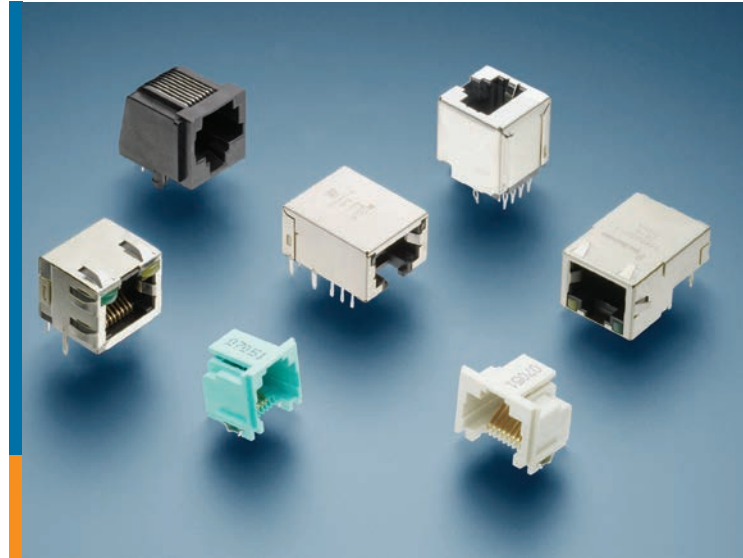


MODULAR JACKS

Single Port PCB Mount Quick Reference Guide



TE Connectivity's (TE) comprehensive single port modular jack product portfolio has been designed to meet the diverse design requirements of the data communications market. The product portfolio, which includes right angle jacks, 45 degree angle jacks and vertical jacks, specifically suits applications that require performance in voice, data, and high-speed networking.

Available in a variety of styles and configurations, TE's single port modular jacks offer compact size, and meet FCC rules and regulations part 68 as supported by Telecommunications Industry Association (TIA-1096-A).

PRODUCT APPLICATIONS

- Communications
 - Telephones
 - Routers
 - Servers
 - Switches
- Computers
- Business equipment
- Consumer electronics
- Wireless base stations

FEATURES AND BENEFITS

- Standardization for network connections
- Ease of use
- Broad portfolio
- RoHS compliant

RJ Designation

Modular jacks are commonly misrepresented by the Registered Jack (RJ) designations shown below. TE modular jacks should be selected by position size and number of contacts loaded.

| RJ45 Designation | Position/Contacts Loaded |
|------------------|--------------------------|
| RJ11 | 6/2 |
| RJ14 | 6/4 |
| RJ22 | 4/4 |
| RJ25 | 6/6 |
| RJ45 | 8/8 |

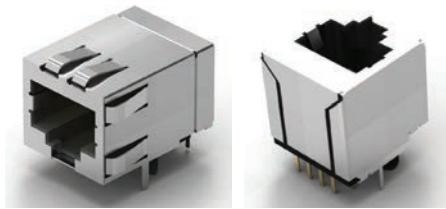
Performance Category

| Category | Applications |
|----------|----------------------------------------|
| Cat 3 | 10 BASE-T |
| Cat 5 | 10/100 BASE-T |
| Cat 5e | 10/100/1000 BASE-T or Gigabit Ethernet |
| Cat 6a | 10 Gigabit Ethernet |

Product Features

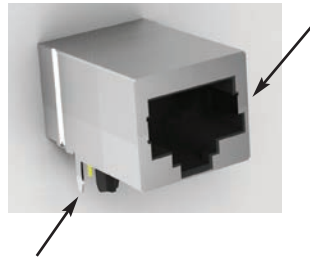
Shielded

A metal shell that provides EMI/RFI* protection. EMI/RFI is unwanted electromagnetic energy (or “noise”) in the frequency range that is generally used in radio communication.



Keyed

Designed for the use with a keyed plug to ensure proper mating and will also accept a standard plug

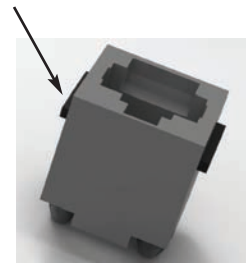


Mounting pegs

Provide location and retention support during soldering processes, but do not function as boardlocks. The majority of modular jacks have some type of mounting peg.

Panel Stops

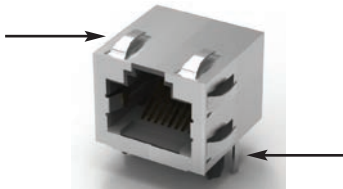
Provides additional mechanical support, especially with top entry jacks.



