



Category 5

High Speed

Single and Ganged Modular Jacks



FEATURES AND SPECIFICATIONS

molex® **Category 5**
High Speed
Single and Ganged
Modular Jacks

Molex Incorporated offers single port and ganged high speed modular jacks for applications that require Category 5 or Category 5e reliability. These high speed jacks have been tested in accordance with EIA/TIA 568B standards and meet the performance criteria of greater than -43dB Near End Cross Talk (NEXT) at 100Mbps/100MHz for Category 5e performance.

Designed as an industry standard footprint and pin layout for Category 5, the RJ-45 modular jack layout is a drop in replacement for many modular jack suppliers. This provides for easy transition of the Molex Category 5 jacks to existing board layouts.

Features and Benefits

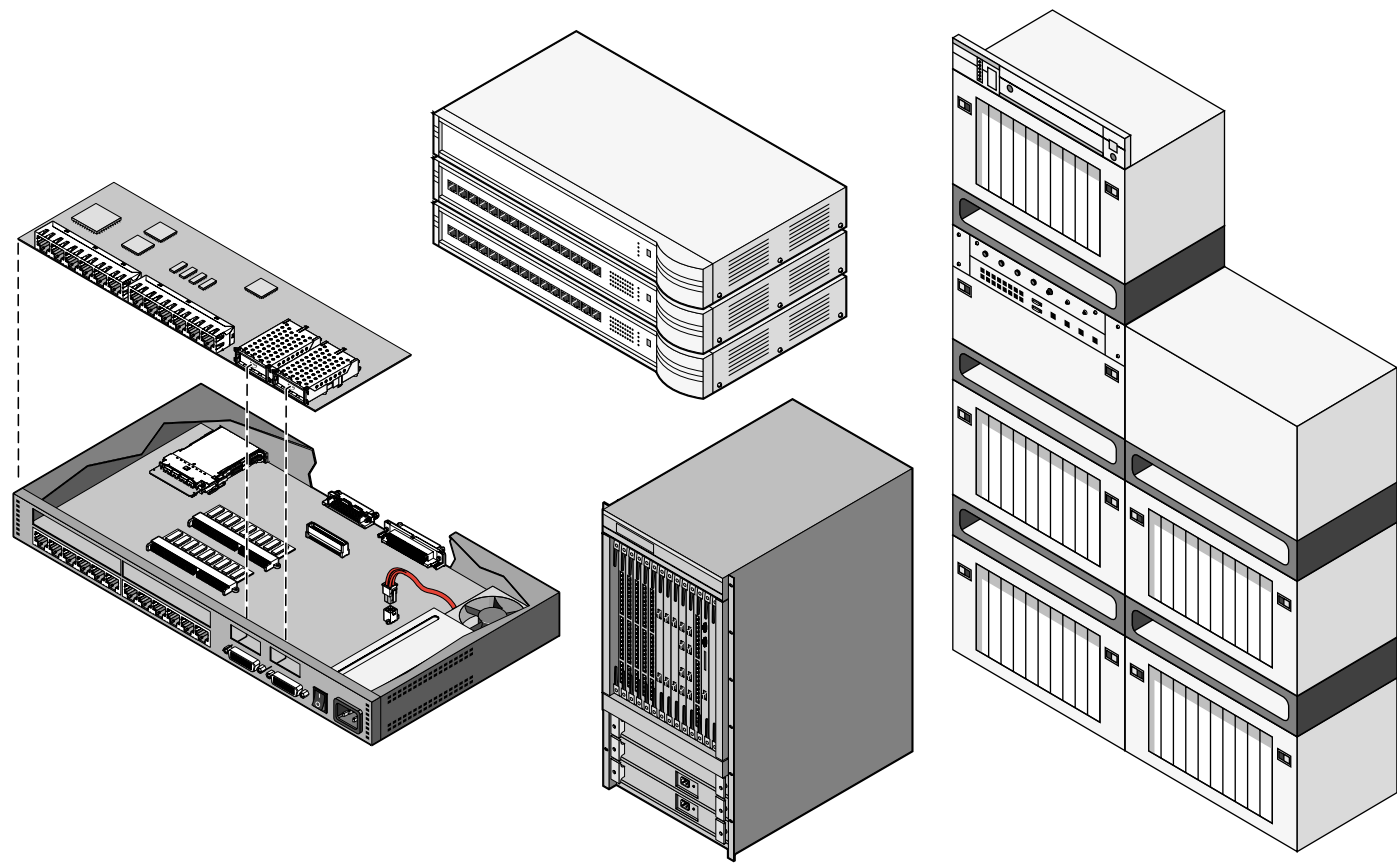
- Gigabit Ethernet compatible
- Delivers Category 5e performance to meet Near End Crosstalk (NEXT) requirements of greater than -43dB on all pair combinations at 100Mbps/100MHz
- Designed for fast Ethernet and ATM applications
- Low profile allows for tight board stacking
- Enhanced panel grounding tabs on shield provide a superior grounding path to panel or bracket
- Housing molded in 30% glass-filled nylon to maintain dimensional integrity to +260°C processing temperature for 1 minute
- 100% Hi-pot and continuity tested for electrical integrity
- Traditional industry standard footprint and pin layout

