

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

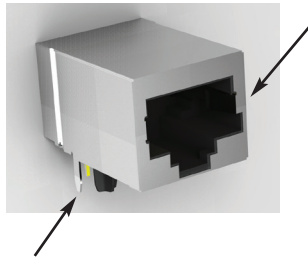
Shielded

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

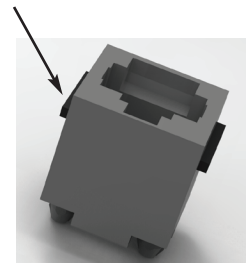


Mounting pegs

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

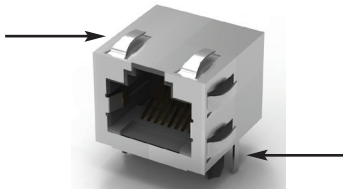
Provides additional mechanical support, especially with top entry jacks.



Grounding Options

Panel Ground — Makes contact with the panel for ground connections

PCB Ground — Makes contact with the PCB for ground connections



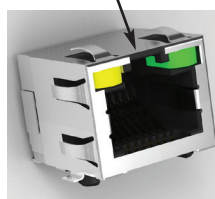
*Terminology Key

EMI — Electro Magnetic Interference
RFI — Radio Frequency Interference

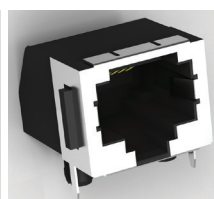
Inverted

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

Inverted Latch Tab Up

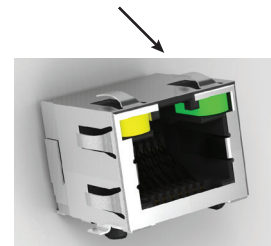


Standard Latch Tab Down



LEDs

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



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

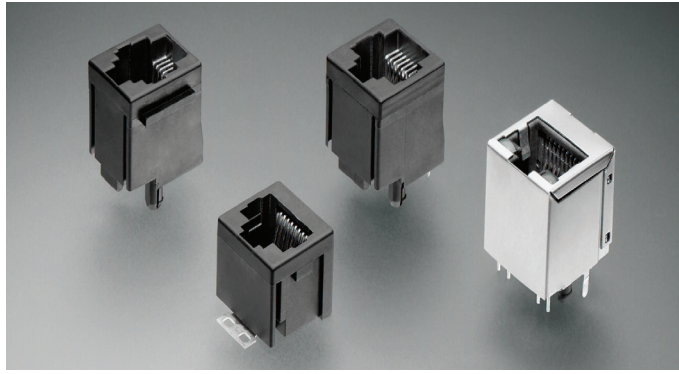
Part Number	Height (mm)	Mount Style	Shielded	Ground Option	Panel Stops	LEDs	Tail Length (mm)	Designed For..	Other Features	Inverted
215876-1	11.5	T/H	No	No	No	No	3.2	Cat 3		No
5555163-1	12.7	T/H	No	No	Yes	No	3.81	Cat 3		No
5555165-1	12.7	T/H	No	No	No	No	3.81	Cat 3		No
5520250-3	16.2	T/H	No	No	Yes	No	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

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