Grounding Options

Panel Ground — Makes contact with the panel for ground connections

PCB Ground — Makes contact with the PCB for ground connections



LEDs

Integrated into the modular jack, eliminating the need for additional system space for indicators. Available in multiple colors and configurations.



Inverted

Contacts are on the bottom and the latch is on the top to allow for alternate location of latch.

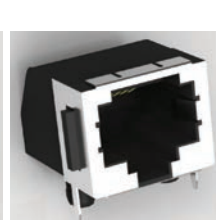
Inverted Latch

Tab Up



Standard Latch

Tab Down

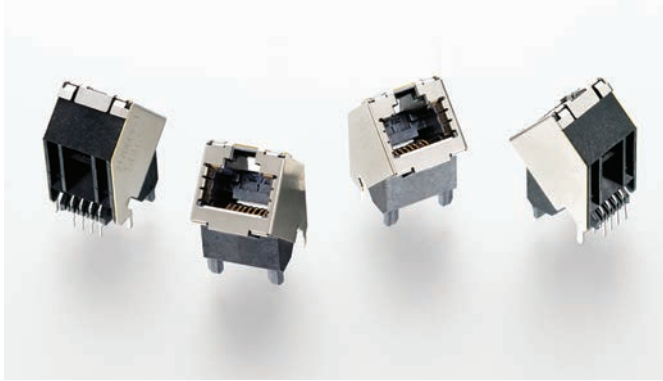


*Terminology Key

EMI — Electro Magnetic Interference

RFI — Radio Frequency Interference

45 Degree Angle Jacks



The newest addition to TE's single port modular jack portfolio is the angled RJ45 connector for Cat6 applications which provides increased data rates, reduced signal interference and easier connections with a 45 degree angle design.

Features

- Cat6 performance rating
- >1Gbps transmission independent of Integrated Circuit Module (ICM)
- Shielded
- Grounding and panel features

Achieve Faster Data Rates

- Exceeds data rates of 1Gbps, meeting the requirements for Cat6 applications
- Expands the possibilities for broader bandwidth Ethernet connections

Increase Ease of Assembly

- 45 degree angle entry jack design allows for easy, efficient cable connections
- Provides a connector surface that is more visible and accessible than right angle or vertical jacks in small or hard-to-reach spaces

Reduce Signal Interference

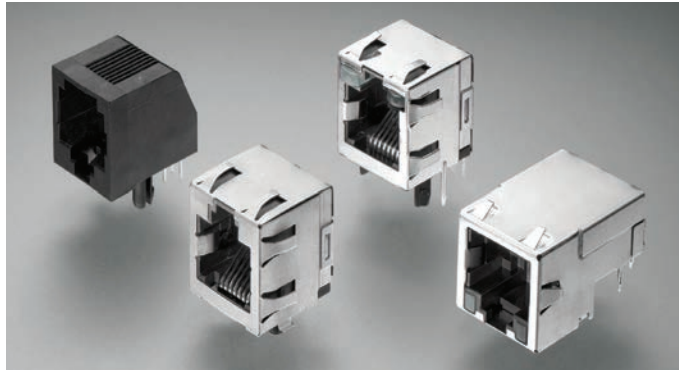
- Features up to 4x the number of EMI springs in the shield design than other RJ45 connectors on the market
- Improves EMI shielding effectiveness and helps prevent external interference to the transmission signal as well as reduce interference to external devices

Decrease PCB Assembly Costs

- Supports cost-effective IR reflow soldering processes with high-temperature, LCP (liquid crystal polymer material)
- Increases assembly efficiency with a single soldering process for through hole and SMT connections

| 8 POSITIONS/ 8 CONTACTS | | | | | | | | | | |
|-------------------------|-------------|-------------|----------|---------------|-------------|------|------------------|----------------|----------------|----------|
| Part Number | Height (mm) | Mount Style | Shielded | Ground Option | Panel Stops | LEDs | Tail Length (mm) | Designed For.. | Other Features | Inverted |
| 2170668-1 | 23.3 | T/H | Yes | PCB | No | No | 2.95 | Cat 6 | | N/A |

Right Angle Jacks



TE' extensive product offering provides a broad selection of right angle modular jacks.

