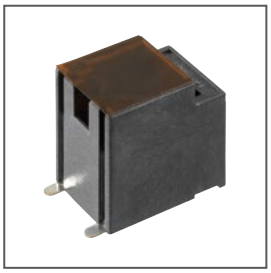
molex®

Vertical SMT Modular Jacks with Polyimide Film

85510 Top Entry SMT Jacks
85513 Low Profile, Top Entry SMT Jacks

Vertical SMT Modular Jacks with Polyimide film for vacuum pick-and-place functionality can streamline high-volume PCB production and lower manufacturing costs

Automatic vacuum pick-and-place is the most common high-speed manufacturing process for precision placement of surface mount (SMT) components on printed circuit boards (PCBs) in mass production. The addition of Polyimide film to the surface of vertical SMT modular jacks facilitates automatic vacuum pick-and-place of the connector alongside other SMT components. This streamlines high-volume production and lowers manufacturing costs for customers. For additional information on Molex's complete offering of modular jacks visit: www.molex.com/product/modjacks.html



Vertical SMT Jack with Polyimide film

Features and Benefits

SMT vertical mounting with added Polyimide film	Automatic vacuum placement possible; lowers customer manufacturing costs
Polyimide film remains stable across a wide range of temperatures	Suitable for high-temperature SMT manufacturing; Polyimide film will keep its form, bond and integrity
Low-profile versions (series 85513) available	Allows for tight board stacking
RJ-11 and RJ-45 jacks available	Provides flexibility for variety of design applications
50µ" Gold plating options	Meets FCC68.5, IEC60603-7 and is approved for all FCC and IEC licenses applications
Palladium nickel (PdNi) + gold (Au) flash plating option	Achieves 2500 mating cycles; meets the new durability requirement of IEC60603-7 PL 2 and FCC68.5 standards



Network Switch

Applications

Networking

- Servers
- Switches
- Routers

Commercial

- Vending machines
- Cash registers
- Card swipes

Consumer

- Set top boxes
- Home security
- Web TV
- Gaming devices

Office

- Printers
- Photocopiers
- Desktops & laptops

Medical

- Home analysis monitors
- Bed monitors
- Breathing devices

Industrial

- Control units
- Vision systems
- Security systems
- Test equipment



Commercial



Consumer



Medical

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Vertical SMT Modular Jacks with Polyimide Film

Specifications

REFERENCE INFORMATION
Packaging: Blister on Reels
UL File No.: E107635
CSA File No.: N/A
Mates With: Plugs, series 90075
RoHS: Yes
Halogen Free: Yes
Glow Wire Compliant: No

ELECTRICAL
Voltage (max.): 125V DC
Current (max.): 1.5A
Contact Resistance: 20 mΩ max.
Dielectric Withstanding Voltage:
1000V rms
Insulation Resistance: 500 MΩ min.

PHYSICAL
Housing:
LCP Fibre Glass Filled UL 94-VO
Contact: Copper Alloy
Plating:
Contact Area —Gold or Gold flash over Palladium Nickel (PdNi)
Underplating — Nickel (Ni)
PCB Thickness: 1.57mm
Operating Temperature:
-40 to +85°C

MECHANICAL
Contact Retention to Housing:
20 mΩ max.
Insertion Force to PCB: 20N max.
Mating Force: 20N max.
Unmating Force: 20N max
Durability (min.): 5,000 operations

Ordering Information

Top Entry SMT Jacks

Order No.	Housing Size	Circuits Loaded	Packaging	Type	Solder Tabs	Mating Plugs
85510-5120	8	8	13” Reel	Top Entry SMT	Yes	90075 Series
85510-5128			22” Reel			
85510-5119	6	6	13” Reel			
85510-5127			22” Reel			
85510-5118	6	4	13” Reel			
85510-5126			22” Reel			
85510-5117	4	4	13” Reel			
85510-5125			22” Reel			

Low Profile, Top Entry SMT Jacks

Order No.	Housing Size	Circuits Loaded	Packaging	Type	Mating Plugs
85513-5113	8	8	13” Reel	Low Profile Top Entry SMT	90075 Series
85513-5109			22” Reel		
85513-5114	6	6	13” Reel		
85513-5110			22” Reel		
85513-5115	6	4	13” Reel		
85513-5111			22” Reel		
85513-5116	4	4	13” Reel		
85513-5112			22” Reel		

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