molex

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.

Micro-Lock™
1.25mm Pitch
SMT Wire-toBoard System,
Single and Dual
Rows, Positive
Lock

504185 Crimp Terminal

504193 Housing,

Single Row

504186 Housing, Dual Row

504194 Vertical Header,

Single Row

504187 Vertical Header, Dual Row

504195 Right-Angle

Header, Single Row

504189 Right -Angle

Header, Dual Row



Features and Benefits

Crash-proof pin protection feature	Prevents header pins from being bent or crushed, even during angled mating
Compact size and low profile	Space savings
Low insertion force with tin plating	Easy mating/unmating and cost-effective design versus gold plating
Wide mating latch with two-point positive lock	Secure mating retention, additional mechanical stability and good "click" feeling
Polarization/mating guide features	Provides secure mating retention

Markets and Applications

Low-halogen housing and wire-harness material

- > Data Communications
 - -Desktop PC
 - -Storage Device
 - -Printer
 - -Fax
- > Gaming
 - -Slot/Poker Machine
 - -Pachinko Machine



- > Lighting
 - -Projector
 - -Transformer
- Medical
 - -CT Scanner
 - -Portable Device

Printer

- > Car Electronics
 - -Audio
 - -Navigation



> Consumer

Meets environmental standards

- -LED TV
- -Home Audio
- -Set-Top Box
- -Rice Cooker
- > Network/Telecom
 - -Hub/Router
 - -Modem

Personal Computer



Game Machine

molex

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.

MECHANICAL

Durability (min.): 30 cycles

PHYSICAL

Terminal: Copper Alloy, Tin-Plated Housing/Header: PBT Header Pin: Brass, Tin-Plated Operating Temperature:

-40 to+85°C

Micro-Lock™ 1.25mm Pitch **SMT Wire-to-Board System,** Single and Dual **Rows, Positive** Lock

504185 Crimp Terminal

504193 Housing, Single Row

504186 Housing, Dual Row

504194 Vertical Header,

Single Row

504187 Vertical Header,

Dual Row

504195 Right-Angle

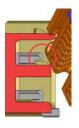
Header, Single Row

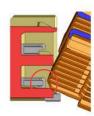
504189 Right -Angle

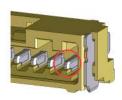
Header, Dual Row

Product Features

"Crash-Free" Mating

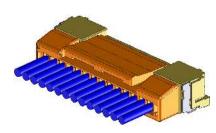






Guard wall and slits molded into the housing and header (above left) help to provide mating alignment. This also prevents the housing from crashing into and damaging the pins during mating—even if the housing is forced in at an angle—which can happen in competitive designs. Blade terminals with a pin 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

Order No.	Wire Range	Insulation Diameter
<u>504185-1000</u>	AWG 26-30	0.78 – 1.02mm

Housing

Order No. Single Row	Order No. Dual Row
<u>504193-**00</u>	<u>504186-**00</u>

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

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

Single-Row Headers

Order No. Vertical	Order No. Right Angle
<u>504194-**70</u>	<u>504195-**70</u>

^{*}Note: Replace ** with circuit sizes 02 through 16

Dual-Row Headers

Order No. Vertical	Order No. Right Angle
<u>504187-**70</u>	<u>504189-**70</u>

^{*}Note: Replace ** with even circuit sizes 16 through 40