Enhanced tabs on the shield provide a superior ground path to the panel or metal bracket for maximum shielding effectiveness. Internal grounding tabs complete the circuit to ground in shielded cable/plug applications. Single port shields are available with two side panel grounding tabs or with one tab staggered on each side to allow for side-by-side stackability. Unshielded versions of both the single port and ganged high speed jacks are also available.

Applications

- Network Servers
- Hubs
- Routers
- Ethernet Switches
- Broadband Equipment
- Repeaters
- Premise Wiring
- Ethernet Telephony
- ATM Transmission Equipment

APPLICATIONS



FEATURES AND SPECIFICATIONS

Features and Benefits

- Exceeds Category 5 performance
- Gigabit Ethernet compatible
- Enclosed top
- Industry Standard Footprint
- Shield with enhanced panel grounding tabs
- Surface Mount Compatible

Reference Information

Product Specification: PS-44050-003
 Packaging: Tray
 UL File No.: E107635
 CSA File No.: LR149980
 Designed In: Inches

Electrical

Voltage: 125V
 Current: 1.5A
 Dielectric Withstanding Voltage: 1000V AC
 Insulation Resistance: 500 MΩ min.

Mechanical

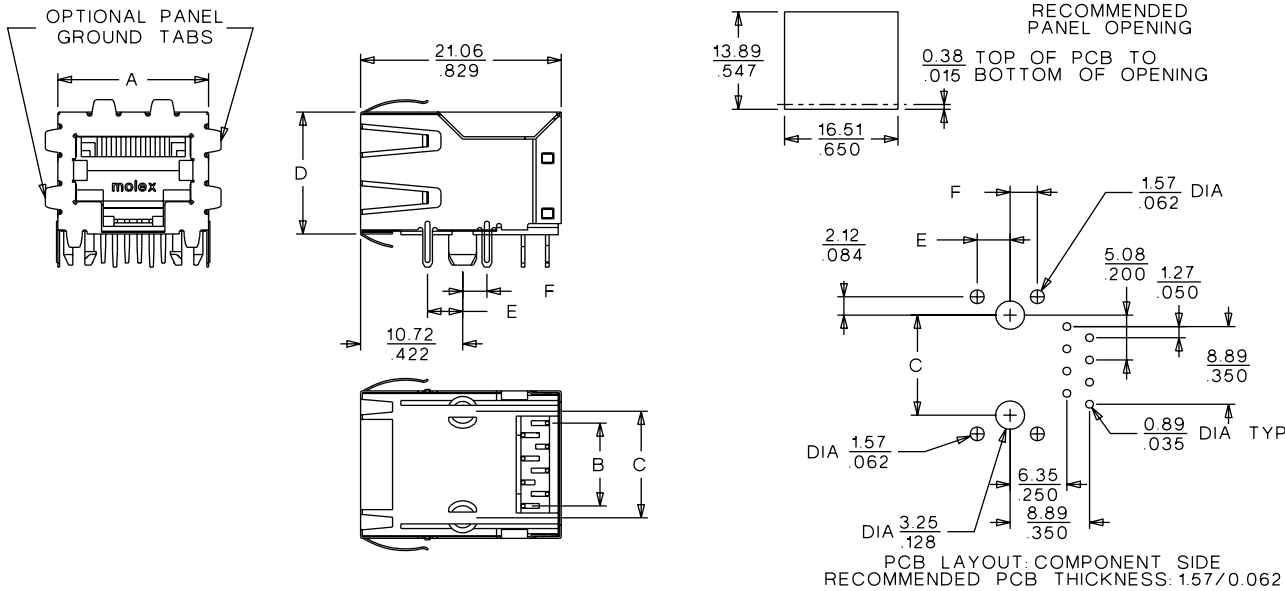
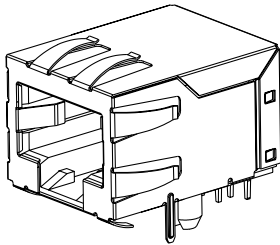
Durability: 500 cycles min.

