSITION,  
WITH SHIELD AND GREEN LEDs

### OVERVIEW

This product specification defines the general use and performance parameters for Amphenol's RJE1A series of modular jacks.

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

### USAGE

The RJE1A 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

#### 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

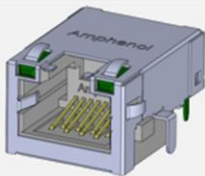
- 5G Wireless
- Telephones
- Modems
- Fax Machines

#### Medical

- Analysis Equipment
- Mass Spectrometers

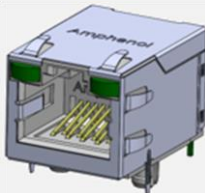
### Related Products

#### RJE72 SERIES



**P/N RJE72-188-1451 SHOWN**  
CAT5e, SINGLE PORT, 8  
POSITION,  
WITH SHIELD AND LEDs

#### RJE59 SERIES



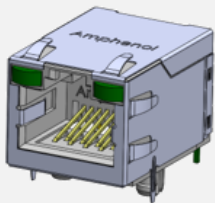
**P/N RJE59-188-5451 SHOWN**  
CAT6, SINGLE PORT, 8  
POSITION,  
WITH SHIELD AND LEDs

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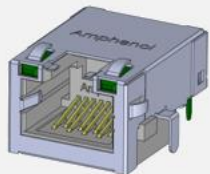
## Related Products

### RJE58 SERIES



P/N RJE58-188-5XX1 SHOWN  
CAT5e, SINGLE PORT, 8  
POSITION,  
WITH SHIELD AND LEDs

### RJE71 SERIES



P/N RJE71-188-1451 SHOWN  
CAT6, SINGLE PORT, 8  
POSITION,  
WITH SHIELD AND LEDs

## ELECTRICAL CHARACTERISTICS

<b>Contact Resistance</b>	20 mΩ maximum
<b>Insulation Resistance</b>	500 MΩ minimum at 500V DC for 2 minutes maximum
<b>Current Rating</b>	1.25 Amps per contact
<b>Voltage Rating</b>	125 Volts AC
<b>DWV</b>	Contact to Contact: 1,000 VAC, 60 Hz, 1 min Contact to LED: 1,500 VAC, 60 Hz, 1 min Contact to Shield: 1,500 VAC, 60 Hz, 1 min LED to Shield: 1,000 VAC, 60 Hz, 1 min
<b>LED Forward DC Current</b>	20 mA typical
<b>LED Forward Voltage</b>	2.4 Volts max. @ 20mA (for single colors) 2.4 Volts max. @ 20mA (for Bi-colors)
<b>LED Reverse Voltage</b>	5 Volts maximum
<b>LED Light Intensity</b>	4 to 30 mcd @ 20mA (for single colors) 8 to 20 mcd @ 20mA (for Bi-colors)
<b>LED Wavelength</b>	Yellow: 587 ± 7nm measured @ 20mA Green: 565 ± 6nm measured @ 20mA Red: 625 ± 5nm measured @ 20mA

Supports PoE Type1, Type2, Type 3, and Type 4 per IEEE PoE standards  
IP20 rated per IEC 60529  
TIA 1096 Compliant

## CATEGORY 5e CHARACTERISTICS

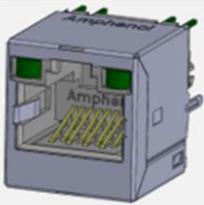
Frequency MHz	Near-end Crosstalk dB Min.	Return Loss dB Min.	Attenuation dB Max.
1.0	65	30	0.1
4.0	65	30	0.1
8.0	64.9	30	0.1
10.0	63	30	0.1
16.0	58.9	30	0.2
20.0	57	30	0.2
25.0	55	30	0.2
31.25	53.1	30	0.2
62.5	47.1	24.1	0.3
100.0	43	20	0.4

## About Amphenol Commercial Products

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## Related Products

### RJE45 SERIES



P/N RJE45-188-2451 SHOWN  
CAT6, SINGLE PORT, 8  
POSITION, WITH SHIELD AND LEDs

### RJE60 SERIES



P/N RJE60-188-5451 SHOWN  
CAT6A, SINGLE PORT, 8  
POSITION, WITH SHIELD AND  
LEDs

## MECHANICAL CHARACTERISTICS

<b>Mating Connector Insertion Force</b>	5.0 lbs maximum
<b>Mating Connector Pull Retention Force</b>	20.0 lbs minimum
<b>Durability</b>	750 mating and unmating cycles for 50µ" gold plating
<b>Recommended Soldering Temperature</b>	Wave soldering peaked at 260°C for 5 seconds maximum
<b>Operating Temperature</b>	-55°C to +85°C

UL File #: E135615  
Contact Sales for reflow-compatible versions.

## MATERIAL REQUIREMENTS

RJE1A connectors are RoHS compliant.  
Unless otherwise specified, materials for each component shall be:

<b>Insulator</b>	High temperature thermoplastic, complies with UL 94V-0
<b>Contacts</b>	-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
<b>Shield</b>	Stainless Steel with Tin finish tails
<b>LED</b>	Tin plating on LED tails

## AVAILABLE DOCUMENTS

Below is a list of common standard sales drawings.  
*Contact our website, sales, or an authorized Amphenol representation for additional drawings.*

<b>RJE1A-188-5X01</b>	Single port, shielded with top and side EMI tabs, without LEDs
<b>RJE1A-188-5XX1</b>	Single port, shielded with top, and side EMI tabs, with LEDs