Features

- CAT 3, CAT 5, CAT 5e performance ratings
- Low-profile, through-hole, or SMT
- With and without shielding
- With and without LEDs
- Grounding and panel features

4 POSITIONS/ 4 CONTACTS

| Part Number | Height (mm) | Mount Style | Shielded | Ground Option | Panel Stops | LEDs | Tail Length (mm) | Designed For.. | Other Features | Inverted |
|-------------|-------------|-------------|----------|---------------|-------------|------|------------------|----------------|----------------|----------|
| 215875-1 | 11.5 | T/H | No | No | No | No | 3.1 | Cat 3 | | No |
| 5555980-1 | 16.2 | T/H | No | No | No | No | 3.81 | Cat 3 | | No |
| 5520249-2 | 16.2 | T/H | No | No | Yes | No | 3.81 | Cat 3 | | No |
| 5520241-2 | 17.4 | T/H | No | No | No | No | 3.43 | Cat 3 | Flanged | No |

6 POSITIONS/ 4 CONTACTS

| Part Number | Height (mm) | Mount Style | Shielded | Ground Option | Panel Stops | LEDs | Tail Length (mm) | Designed For.. | Other Features | Inverted |
|-------------|-------------|-------------|----------|---------------|-------------|------|------------------|----------------|----------------|----------|
| 5520250-2 | 16.2 | T/H | No | No | Yes | No | 3.81 | Cat 3 | | No |
| 5555979-1 | 16.2 | T/H | No | No | No | No | 3.81 | Cat 3 | | No |
| 215876-2 | 11.5 | T/H | No | No | No | No | 3.2 | Cat 3 | | No |
| 5555163-2 | 12.7 | T/H | No | No | Yes | No | 3.81 | Cat 3 | | No |
| 5555165-2 | 12.7 | T/H | No | No | No | No | 3.81 | Cat 3 | | No |
| 5555140-2 | 12.7 | T/H | Yes | Panel & PCB | Yes | No | 3.81 | Cat 3 | | No |
| 5555154-2 | 12.7 | T/H | Yes | PCB | Yes | No | 3.81 | Cat 3 | | No |
| 5406545-1 | 12.4 | SMT | No | No | Yes | No | N/A | Cat 3 | | Yes |

6 POSITIONS/ 6 CONTACTS

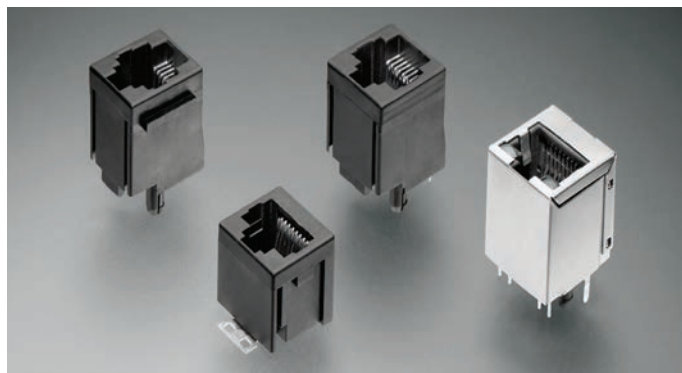
| Part Number | Height (mm) | Mount Style | Shielded | Ground Option | Panel Stops | LEDs | Tail Length (mm) | Designed For.. | Other Features | Inverted |
|-------------|-------------|-------------|----------|---------------|-------------|------|------------------|----------------|----------------|----------|
| 215876-1 | 11.5 | T/H | No | No | No | No | 3.2 | Cat 3 | | No |
| 5555163-1 | 12.7 | T/H | No | No | Yes | No | 3.81 | Cat 3 | | No |
| 5555165-1 | 12.7 | T/H | No | No | No | No | 3.81 | Cat 3 | | No |
| 5520250-3 | 16.2 | T/H | No | No | Yes | No | 3.81 | Cat 3 | | No |
| 5555003-1 | 16.13 | T/H | No | No | Yes | No | 3.81 | Cat 3 | Offset Latch | No |
| 5520470-3 | 16.13 | T/H | No | No | No | No | 3.81 | Cat 3 | | No |
| 5555154-1 | 12.7 | T/H | Yes | PCB | Yes | No | 3.81 | Cat 3 | | No |
| 5555140-1 | 12.7 | T/H | Yes | Panel & PCB | Yes | No | 3.81 | Cat 3 | | No |
| 5406514-1 | 12.4 | SMT | No | No | Yes | No | N/A | Cat 3 | | Yes |
| 5555077-1 | 12.7 | SMT | No | No | Yes | No | N/A | Cat 3 | | No |