Physical

Hog: Black glass-filled, high temperature nylon, UL 94V-0
 Plating: Contact Area—1.27μm (50μ") min. Gold
 Solder Tails—1.27μm (50μ") Tin/Lead
 On both contact area and solder tails over nickel overall
 Temperature: -40 to +80°C



44050
High Speed, Right Angle
Low Profile
Shielded and Unshielded
Versions



ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	Order No.						Dimension					
		Unshielded	Shielded										
			With All Panel Grounding Tabs		With Offset Panel Grounding Tabs								
			Location E	Location F	Location E	Location F	A	B	C	D	E	F	
8	8	44050-0001					15.24 (.600)	8.89 (.350)	11.43 (.450)	12.83 (.505)			
8	8		44050-0007		44050-0009		15.80 (.622)	8.89 (.350)	11.43 (.450)	13.08 (.515)	4.57 (.180)		
8	8		44050-0002		44050-0004		15.80 (.622)	8.89 (.350)	11.43 (.450)	13.08 (.515)	3.68 (.145)		
8	8		44050-0006		44050-0008		15.80 (.622)	8.89 (.350)	11.43 (.450)	13.08 (.515)	3.05 (.120)		
8	8			44050-0003		44050-0005	15.80 (.622)	8.89 (.350)	11.43 (.450)	13.08 (.515)		3.05 (.120)	

FEATURES AND SPECIFICATIONS

Features and Benefits

- Exceeds Category 5 performance
- Gigabit Ethernet compatible
- 2, 4, 6 and 8 port configurations available
- Shield with enhanced panel grounding tabs
- 100% tested for hi-pot and continuity
- Industry Standard Footprint
- High-temperature plastic

Reference Information

Product Specification: PS-44150-003
 Packaging: Tray
 UL File No.: E107635
 CSA File No.: LR19980
 Designed In: Inches

Electrical

Voltage: 125V
 Current: 1.5A
 Dielectric Withstanding Voltage: 1000V AC
 Insulation Resistance: 500 MΩ min.

