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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 thumblatch 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 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-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



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Prevents	header	pins from	beina	bent or	

Prevents header pins from being bent of crushed, even during angled mating

Space savings

Easy mating/unmating and cost-effective design versus gold plating

Secure mating retention, additional mechanical stability and good "click" feeling

Provides secure mating retention

Features and Benefits

Crash-proof pin protection feature

Compact size and low profile

Low insertion force with tin plating

Wide mating latch with two-point positive lock

Polarization/mating guide features

Markets and Applications

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



Game Machine

- > Lighting
- -Projector
- -Transformer
- > Medical
- -CT Scanner -Portable Device
- > Car Electronics -Audio -Navigation



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

> Consumer

Personal Computer



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Specifications

REFERENCE INFORMATION

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

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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.

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

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.

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

www.molex.com/product/microlock.html