Right Angle Jacks

| 8 POSITIONS/ 8 CONTACTS | | | | | | | | | | |
|-------------------------|-------------|-------------|----------|---------------|-------------|---------|------------------|----------------|------------------------------|----------|
| Part Number | Height (mm) | Mount Style | Shielded | Ground Option | Panel Stops | LEDs | Tail Length (mm) | Designed For.. | Other Features | Inverted |
| 215877-1 | 11.5 | T/H | No | No | No | No | 3 | Cat 3 | | No |
| 5555162-1 | 12.7 | T/H | No | No | Yes | No | 3.81 | Cat 3 | | No |
| 5555164-1 | 12.7 | T/H | No | No | No | No | 3.81 | Cat 3 | | No |
| 5555166-1 | 12.7 | T/H | No | No | Yes | No | 3.81 | Cat 3 | Keyed | No |
| 5555167-1 | 12.7 | T/H | No | No | No | No | 3.81 | Cat 3 | Keyed | No |
| 5520251-4 | 16.13 | T/H | No | No | Yes | No | 3.81 | Cat 3 | | No |
| 5520252-4 | 16.2 | T/H | No | No | Yes | No | 3.81 | Cat 3 | Keyed | No |
| 5520426-4 | 16.2 | T/H | No | No | No | No | 3.81 | Cat 3 | | No |
| 5554517-1 | 16.2 | T/H | No | No | No | No | 3.81 | Cat 3 | Keyed | No |
| 2-5338556-1 | 12.1 | T/H | Yes | Panel & PCB | No | No | 3.1 | Cat 3 | Staggered side panels | No |
| 3-5338556-1 | 12.1 | T/H | Yes | Panel & PCB | No | No | 3.1 | Cat 3 | No Side Panels | No |
| 5555141-1 | 12.7 | T/H | Yes | Panel & PCB | No | No | 3.81 | Cat 3 | | No |
| 5555153-1 | 12.7 | T/H | Yes | PCB | Yes | No | 3.81 | Cat 3 | | No |
| 5556591-1 | 12.7 | T/H | Yes | PCB | No | No | 3.81 | Cat 3 | Keyed | No |
| 5406216-1 | 13.72 | T/H | Yes | Panel & PCB | No | No | 3.56 | Cat 3 | | No |
| 5557786-1 | 13.64 | T/H | Yes | PCB | No | No | 3.56 | Cat 3 | | No |
| 5557789-1 | 13.64 | T/H | Yes | PCB | No | No | 3.56 | Cat 3 | Shorting Feature | No |
| 5406298-1 | 13.72 | T/H | Yes | Panel & PCB | No | No | 3.56 | Cat 3 | | No |
| 5569564-1 | 13.64 | T/H | Yes | Panel & PCB | No | G/Y | 2.79 | Cat 3 | | No |
| 5406533-1 | 12.83 | T/H | No | No | No | G/Y | 2.54 | Cat 5 | | Yes |
| 5558341-1 | 13.39 | T/H | No | No | No | No | 3.56 | Cat 5e | Non-traditional CAT 5 Pinout | No |
| 5558343-1 | 13.39 | T/H | No | No | Yes | No | 3.56 | Cat 5e | Non-traditional CAT 5 Pinout | No |
| 1-406525-1 | 12.83 | T/H | No | No | No | No | 2.54 | Cat 5 | | Yes |
| 1116503-2 | 9.58 | T/H | Yes | PCB | No | No | 3.48 | Cat 5 | | No |
| 1116062-2 | 9.58 | T/H | Yes | Panel & PCB | No | No | 3.48 | Cat 5 | Bezel Grounds | No |
| 1888542-2 | 9.58 | T/H | Yes | Panel & PCB | No | No | 3.48 | Cat 5 | | No |
| 1-406541-1 | 13.34 | T/H | Yes | Panel & PCB | No | No | 2.54 | Cat 5 | | Yes |
| 1-406541-5 | 13.34 | T/H | Yes | PCB | No | No | 2.54 | Cat 5 | | Yes |
| 6364288-1 | 13.34 | T/H | Yes | Panel & PCB | No | No | 2.6 | Cat 5 | | Yes |
| 5558344-1 | 13.64 | T/H | Yes | Panel & PCB | No | No | 3.56 | Cat 5e | Non-traditional CAT 5 Pinout | No |
| 6116526-1 | 13.64 | T/H | Yes | PCB | No | No | 3.56 | Cat 5 | RJ11 blocking feature | No |
| 5406299-1 | 13.72 | T/H | Yes | Panel & PCB | No | No | 3.56 | Cat 5e | | No |
| 5558342-1 | 13.64 | T/H | Yes | PCB | No | No | 3.56 | Cat 5 | | No |
| 1888566-1 | 13.34 | T/H | Yes | Panel & PCB | No | Y/G-Y/G | 3.18 | Cat 5 | | Yes |
| 2-406549-1 | 13.34 | T/H | Yes | Panel & PCB | No | G/Y | 2.54 | Cat 5 | | Yes |
| 5406721-2 | 12.4 | SMT | No | No | Yes | No | N/A | Cat 3 | | Yes |
| 5555078-1 | 12.7 | SMT | No | No | Yes | No | N/A | Cat 3 | Keyed | No |
| 5555764-1 | 12.7 | SMT | No | No | No | No | N/A | Cat 3 | | No |
| 6339191-1 | 13.34 | SMT | Yes | Panel & PCB | No | G/Y | N/A | Cat 5 | | Yes |
| 5558178-1 | 12.7 | SMT | Yes | PCB | Yes | No | N/A | Cat 3 | | No |
| 6339160-1 | 13.34 | SMT | Yes | Panel & PCB | No | No | N/A | Cat 5 | | Yes |
| 1888250-2 | 7.38 | Press Fit | Yes | Panel & PCB | No | G/Y-G/Y | 1.74 | Cat 5 | ATCA/AMC Module compliant | No |
| 1888250-3 | 7.38 | Press Fit | Yes | Panel & PCB | No | No | 1.74 | Cat 5 | ATCA/AMC Module compliant | No |

