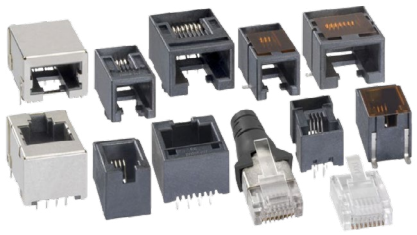
DATASHEET

Modular Jacks and Plugs ›

With a broad range of components, Modular Jacks and Plugs offer exceptional performance for voice, data and high-speed networking applications in addition to consumer, medical and industrial applications. By offering a wide array of configurations, including right-angle, vertical, single-port and multi-port versions, as well as options for enhanced EMI protection and durability, Molex's Modular Jacks and Plugs address the growing need for connectors that can handle high bandwidth and speed requirements.



ADVANTAGES AND FEATURES

Provides advanced EMI/RFI protection

The shielding of both plugs and jacks minimizes external interference, reduces radiated emissions and ensures signal integrity.

Provides significant flexibility in fitting different panel cut-out needs

The various panel grounding tab configurations on jacks ensure compatibility with a variety of panel cut-out sizes and mounting configurations. This flexibility enables reliable grounding, which improves both signal integrity and electromagnetic shielding while also providing mechanical stability.

Allows for tight board stacking

The low-profile jacks reduce the vertical height of the connectors, which enables better use of available PCB space and supports the design of compact, high-density systems that can fit into space-constrained enclosures.

Current (max.)	1.5A
Voltage (max.)	150V rms AC
Contact Resistance (max.)	20 milliohms
Mating Force, Shielded (max.)	35N
Mating Force, Unshielded (max.)	22N
Operating Temperatures	-40 to +85°C

Helps cater to various performance standards and capabilities

Modular Jacks and Plugs support a range of category ratings from Cat3 to Cat6 speed, which ensures compatibility with various network speeds and requirements.

Meets industry standard IEC60603-7 and is approved for all IEC license applications

The plating options ensure compliance with industry standards by providing excellent electrical performance, corrosion resistance and electromagnetic shielding.

Achieves 2,500 mating cycles

The palladium nickel and gold flash plating significantly contributes to the jack's ability to withstand 2,500 mating cycles by enhancing wear resistance, corrosion protection, electrical conductivity and mechanical stability.

Prevents the insertion of an RJ11 plug into an RJ45 housing

The "keep out" feature protects the contacts from damage by acting as a physical barrier, which ensures that only compatible plugs are inserted into the corresponding jack.

DATASHEET

Modular Jacks and Plugs ›

MARKETS AND APPLICATIONS

Telecommunications
Telephone systems
Patch panels
Internet connections

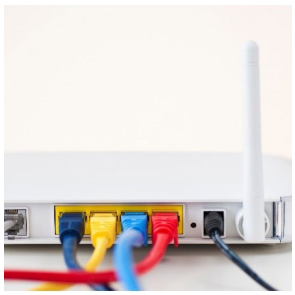
Networking
Servers
Switches
Routers

Appliances
Vending machines
Gaming devices
Printers
Photo copiers
Fax machines

Industrial automation
Control units
Security systems
Vision systems
Test equipment

Medtech
Patient monitoring systems
Diagnostic equipment

Telephone Systems



Routers

Printers

Control Units

Patient Monitoring Systems

SPECIFICATIONS

Reference Information
Packaging: Tray, tube, and tape and Reel
UL File No.: E107635
CSA File No.: LR19980
Mates With: IEC-60603-7/IEC-60603-7-1
RoHS: Yes
Low Halogen: No

Electrical
Voltage (max.): 150V rms AC
Current (max.): 1.5A
Contact Resistance (max.): 20 milliohms
Dielectric Withstanding Voltage: <5mA
Insulation Resistance (min.): 500 Megohms

Mechanical
Plug Retention to Jack (min.): 89N
Mating Force, Shielded (max.): 35N
Mating Force, Unshielded (max.): 22N
Durability (max.): 500/750/2,500 Cycles

Electrical
Housing: Nylon/PBT/LCP
Contact: copper alloy
Plating:
  Contact Area — gold/gold flash
  Solder Tail Area — tin
  Underplating — nickel/palladium nickel
PCB Thickness: 1.60mm
Operating Temperatures: -40 to +85°C

