



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

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 |

Applications

Networking

- Servers
- Switches
- Routers

Commercial

- Vending machines
- Cash registers
- Card swipers

Consumer

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

Office

- Printers
- Photocopiers
- Desktops & laptops

Medical

- Home analysis monitors
- Bed monitors
- Breathing devices

Industrial

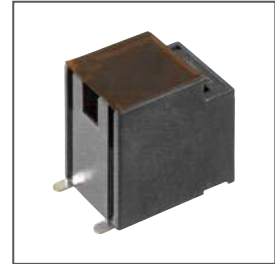
- Control units
- Vision systems
- Security systems
- Test equipment



Consumer

Vertical SMT Modular Jacks with Polyimide Film

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



Vertical SMT Jack with Polyimide film



Network Switch



Commercial



Medical

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

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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 | | |