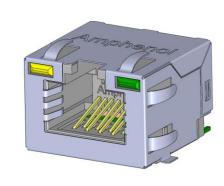
Product Specification S6182C Rev 1.0

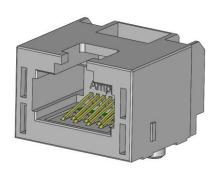
About Amphenol Commercial Products

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 RJE3A-188-1441 SHOWN

SINGLE PORT, 8 POSITION, SURFACE MOUNT, TAB-UP, WITHOUT BOARD PEGS, WITH SHIELD AND GREEN LEDS



P/N RJE3A-188-0402 SHOWN

SINGLE PORT, 8 POSITION, SURFACE MOUNT, TAB-UP, WITH BOARD PEGS, NO SHIELD, NO LEDs

Related Products

RJE72 SERIES



P/N RJE72-188-1451 SHOWN CAT5e, SINGLE PORT, 8P8C, WITH SHIELD AND GREEN LFDs

RJE71 SERIES



P/N RJE71-188-1451 SHOWN CAT6, SINGLE PORT, 8P8C, WITH SHIELD AND GREEN

OVERVIEW

This product specification defines the general use and performance parameters for Amphenol's RJE3A series of modular jacks.

Availability: Single port connectors available with a wide variety of LEDs and shielding options. With or without housing board pegs.

USAGE

The RJE3A series of modular jacks is a SMT connector that meets CAT5e performance per EIA-568-C.2. It supports Gigabit Ethernet Protocols as well as 2.5GBASE-T per IEEE 802.3bz. Shielding available for improved 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
- 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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Related Products

RJE4A SERIES



P/N RJE4A-188-1451 SHOWN CAT6A, SINGLE PORT, 8P8C, WITH SHIELD AND GREEN LEDs

RJE1A SERIES



P/N RJE1A-188-5451 SHOWN CAT5e, SINGLE PORT, 8P8C, WITH SHIELD AND GREEN LEDs

ELECTRICAL CHARACTERISTICS

| Contact Resistance | $20~\text{m}\Omega$ maximum | |
|------------------------|---|--|
| Insulation Resistance | 500 $\mbox{M}\Omega$ minimum at 500V DC for 2 minutes maximum | |
| Current Rating | 1.25 Amps per contact | |
| Voltage Rating | 125 Volts AC | |
| DWV | 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 | |
| LED Forward DC Current | 20 mA typical | |
| LED Forward Voltage | 2.4 Volts max. @ 2mA (for single colors)2.4 Volts max. @ 20mA (for Bi-colors) | |
| LED Reverse Voltage | 5.0 Volts maximum (for single colors)1.3 Volts maximum (for bi-colors) | |
| LED Light Intensity | 4 to 30 mcd @ 20mA (for single colors) 8 to 20 mcd @ 20mA (for Bi-colors) | |
| LED Wavelength | 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 |

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Related Products

RJE58 SERIES



P/N RJE58-188-5451 SHOWN CAT5e, SINGLE PORT, 8P8C, WITH SHIELD AND GREEN

RJE59 SERIES



P/N RJE59-188-5451 SHOWN CAT6, SINGLE PORT, 8P8C, WITH SHIELD AND GREEN LEDs

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 $50\mu\text{"}$ gold plating |
| Recommended Soldering Temperature | Reflow soldering peaked at 260°C for 10 seconds max. |
| Operating Temperature | -55°C to +85°C |

MATERIAL REQUIREMENTS

RJE3A 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 -100 μ " minimum matte Tin plating on solder tails |
| Shield | Stainless steel with matte-Tin plating |
| LED | Tin plating on LED tails |
| Moisture Sensitivity | MSL - 2a |

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.

| RJE3A-188-0X02 Single port, with board pegs, without shield, without LEDs |
|---|
| RJE3A-188-0XX2 Single port, with board pegs, without shield, with LEDs |
| RJE3A-188-1X02 Single port, with board pegs, shield with top and side EMI tabs, without LEDs |
| RJE3A-188-1XX2 Single port, with board pegs, shield with top and side EMI tabs, with LEDs |
| RJE3A-188-6X02 Single port, with board pegs, shield with no EMI tabs, without LEDs |
| RJE3A-188-6XX2 Single port, with board pegs, shield with no EMI tabs, with LEDs |
| RJE3A-188-1X01 Single port, without board pegs, shield with top and side EMI tabs, without LEDs |
| RJE3A-188-1XX1 Single port, without board pegs, shield with top and side EMI tabs, with LEDs |
| RJE3A-188-6X01 Single port, without board pegs, shield with no EMI tabs, without LEDs |
| RJE3A-188-6XX1 Single port, without board pegs, shield with no EMI tabs, with LEDs |

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