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Modular Jacks and Plugs ›

ORDERING INFORMATION

SINGLE PORTS

Series	Orientation	Ports	Category	PCB attachment		Shielding	Visual Indication	Positions/Loaded Contacts	Height (mm)	Description
				Signal tails	Body tails					
95009	Right angle	1	3	Through hole	Through hole	None	No	4/4 6/4 6/6 8/8	16.00	Flush or flange
95501				Through hole, SMT					11.50	Optional Key
95622						External shield		8/8	13.00	Shield tabs and solder pins
95540					Through hole, SMT	Internal shield			11.50	SMT or through hole shield tabs/nails
85502				SMT		None		4/4 6/4 6/6 8/8		
85542				Through hole, SMT		External shield		8/8	13.00	Shield tabs
85543			5e	Through hole, SMT	Through hole, SMT					Shielded with optional EMI tabs
85503				Through hole	Through hole	None			11.50	Unshielded through hole
85504						Internal shield				Internally shielded
85505						External shield			13.00	Optional EMI tabs
43202			3			External none		4/2, 4/4, 6/2, 6/4, 6/6, 8/2, 8/4, 8/6, 8/8, 8/10	11.58/ 11.81.12.09	Ultra-low profile
43249								6/2, 6/4, 6/6, 8/6, 8/8, 8/10	12.83/13.00	Shield option on 8-circuit only
43743				SMT	SMT	None		6/2, 6/4, 6/6, 8/4, 8/6, 8/8	11.74	Outboard fitting nails
43860				Through hole	Through hole	External, none	Lightpipes/ No	6/2, 6/4, 6/6, 8/4, 8/8	13.21/13.53/ 13.54	Inverted, available with or without lightpipes
44144				SMT	SMT	None	No	6/2, 6/4, 6/6, 8/2, 8/4, 8/6, 8/8	11.73	Inboard fitting nails
44282						External, none		8/8	12.19	Low profile
44380				Through hole	Through hole		Lightpipes/ No	6/4, 6/6, 8/4, 8/6, 8/8	13.21/ 13.53	Mini PCIe available with or without lightpipes
44620							Lightpipe	8/8	13.21/ 13.46	RJ-11 keep-out feature, single lightpipe
44050			5e				No		12.83/ 13.06	Option to omit side tabs for side-to-side stacking
44661						External			9.19/ 9.53	Three different shielding options

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Modular Jacks and Plugs ›

Series	Orientation	Ports	Category	PCB attachment		Shielding	LED	Positions/Loaded Contacts	Height (mm)	Description
				Signal tails	Body tails					
95503	Vertical	1	3	Through hole SMT	Through hole	None	No	4/4 6/4 6/6 8/8	12.7 or 15.7	Flush or flange. Low or high profile
95522				Through hole					16.25	Flush or flange
95551								6/6		Offset plug latch
95552						Internal shield		8/8		Internally shielded flush or flange
95623						External shield			16.50	Shielded top entry
85510				SMT	SMT	None		4/4 6/4 6/6 8/8	15.70	SMT solder tabs, optional pick & place tape
85513								None	12.70	None
85506			5e	Through hole	Through hole			8/8	16.30	Unshielded through hole
85507						Internal shield			16.25	Flush or flange
85508						External shield			16.50	Shielded top entry
85511						None			12.70 or 15.70	Low and high profile
42410			3	Through hole	Through hole	External		4/2, 4/4, 6/2, 6/4, 6/6, 8/2, 8/4, 8/6, 8/8	16.38	Flush/flangeless
42878						None		8/2, 8/4, 8/6, 8/8, 8/10	12.70	
43090					No			8/10		Radius housing

Modular Jacks and Plugs ›

MULTIPORTS

Series	Orientation	Ports	Category	PCB attachment		Shielding	LED	Positions/Loaded Contacts	Height (mm)	Description
				Signal tails	Body tails					
43814	Right angle	2	3	Through hole	Through hole	None	No	6/2, 6/4, 6/6	12.70	Inverted flangeless
43841								6/2, 6/4, 6/6, 8/4, 8/6, 8/8	11.80	Outboard fitting nails
44193										Inboard fitting nails
43223		2, 3, 4, 5, 6, 8	3			External, none	No	6/2, 6/4, 6/6, 8/4, 8/6, 8/8, 8/10	12.83/13.31	Multi-port, low profile
44560		2, 4	5e					8/8	9.19/9.53	Low profile
44150		2, 4, 6, 8	5e			External, none	No	8/8	12.83/13.31	Press-fit or snap-fit pegs
44248		2, 4	3				Lightpipes	6/4, 6/6, 8/8	13.21/13.45	Inverted
44170		8, 12, 16	5e			External	Lightpipes	8/8	25.41	Press-fit or snap-fit pegs
44520							No			

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