| 10 POSITIONS/ 10 CONTACTS | | | | | | | | | | |
|---------------------------|-------------|-------------|----------|---------------|-------------|------|------------------|----------------|----------------|----------|
| Part Number | Height (mm) | Mount Style | Shielded | Ground Option | Panel Stops | LEDs | Tail Length (mm) | Designed For.. | Other Features | Inverted |
| 5558065-1 | 13.39 | T/H | No | No | No | No | 3.56 | Cat 3 | | No |
| 5558066-1 | 13.34 | T/H | No | No | No | No | 3.56 | Cat 3 | Keyed | No |
| 5558067-1 | 13.64 | T/H | Yes | PCB | No | No | 3.56 | Cat 3 | | No |
| 5558070-1 | 13.64 | T/H | Yes | Panel & PCB | No | No | 3.56 | Cat 3 | | No |

Vertical Jacks



TE's extensive product offering provides a broad selection of vertical modular jacks for your jack application needs.

Features

- CAT 3, CAT 5 performance ratings
- Low-profile, through-hole, or SMT
- With and without shielding
- With and without LEDs
- Grounding and panel features

4 POSITIONS/ 4 CONTACTS

| Part Number | Height (mm) | Mount Style | Shielded | Ground Option | Panel Stops | LEDs | Tail Length (mm) | Designed For.. | Other Features | Inverted | PCB Mount Angle |
|-------------|-------------|-------------|----------|---------------|-------------|------|------------------|----------------|----------------|----------|-----------------|
| 216444-1 | 12 | T/H | No | No | No | No | 2.79 | Cat 3 | W/ Solder Stop | N/A | Bottom Entry |
| 216562-1 | 16.4 | T/H | No | No | Yes | No | 3.1 | Cat 3 | | N/A | Top Entry |
| 5558872-1 | 16.51 | T/H | No | No | No | No | 3.81 | Cat 3 | | N/A | Top Entry |
| 5520257-2 | 16.51 | T/H | No | No | Yes | No | 3.43 | Cat 3 | | N/A | Top Entry |
| 1-338084-3 | 12.7 | SMT | No | No | No | No | N/A | Cat 3 | | No | Top Entry |

6 POSITIONS/ 2 CONTACTS

| Part Number | Height (mm) | Mount Style | Shielded | Ground Option | Panel Stops | LEDs | Tail Length (mm) | Designed For.. | Other Features | Inverted | PCB Mount Angle |
|-------------|-------------|-------------|----------|---------------|-------------|------|------------------|----------------|----------------|----------|-----------------|
| 5406010-2 | 16.51 | T/H | No | No | No | No | 3.81 | Cat 3 | RJ-11T Bridged | N/A | Top Entry |
| 5569984-2 | 16.51 | T/H | No | No | No | No | 3.81 | Cat 3 | | N/A | Top Entry |

