

# Slim-Grid 1.27mm Pitch Board-to-Board Connector

**molex**<sup>®</sup>

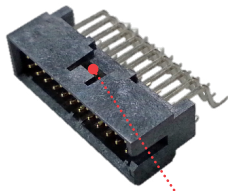
Based on a 1.27 by 1.27mm grid pattern, this high-current density board-to-board interconnect solution offers complete design flexibility and higher current density per inch to support variety of data, automotive, industrial and consumer board-to-board applications



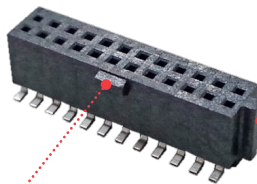
Slim-Grid 1.27mm Pitch Board-to-Board Connectors

## Features and Benefits

**Shrouded Right Angle Header, Horizontal SMT**



**Vertical Receptacle, SMT**



**Locking Window, Locking Ramp**

Ensure robust connector retention when mated

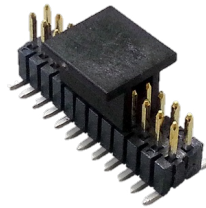
**Single-sided Polarization Slot**

Prevents wrong orientation and mis-mating.  
Improves mating for smaller circuit sizes of 6 and below

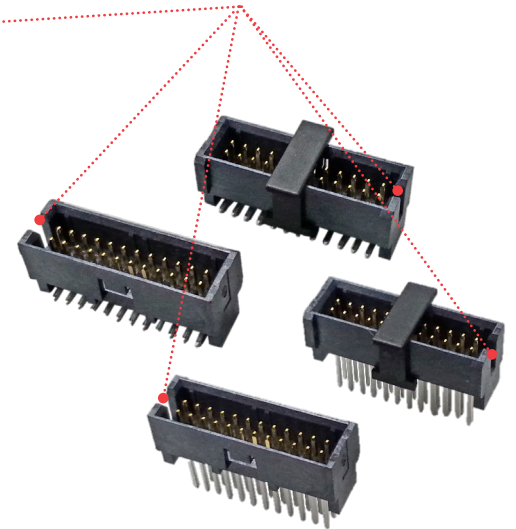


**Locating Pegs (Shrouded Right Angle Header, Through-hole)**

Ensure precise connector positioning on PCB



**Vertical Unshrouded Headers with Pick-and-Place Cap, SMT**



**Vertical Shrouded Headers with and without Pick-and-Place Cap, SMT and Through-hole**

## Applications

### Consumer / Smart House

- Energy efficient appliances
- Home theaters
- White goods
- Drones

### Telecommunications/Networking

- Hubs, Servers, Routers, Switches

### Automotive

- Car audio and navigation systems

### General Market

- Control boards, Lighting luminaries,
- Audio speakers

### Mobile

- Smart phones and other portable electronic devices



Drones



Car Audio and Navigation System



Home Appliances

# Slim-Grid 1.27mm Pitch Board-to-Board Connector



## Specifications

### REFERENCE INFORMATION

Packaging: Tube, Tape and Reel upon request  
 UL File No.:E29179, Vol. 10  
 CSA File No.: 152514 (LR 19980)  
 Mates With: 87933/200989/201021/201022 and 201173  
 Terminal Used: Copper Alloy  
 Designed In: Millimeters  
 RoHS: Yes  
 Halogen Free: Yes  
 Glow Wire-compliant: Pending for application

### ELECTRICAL

Voltage (max.): 125V AC  
 Current (max.): 4.3A (per circuit)  
 Contact Resistance: 30 milliohms  
 Insulation Resistance: 1000 Megohms

### MECHANICAL

Terminal Retention Force (in Housing): 2.22N  
 Terminal Retention Force (Header): 4.0N  
 Mating Force: 10N (4-circuit) to 15N (24-circuit)  
 Unmating Force: 0.5N (4-circuit) to 3.0N (24-circuit)  
 Durability (min.): 50 cycles

### PHYSICAL

Housing: LCP, UL94V-0 Black  
 Contact: Copper Alloy  
 Plating:  
 Contact Area — 0.05, 0.38 and 0.76micron Gold (Au)  
 Solder Tail Area — 2.00 micron Matte Tin (Sn)  
 Underplating — 1.27 micron Nickel (Ni)  
 PCB Thickness: Refer to sales drawing  
 Operating Temperature: -55 to 105°C

## Ordering Information

Series No.	Description	Part No. / LEGEND
<a href="#">78120</a>	Vertical SMT Receptacle	<b>78120-ABCC</b> AA - circuit size (04 to 24) B - packaging option C - plating option
<a href="#">200989</a>	Vertical SMT Shrouded Header	<b>200989_ABCC</b> A - packaging option B - plating option CC - circuit size (04 to 24)
<a href="#">201022</a>	Shrouded Vertical Through-hole Header	<b>201022_ABCC</b> A - packaging option B - plating option CC - circuit size (04 to 24)
<a href="#">201173</a>	Shrouded Right Angle SMT Header	<b>201173_ABCC</b> A - packaging option B - plating option CC - circuit size (04 to 24)
<a href="#">201021</a>	Shrouded Right Angle Through-hole Header	<b>201021_ABCC</b> A - packaging option B - plating option CC - circuit size (04 to 24)
<a href="#">87933</a>	Unshrouded Vertical SMT Header	<b>87933-AABB</b> AA - circuit size (04 to 24) BB - plating/package option

[www.molex.com/link/slimgrid.html](http://www.molex.com/link/slimgrid.html)