Ideal for tight-packaging applications in all industries, the Micro-Lock 1.25mm pitch system offers the smallest overall size and highest current-carrying capability of any similar pitch positive-lock system, while also providing a wide range of mating configurations and superior pin and terminal protection.

Available in single and dual rows in both straight and right-angle configurations, the system is ideal for any application that requires space savings and mating variation.

The Micro-Lock 1.25mm pitch system offers many of the same features as Molex’s Micro-Lock 2.00mm pitch system. These include an outer thumb-latch design with two locking points for ease-of-use and secure contact, and a mating design that protects the pins and terminals while providing low insertion force. Key differences between the two systems are size and current rating. The Micro-Lock 1.25 system is about 75% smaller, and is rated at 1.5A versus 3.0A for Micro-Lock 2.0.

The Micro-Lock 1.25mm family is available in 2-16 circuits for single row, and 16-40 circuits for dual row. The system offers low-halogen material not only for connectors, but also in the wire-harness material used. The system comes standard in natural color material, with custom versions available in different colors to support certain mating and application requirements.

Features and Benefits

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crash-proof pin protection feature</td>
<td>Prevents header pins from being bent or crushed, even during angled mating</td>
</tr>
<tr>
<td>Compact size and low profile</td>
<td>Space savings</td>
</tr>
<tr>
<td>Low insertion force with tin plating</td>
<td>Easy mating/unmating and cost-effective design versus gold plating</td>
</tr>
<tr>
<td>Wide mating latch with two-point positive lock</td>
<td>Secure mating retention, additional mechanical stability and good “click” feeling</td>
</tr>
<tr>
<td>Polarization/mating guide features</td>
<td>Provides secure mating retention</td>
</tr>
<tr>
<td>Low-halogen housing and wire-harness material</td>
<td>Meets environmental standards</td>
</tr>
</tbody>
</table>

Markets and Applications

- Data Communications
  - Desktop PC
  - Storage Device
  - Printer
  - Fax
- Gaming
  - Slot/Poker Machine
  - Pachinko Machine
- Lighting
  - Projector
  - Transformer
- Medical
  - CT Scanner
  - Portable Device
- Car Electronics
  - Audio
  - Navigation
- Consumer
  - LED TV
  - Home Audio
  - Set-Top Box
  - Rice Cooker
- Network/Telecom
  - Hub/Router
  - Modem
- Personal Computer
Specifications

REFERENCE INFORMATION
Designed In: Millimeters
Packaging: Headers (Embossed Tape); Housing (Bag); Terminal (Reel)
RoHS: Yes
Halogen Free: Yes
Glow Wire Compliant: No

ELECTRICAL
Voltage (max.): 50V AC/DC
Current (max.): 1.5A
Contact Resistance: 20 milliohms max
Dielectric Withstanding Voltage: 500V AC for one minute
Insulation Resistance: 100 Megaohm min.

PHYSICAL
Terminal: Copper Alloy, Tin-Plated
Housing/Header: PBT
Header Pin: Brass, Tin-Plated
Operating Temperature: -40 to +85°C

MECHANICAL
Durability (min.): 30 cycles

Product Features

“Crash-Free” Mating

Guard wall and slits molded into the housing and header (above left) help to provide mating alignment. This also prevents the housing from crashing into and damaging the pins during mating—even if the housing is forced in at an angle—which can happen in competitive designs. Blade terminals with a pin guard feature (above right) provide further pin protection and stability, especially versus most tuning-fork designs, which are more exposed to damage.

Two-Point Latch Design
With Good “Click” Feeling
And Locking Force

Robust thumb-latch design provides easy operation and two points of positive-lock contact for secure mating retention. The design also provides a strong “click” feeling for mating assurance.

Ordering Information

Crimp Terminal

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Wire Range</th>
<th>Insulation Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>504185-1000</td>
<td>AWG 26-30</td>
<td>0.78 – 1.02mm</td>
</tr>
</tbody>
</table>

Housing

<table>
<thead>
<tr>
<th>Order No. Single Row</th>
<th>Order No. Dual Row</th>
</tr>
</thead>
<tbody>
<tr>
<td>504193-**00</td>
<td>504186-**00</td>
</tr>
</tbody>
</table>

Single-Row Headers

<table>
<thead>
<tr>
<th>Order No. Vertical</th>
<th>Order No. Right Angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>504194-**70</td>
<td>504195-**70</td>
</tr>
</tbody>
</table>

Dual-Row Headers

<table>
<thead>
<tr>
<th>Order No. Vertical</th>
<th>Order No. Right Angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>504187-**70</td>
<td>504189-**70</td>
</tr>
</tbody>
</table>

*Note: Replace ** with circuit sizes 02 through 16
*Note: Replace ** with even circuit sizes 16 through 40

www.molex.com/product/microlock.html