

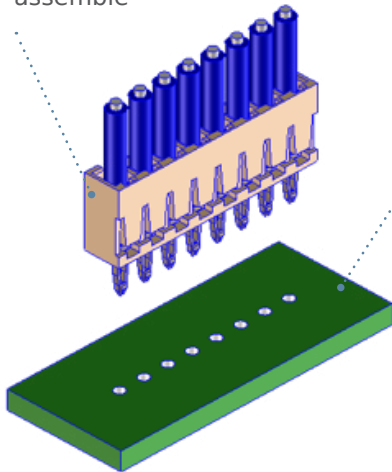
# Board-in Connectors Vertical and Right Angle, 2.00 and 2.50 Pitch >

Molex's Board-in connectors offer a variety of pitch and circuit size options, mating configurations for simple but reliable connections

## FEATURES AND ADVANTAGES

### One-piece direct solder-to-board assembly

Provides space and cost saving compared to the two-piece connection system. Easy to assemble

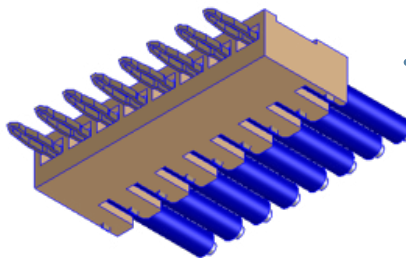


### Terminal and housing locking features

Help ensure secure terminal retention force

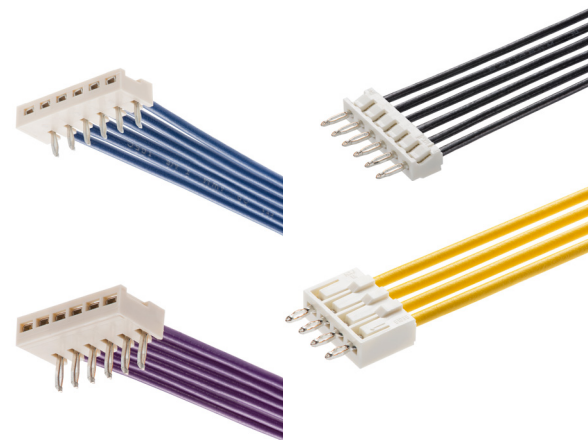
### Compatible with standard through-hole soldering methods

Offers more reliable solder fillet compared to uneven and labor-intensive hand soldering



### Range of pitch and circuit size options

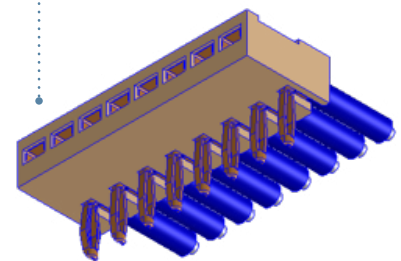
For greater design flexibility



Board-in connectors in 2.00 (top row) and 2.50mm-pitch (bottom row), right-angle and vertical configurations

### Right-angle and vertical housing options

Protect terminal and functions as wire alignment and retention device. Provide strain relief after soldering



## MARKETS AND APPLICATIONS

### Automotive

Infotainment

### Medical

Patient monitoring

### Home Appliance

HVAC

Refrigerator

### Industrial

Factory machines

Power tools



White Goods



Factory Machines



Patient Monitoring Systems

# Board-in Connectors Vertical and Right Angle, 2.00 and 2.50 Pitch >

## SPECIFICATIONS - 2.00MM VERTICAL (51015)

### REFERENCE INFORMATION

Packaging:  
Terminal: Reel  
Housing: Bag  
Designed In: Millimeters  
RoHS: Yes  
Halogen Free: No

### ELECTRICAL

Voltage (max.): 125V  
Current (max.): 2.0A  
Contact Resistance (max.): 5 milliohms  
Dielectric Withstanding Voltage: 500V AC (rms)  
Insulation Resistance (min.): 1000 Megaohm  
Wire Size: AWG 26 to 30

