Molex’s bestseller wire-to-board and wire-to-wire connector series in 1.25mm pitch with four header options for a wide variety of applications and industries across the world. Newly added 0.38μm gold plated versions.

**Features and Benefits**

**Compact and Small**

1.25mm pitch WTB/WTB connectors for space saving

**Wide variety choices**

WTB and WTW solution. Through hole and SMT headers with straight and right-angle orientations.

**0.38μm gold plating (26 and 28 AWG)**

Provides superior reliability and durability in harsh environments.

**Friction Lock**

The crimp receptacle is equipped with two latching ramps to minimize the chance of accidental unmating due to vibration or mishandling.

**Reliable Terminal**

The two-point-contact design assures a reliable electrical connection under low current, low voltage and high-vibration conditions.

**Applications**

**Automotive**

In-vehicle comfort and infotainment, Body Control Module, Shifters, Steering wheel, Instrument Cluster, combination switches

**Consumer**

Smart TV, LED TV, Set Top Box, Air conditioners, White goods, Gaming machines

**Industrial**

Security, Drones, Electric test equipment

**Data Communications**

Laser Printers, Inkjet Printers, Servers, Computer screen

**Healthcare**

Hearing aid, Medical Monitors
# PicoBlade Connector System

## Specifications

### REFERENCE INFORMATION
- **Packaging:** Reel (Terminal); Embossed (SMT Header Assembly); Tray (Through Hole Header Assembly), Bag (Receptacle Housing);
- **Designed In:** Millimeters
- **RoHS:** Yes

### PHYSICAL
- **Housing:** Receptacle – PBT (51021)
- **Plug - PBT (51047)**
- **Header – PA66 (53047/53048/Through hole)**
- **PA46 (53261/53398/SMT)**
- **Contact:** Phosphor Bronze
- **Plating:** Contact Area* – Tin/Gold
  - Underplating – Gold Crimp terminal (50079), Gold Through hole (53048), SMT Tin and Gold headers (53398/53261)
  - None for Through hole Tin headers (53047/53048) and Tin Crimp terminals (50058/50133/50125)
- **Operating Temperature:** -40 to 105˚C (53398/53261/53048 Gold)
  - -40 to +85˚C (53047/53048 Tin)

### MECHANICAL
- **Crimp Terminal Insertion Force (max.):** 4.9N
- **Crimp Terminal Retention to Housing (min.):** 4.9N
- **Mating Force (1st):** 19.6N (2 Circuit)
- **Unmating Force (1st):** 2.8N (2 Circuit)
- **Durability:** 30 Cycles

### ELECTRICAL
- **Voltage (max.):** 125V
- **Current (max.):** 2.5A at 2 Circuit/26 AWG
- **Contact Resistance (max.):** 20 milliohms
- **Dielectric Withstanding Voltage:** 250V AC
- **Insulation Resistance (min.):** 100 Megaohms

### Ordering Information

<table>
<thead>
<tr>
<th>Series/ Part No.</th>
<th>Component</th>
<th>Circuits</th>
<th>Plating</th>
<th>Description</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>50058-8000/8100</td>
<td>Crimp Terminal, Female</td>
<td>-</td>
<td>Tin</td>
<td>28 to 32 AWG</td>
<td>-</td>
</tr>
<tr>
<td>50079-8000/8100</td>
<td>-</td>
<td>-</td>
<td>Gold 0.38µm</td>
<td>26 to 28 AWG</td>
<td>-</td>
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<tr>
<td>50079-8025</td>
<td>Crimp Terminal, male</td>
<td>-</td>
<td>Tin</td>
<td>Wire-to-Wire, 20 to 28 AWG</td>
<td>-</td>
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<tr>
<td>50125-8000/8100</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Wire-to-Wire, 20 to 28 AWG</td>
<td>-</td>
</tr>
<tr>
<td>50133-8000/8100</td>
<td>Housing</td>
<td>2 to 15 and 17</td>
<td>-</td>
<td>Wire-to-Wire/Wire-to-Board</td>
<td>-</td>
</tr>
<tr>
<td>50107-xx00</td>
<td>Plug Housing</td>
<td>2 to 10</td>
<td>Tin</td>
<td>Through hole</td>
<td>Natural</td>
</tr>
<tr>
<td>50304-xx10</td>
<td>Header</td>
<td>2 to 15</td>
<td>Tin</td>
<td>Through hole, Vertical</td>
<td></td>
</tr>
<tr>
<td>50304-xx10</td>
<td>-</td>
<td>2 to 15</td>
<td>Gold 0.38µm</td>
<td>Through hole, Right-Angle</td>
<td></td>
</tr>
<tr>
<td>50304-xx50</td>
<td>-</td>
<td>2 to 15 and 17</td>
<td>Tin</td>
<td>SMT, Right-Angle</td>
<td></td>
</tr>
<tr>
<td>53261-xx71</td>
<td>2 to 15</td>
<td>Gold 0.38µm</td>
<td>SMT, Right-Angle</td>
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<tr>
<td>53261-70xx</td>
<td>2 to 15</td>
<td>Tin</td>
<td>SMT, Vertical</td>
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<tr>
<td>53398-xx71</td>
<td>2 to 15</td>
<td>Tin</td>
<td>SMT, Vertical</td>
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<td></td>
</tr>
<tr>
<td>53398-xx67</td>
<td>Header with vacuum cap</td>
<td>2 to 6</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*For 53398, optional vacuum cap : 2 to 6 Circuit/Natural
*Please contact Molex for available color in circuit size

www.molex.com/product/picoblade.html

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