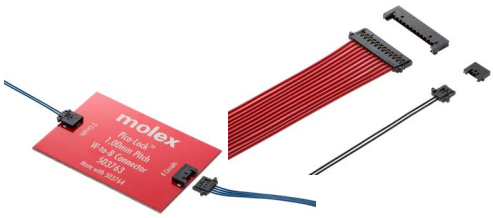
Pico-Lock 1.00 and 1.50mm Pitch Wire-to-Board Connector System

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



Pico-Lock 1.00mm and 1.50mm pitch Wire-to-Board Connector System

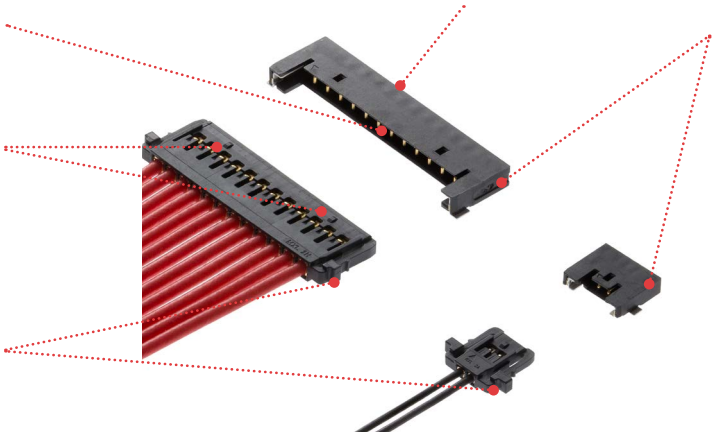
Features and Advantages

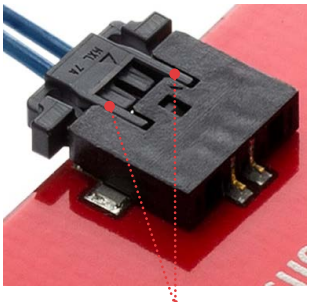
Beveled header in pin design
Provides smooth mating and pin-and-contact protection

Ultra-low-profile mated height
Provides space savings

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

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

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

Markets and Applications

Automotive
- Infotainment
- Interior electronics
- Heads-up display
- Control units

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

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

Telecommunications/Networking
- Wireless modems



Automotive infotainment



Smart meters



Security cameras



Factory automation

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Specifications

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

MECHANICAL
Housing (Positive Lock) Strength:
1.00mm Pitch(min.): 5N (0.50kgf)
1.50mm Pitch(min.): 10N (1.02kgf)
Pin Retention Force(min.): 0.5N (0.05kgf)
Durability (min.): 30 cycles

ELECTRICAL
Voltage (max.): 150V
Current (max.): 3.0A per circuit
* see more detail at derating table
Contact Resistance(max.): 20 milliohms
Dielectric Withstanding Voltage:
500V AC (rms) for 1 minute
Insulation Resistance(min.): 1000 Megohms

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

*Derating table (For electrical specifications)

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

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

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

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

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 (1.00mm pitch)

Circuit Size	Applicable Wire Gauge	Housing	PCB Header
2	28 to 30 (Terminal 503765-0098)	503764-0201	503763-0291
3 (New)		503764-0301	503763-0391
4		503764-0401	503763-0491
5 (New)		503764-0501	503763-0591
6 (New)		503764-0601	503763-0691

Ordering Information (1.50mm pitch)

Circuit Size	Applicable Wire Gauge	Housing	PCB Header
2 (New)	24 to 28 (Terminal 504052-0098) 30 to 32 (Terminal 504052-0298)	504051-0201	504050-0291
3 (New)		504051-0301	504050-0391
4		504051-0401	504050-0491
5		504051-0501	504050-0591
6		504051-0601	504050-0691
7		504051-0701	504050-0791
8		504051-0801	504050-0891
9 (New)		504051-0901	504050-0991
10		504051-1001	504050-1091
11 (New)		504051-1101	504050-1191
12		504051-1201	504050-1291

www.molex.com/link/picolock.html

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