### PHYSICAL

Housing: Polyamide (Natural)  
Terminal: Phosphor Bronze

### PLATING

Contact Area — Tin  
Operating Temperature: -40 to +105 C

## SPECIFICATIONS - 2.00MM RIGHT-ANGLE/VERTICAL (35023)

### REFERENCE INFORMATION

Packaging:  
Terminal: Reel  
Housing: Bag  
Designed In: Millimeters  
RoHS: Yes  
Halogen Free: No

### ELECTRICAL

Voltage (max.): 125V  
Current (max.): 2.5A  
Contact Resistance (max.): 5 milliohms  
Dielectric Withstanding Voltage: 1000V AC (rms)  
Insulation Resistance (min.): 1000 Megaohm  
Wire Size: AWG 24 to 30

### PHYSICAL

Housing: Polyamide (Ivory)  
Terminal: Phosphor Bronze, Brass

### PLATING

Contact Area — Tin  
Operating Temperature: -40 to +105 C

## SPECIFICATIONS - 2.50MM VERTICAL (51035)

### REFERENCE INFORMATION

Packaging:  
Terminal: Reel  
Housing: Bag  
Designed In: Millimeters  
RoHS: Yes  
Halogen Free: Low Halogen

### ELECTRICAL

Voltage (max.): 250V  
Current (max.): 4.0A  
Contact Resistance (max.): 5 milliohms  
Dielectric Withstanding Voltage: 1000V AC (rms)  
Insulation Resistance (min.): 1000 Megaohm  
Wire Size: AWG 20 to 24

### PHYSICAL

Housing: Polyamide (Natural)  
Terminal: Phosphor Bronze

### PLATING

Contact Area — Tin  
Operating Temperature: -40 to +105 C

## SPECIFICATIONS - 2.50MM RIGHT-ANGLE/VERTICAL (35022)

### REFERENCE INFORMATION

Packaging:  
Terminal: Reel  
Housing: Bag  
Designed In: Millimeters  
RoHS: Yes  
Halogen Free: Low Halogen

### ELECTRICAL

Voltage (max.): 125V  
Current (max.): 3.0A  
Contact Resistance (max.): 5 milliohms  
Dielectric Withstanding Voltage: 1000V AC (rms)  
Insulation Resistance (min.): 1000 Megaohm  
Wire Size: AWG 22 to 28

### PHYSICAL

Housing: Polyamide (Ivory)  
Terminal: Phosphor Bronze, Brass

### PLATING

Contact Area — Tin  
Operating Temperature: -40 to +105 C

# Board-in Connectors Vertical and Right Angle, 2.00 and 2.50 Pitch >

## ORDERING INFORMATION

2.00mm Pitch (Replace xx with circuit size)

Order No.	Type	Comments
<a href="#">51015-xx00</a>	Housing (Vertical)	2 to 10 circuit sizes
<a href="#">50034-8000</a>	Terminal (Vertical)	AWG# 26 to 30
<a href="#">35023-00xx</a>	Housing (Right-Angle/Vertical)	2 to 16 circuit sizes
<a href="#">35021-1201/1301/1360</a>	Terminal (Right-Angle)	AWG# 24 to 30
<a href="#">35044-9102</a>	Terminal (Vertical)	AWG# 24 to 28

2.50mm Pitch (Replace xx with circuit size)

Order No.	Type	Comments
<a href="#">51035-xx00</a>	Housing (Vertical)	2 to 12 circuit sizes
<a href="#">50097-8000</a>	Terminal (Vertical)	AWG# 20 to 24
<a href="#">35022-00xx</a>	Housing (Right-Angle/Vertical)	2 to 15 circuit sizes
<a href="#">35021-1001/1160</a>	Terminal (Right-Angle)	AWG# 22 to 28
<a href="#">35044-9104</a>	Terminal (Vertical)	AWG# 22 to 28

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