6 POSITIONS/ 4 CONTACTS

| Part Number | Height (mm) | Mount Style | Shielded | Ground Option | Panel Stops | LEDs | Tail Length (mm) | Designed For.. | Other Features | Inverted | PCB Mount Angle |
|-------------|-------------|-------------|----------|---------------|-------------|------|------------------|----------------|----------------|----------|-------------------|
| 5520258-2 | 16.51 | T/H | No | No | Yes | No | 3.81 | Cat 3 | | N/A | Top Entry |
| 5520425-2 | 16.51 | T/H | No | No | No | No | 3.81 | Cat 3 | | N/A | Top Entry |
| 1-338086-4 | 12.7 | SMT | No | No | No | No | N/A | Cat 3 | | N/A | Top/ Bottom Entry |

6 POSITIONS/ 6 CONTACTS

| Part Number | Height (mm) | Mount Style | Shielded | Ground Option | Panel Stops | LEDs | Tail Length (mm) | Designed For.. | Other Features | Inverted | PCB Mount Angle |
|-------------|-------------|-------------|----------|---------------|-------------|------|------------------|----------------|----------------|----------|-------------------|
| 216446-1 | 12 | T/H | No | No | No | No | 2.79 | Cat 3 | W/ Solder Stop | N/A | Bottom Entry |
| 5520258-3 | 16.51 | T/H | No | No | Yes | No | 3.81 | Cat 3 | | N/A | Top Entry |
| 5554990-1 | 16.51 | T/H | No | No | Yes | No | 3.81 | Cat 3 | Offset Latch | N/A | Top Entry |
| 5520425-3 | 16.51 | T/H | No | No | No | No | 3.81 | Cat 3 | | N/A | Top Entry |
| 1-338086-6 | 12.7 | SMT | No | No | No | No | N/A | Cat 3 | | N/A | Top/ Bottom Entry |

8 POSITIONS/ 8 CONTACTS

| Part Number | Height (mm) | Mount Style | Shielded | Ground Option | Panel Stops | LEDs | Tail Length (mm) | Designed For.. | Other Features | Inverted | PCB Mount Angle |
|-------------|-------------|-------------|----------|---------------|-------------|------|------------------|----------------|------------------------------|----------|-------------------|
| 216550-1 | 16.4 | T/H | No | No | Yes | No | 3.1 | Cat 3 | | N/A | Top Entry |
| 5520259-4 | 16.51 | T/H | No | No | Yes | No | 3.81 | Cat 3 | | N/A | Top Entry |
| 5520260-4 | 16.51 | T/H | No | No | Yes | No | 3.81 | Cat 3 | Keyed | N/A | Top Entry |
| 5555799-1 | 16.51 | T/H | No | No | No | No | 3.81 | Cat 3 | Keyed | N/A | Top Entry |
| 5556416-1 | 16.51 | T/H | No | No | No | No | 3.81 | Cat 3 | | N/A | Top Entry |
| 5569284-1 | 16.51 | T/H | No | No | No | No | 3.43 | Cat 3 | | N/A | Top Entry |
| 5557969-1 | 16.64 | T/H | Yes | Panel & PCB | Yes | No | 3.43 | Cat 3 | | N/A | Top Entry |
| 5557484-1 | 16.64 | T/H | Yes | Panel & PCB | Yes | No | 3.9 | Cat 3 | Low Panel Stop | N/A | Top Entry |
| 100616-1 | 16.71 | T/H | Yes | PCB | Yes | No | 3.1 | Cat 3 | | N/A | Top Entry |
| 5557730-1 | 16.77 | T/H | Yes | Panel & PCB | Yes | No | 3.43 | Cat 3 | Keyed | N/A | Top Entry |
| 1734577-1 | 16.51 | T/H | Yes | PCB | No | G/Y | 3.25 | Cat 3 | | N/A | Top Entry |
| 5558397-1 | 16.38 | T/H | No | No | No | No | 3.56 | Cat 5 | Non-traditional CAT 5 Pinout | N/A | Top Entry |
| 6368150-1 | 16.82 | T/H | Yes | PCB | No | No | 3.99 | Cat 5 | | N/A | Top Entry |
| 6116202-1 | 16.82 | Press Fit | Yes | PCB | No | No | 3.99 | Cat 5 | Compliant Pin | N/A | Top Entry |
| 6116418-1 | 16.82 | Press Fit | Yes | Panel & PCB | No | No | 3.99 | Cat 5 | Compliant Pin | N/A | Top Entry |
| 1-338088-3 | 12.7 | SMT | No | No | No | No | N/A | Cat 3 | | N/A | Top/ Bottom Entry |

For More Information

te.com/products/stdmodjacks

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