Mechanical

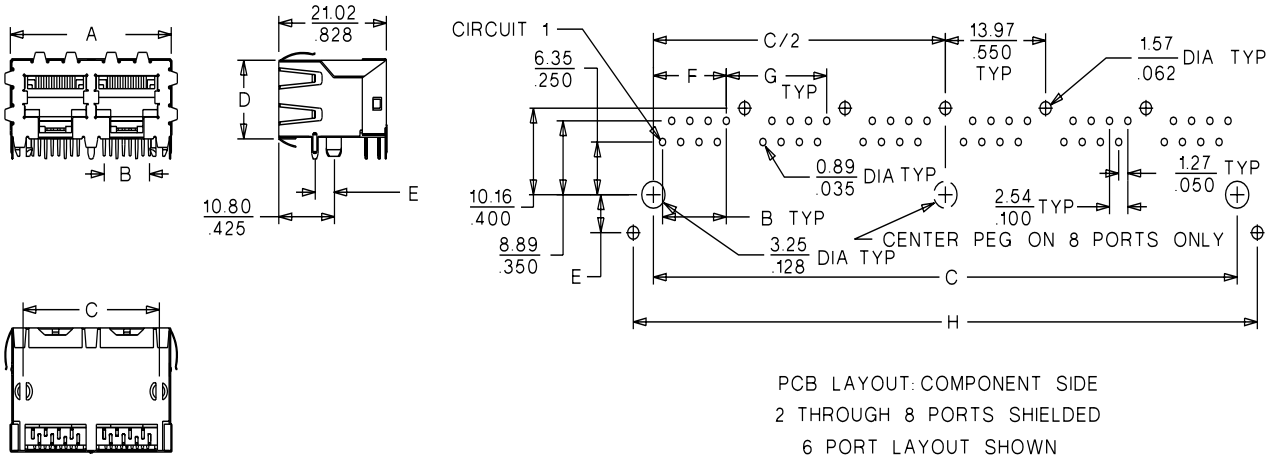
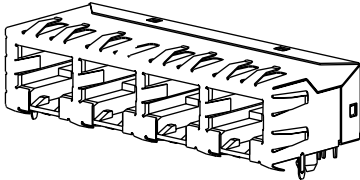
Durability: 500 cycles min.

Physical

Housing: Glass-filled nylon, UL 94V-0
 Plating: Contact Area—1.27μm (50μ") min. Gold
 Solder Tails—1.27μm (50μ") Tin/Lead
 On both contact area and solder tails over nickel overall
 Temperature: -40 to +80°C



44150 High Speed, Ganged, Right Angle, Low Profile Shielded and Unshielded Versions



RECOMMENDED PCB THICKNESS: $\frac{1.57}{.062}$

ORDERING INFORMATION AND DIMENSIONS

Circuits	Loaded Contacts	No. of Ports	Order No.		Dimension						
			Snap-Fit Pegs	Press-Fit Pegs	A	B	C	D	F	G	
8	8	2	44150-0001	44150-0017	30.48 (1.20)	8.89 (.350)	25.40 (1.00)	12.83 (.505)	10.16 (.400)	13.97 (.550)	
8	8	4	44150-0002	44150-0018	58.42 (2.30)	8.89 (.350)	53.34 (2.10)	12.83 (.505)	10.16 (.400)	13.97 (.550)	
8	8	6	44150-0003	44150-0019	86.36 (3.40)	8.89 (.350)	82.28 (3.20)	12.83 (.505)	10.16 (.400)	13.97 (.550)	
8	8	8	44150-0004	44150-0020	114.30 (4.50)	8.89 (.350)	109.22 (4.30)	12.83 (.505)	10.16 (.400)	13.97 (.550)	

Circuits	Loaded Contacts	No. of Ports	Order No.				Dimension						
			Option 1*		Option 2†		A	B	C	D	F	G	H
			Snap-Fit Pegs	Press-Fit Pegs	Snap-Fit Pegs	Press-Fit Pegs							
8	8	2	44150-0005	44150-0021	44150-0011	44150-0027	30.48 (1.20)	8.89 (.350)	25.40 (1.00)	13.31 (.524)	10.16 (.400)	13.97 (.550)	30.99 (1.22)
8	8	4	44150-0006	44150-0022	44150-0012	44150-0028	58.42 (2.30)	8.89 (.350)	53.34 (2.10)	13.31 (.524)	10.16 (.400)	13.97 (.550)	58.93 (2.32)
8	8	6	44150-0007	44150-0023	44150-0013	44150-0029	86.36 (3.40)	8.89 (.350)	82.28 (3.20)	13.31 (.524)	10.16 (.400)	13.97 (.550)	86.87 (3.42)
8	8	8	44150-0008	44150-0024	44150-0014	44150-0030	114.30 (4.50)	8.89 (.350)	109.22 (4.30)	13.31 (.524)	10.16 (.400)	13.97 (.550)	114.81 (4.52)

Note: Contact Inside Sales for alternative rear grounding tab option on 4 and 8 port order numbers only.

* Dimension E = 3.68mm (.145")

† Dimension E = 4.57mm (.180")

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