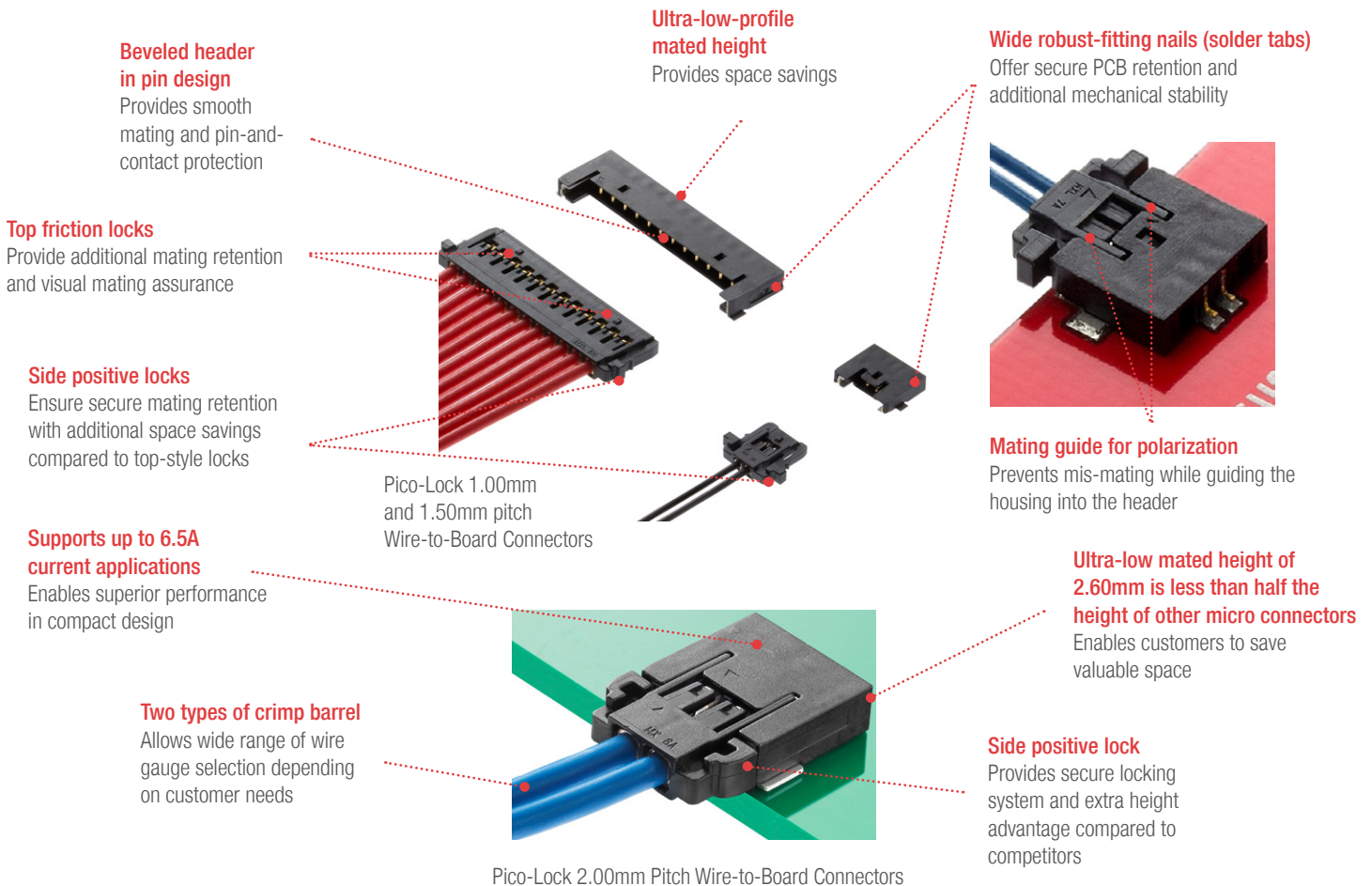


Pico-Lock Wire-to-Board Connector System

molex

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



Markets and Applications

Automotive

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

Industrial

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

Consumer

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

Telecommunications/Networking

- Wireless modems
- Servers



Automotive infotainment



Smart meters



Security cameras



Factory automation

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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(min.): 5N (0.50kgf)

1.50mm Pitch(min.): 10N (1.02kgf)

2.00mm Pitch (min.): 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.): 150V (1.00 and 1.50mm)

Voltage (max.): 250V (2.00mm)

Current (max.): 3.5A per circuit

* see more detail at derating table

Contact Resistance(max.): 20 milliohms

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

*Derating table (For electrical specifications)

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

Wire Size (AWG)	Current (A)		
	2-Circuit	4-Circuit	6-Circuit
28	2.5	2.0	1.5
30	2.0	1.5	1.5

1.50mm Pitch Pico-Lock rated current (max.)

Wire Size (AWG)	Current (A)			
	2-Circuit	4-Circuit	8-Circuit	12-Circuit
24	3.5	3.0	2.5	2.5
26	3.0	2.5	2.0	2.0
28	2.5	2.0	2.0	1.5
30	2.5	2.0	1.5	1.5
32	2.0	1.5	1.5	1.0

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

Wire Size (AWG)	Current (A)				
	2-Circuit	3-Circuit	4-Circuit	5-Circuit	6-Circuit
20	6.5	5.5	5.5	5.0	5.0
22	5.0	5.0	4.5	4.5	4.0
24	4.5	4.0	3.5	3.5	3.5
26	3.5	3.5	3.0	3.0	3.0

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.

Ordering Information

Pitch (mm)	Circuit Size	Applicable Wire Gauge (AWG)	Housing	PCB Header
2.00	2 to 6	20 to 26 (Terminal 205342)	205341	205338
1.50	2 to 12	24 to 28 (Terminal 504052-0098)	504051	504050
		30 to 32 (Terminal 504052-0298)		
1.00	2 to 6	28 to 30 (Terminal 503765)	503764	503763

www.molex.com/link/picolock.html

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