Available in 1.00, 1.50 and 2.00mm pitch, Pico-Lock Wire-to-Board Connector System is ideal for applications requiring ultra-low profile, high-current and secure locking.

**Features and Advantages**

- **Beveled header in pin design**
  - Provides smooth mating and pin-and-contact protection

- **Top friction locks**
  - Provide additional mating retention and visual mating assurance

- **Side positive locks**
  - Ensure secure mating retention with additional space savings compared to top-style locks

- **Supports up to 6.5A current applications**
  - Enables superior performance in compact design

- **Two types of crimp barrel**
  - Allows wide range of wire gauge selection depending on customer needs

- **Ultra-low-profile mated height**
  - Provides space savings

- **Wide robust-fitting nails (solder tabs)**
  - Offer secure PCB retention and additional mechanical stability

- **Mating guide for polarization**
  - Prevents mis-mating while guiding the housing into the header

- **Ultra-low mated height of 2.60mm is less than half the height of other micro connectors**
  - Enables customers to save valuable space

- **Side positive lock**
  - Provides secure locking system and extra height advantage compared to competitors

**Markets and Applications**

**Automotive**
- Infotainment
- Interior electronics
- Heads-up display
- Control units
- Black boxes

**Consumer**
- LED/LCD TVs
- Notebook PCs
- Tablets
- Gaming equipment
- LED lightings
- Heaters/fans

**Industrial**
- Smart meters
- Factory automation
- Power supplies
- Security/Surveillance devices
- Transformers

**Telecommunications/Networking**
- Wireless modems
- Servers

**Automotive infotainment**

**Smart meters**

**Security cameras**

**Factory automation**
Pico-Lock Wire-to-Board Connector System

Specifications

REFERENCE INFORMATION
Packaging:
- Header (Embossed tape)
- Housing (Bag)
- Crimp Terminal (Reel)
Designed In: millimeters
RoHS: Yes
Halogen Free: Low-halogen

MECHANICAL
Housing (Positive Lock) Strength (min.):
- 1.00mm Pitch: 5N (0.50kgf)
- 1.50mm Pitch: 10N (1.02kgf)
- 2.00mm Pitch: 19.8N (2.0kgf)
Crimp Terminal Retention Force (min.):
- 1.00mm: 4N
- 1.50mm: 6.7N
- 2.00mm: 9.8N
Durability (min.): 30 cycles

ELECTRICAL
Voltage (max.):
- 1.00mm and 1.50mm: 150V
- 2.00mm: 250V
Current (max.): 3.5A per circuit
* see more detail at derating table
Contact Resistance (max.): 20 milliseconds
Dielectric Withstanding Voltage:
- 500V AC (rms) for 1 minute (1.00 and 1.50mm)
- 800V AC (rms) for 1 minute (2.00mm)
Insulation Resistance (min.): 1000 Megohms

PHYSICAL
Housing/Header: Polyamide (PA), UL 94V-0, Black
Contact: Copper Alloy
Plating:
- Contact Area — Gold (Au)
- Solder Tail Area — Gold (Au)
- Underplating — Nickel (Ni)
Operating Temperature: -40 to +105°C

Ordering Information

<table>
<thead>
<tr>
<th>Pitch (mm)</th>
<th>Circuit Size</th>
<th>Applicable Wire Gauge (AWG)</th>
<th>Housing</th>
<th>PCB Header</th>
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<tbody>
<tr>
<td>2.00</td>
<td>2 to 6</td>
<td>20 to 26 (Terminal 205343)</td>
<td>205341</td>
<td>205338</td>
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<td>1.50</td>
<td>2 to 12</td>
<td>24 to 28 (Terminal 504052-0098)</td>
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<td>28 to 30 (Terminal 503765)</td>
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</table>

Notes:
1) Values are for reference only.
2) Current deratings are based on not exceeding 30°C temperature.
3) Temperature rise is measured in barrel area of crimp terminal.
4) PCB trace design can greatly affect temperature rise results.
5) Data is for all circuits powered.

*Derating table (For electrical specifications)

1.00mm Pitch Pico-Lock rated current (max.)

<table>
<thead>
<tr>
<th>Wire Size (AWG)</th>
<th>2-Circuit</th>
<th>4-Circuit</th>
<th>6-Circuit</th>
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<tr>
<td>28</td>
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1.50mm Pitch Pico-Lock rated current (max.)

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2.00mm Pitch Pico-Lock rated current (max.)

<table>
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<th>4-Circuit</th>
<th>5-Circuit</th>
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www.molex.com/link/picolock.html