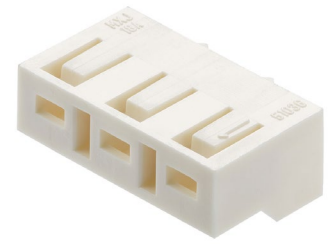


# Board-In Connectors >

Providing a wide range of pitch options, mating configurations and circuit sizes, Molex Board-In Connectors are reliable and versatile. These connectors overcome design limitations and offer cost-effective methods for wire-to-board applications.



## ADVANTAGES AND FEATURES

### Ensures secure terminal retention force

Terminal and housing locking features help reduce risk of faulty connections which cause end-product failure.

### Provides space and cost savings

One-piece direct solder-to-board assembly are easy to apply and help avoid additional purchasing and space limitations.

### Offer design flexibility

These connectors are available in a wide variety of pitch sizes, now including 4.00mm, configurations and circuit sizes to help customers overcome space and design limitations.

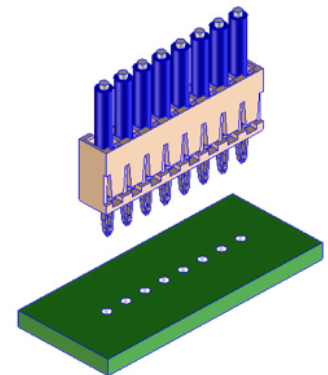
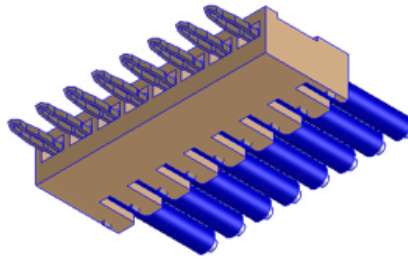
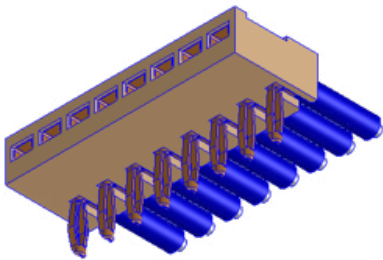
Pitch	2.00, 2.50 and 4.00mm
Current	5.0A
Voltage	250V
Operating Temperatures	-40 to +105°C

### Offers compatible and reliable solder fillet

These connectors accept standard through-hole soldering methods and overcome the challenges of uneven and labor-intensive hand soldering.

### Protects terminals

Right-angle and vertical housing options function as wire alignment and a retention device during the soldering process and as strain relief after soldering.



## MARKETS AND APPLICATIONS

### Automotive

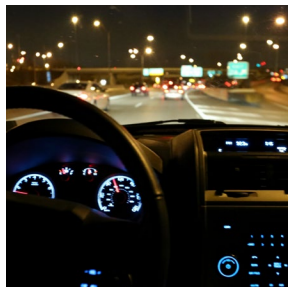
Infotainment

### Home Appliance

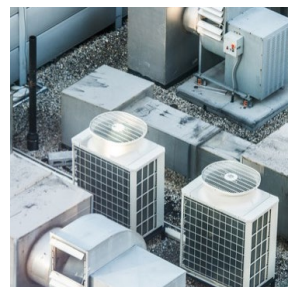
HVAC equipment  
Refrigerators

### Industrial

Factory machines  
Power tools



Infotainment



HVAC Systems



Factory Machines

# Board-In Connectors >

## 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.): 1,000 Megaohms  
Wire Size: 30 to 26 AWG

#### Physical

Housing: Polyamide (natural)  
Terminal: Phosphor bronze  
Plating: Contact Area—tin  
Operating Temperature: -40 to +105°C

### 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: 1,000V AC (rms)  
Insulation Resistance (min.): 1,000 Megaohm  
Wire Size: 30 to 24 AWG

#### Physical

Housing: Polyamide (ivory)  
Terminal: Phosphor bronze, brass  
Plating: Contact Area—tin  
Operating Temperature: -40 to +105°C

### 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: 1,000V AC (rms)  
Insulation Resistance (min.): 1,000 Megaohm  
Wire Size: 24 to 20 AWG

#### Physical

Housing: Polyamide (natural)  
Terminal: Phosphor bronze  
Plating: Contact Area—tin  
Operating Temperature: -40 to +105°C

### 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: 1,000V AC (rms)  
Insulation Resistance (min.): 1,000 Megaohm  
Wire Size: 28 to 22 AWG

#### Physical

Housing: Polyamide (ivory)  
Terminal: Phosphor bronze, brass  
Plating: Contact Area—tin  
Operating Temperature: -40 to +105°C

### 4.00mm Vertical (51036)

#### Reference Information

Packaging:  
Terminal—reel  
Housing—bag  
Designed In: Millimeters  
RoHS: Yes  
Halogen Free: No

#### Electrical

Voltage (max.): 250V  
Current (max.): 5.0A  
Contact Resistance (max.): 5 milliohms  
Dielectric Withstanding Voltage: 1,000V AC  
Insulation Resistance (min.): 1,000 Megaohms  
Wire Size: 22 to 18 AWG

#### Physical

Housing: Polyamide (ivory)  
Terminal: Phosphor bronze, brass  
Plating: Contact Area—tin  
Operating Temperature: -40 to +105°C

# Board-In Connectors >

## ORDERING INFORMATION

2.00mm Pitch (Replace xx with circuit size)

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

2.50mm Pitch (Replace xx with circuit size)

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

4.00mm Pitch (Replace xx with circuit size)

Order No.	Type	Comments
<u>51036-0200</u>	Housing (vertical)	2 Circuit sizes
<u>51036-0300</u>	Housing (vertical)	3 Circuit sizes
<u>51036-0400</u>	Housing (vertical)	4 Circuits sizes
<u>50098-8000</u>	Terminal	22 to 18 AWG