

Pico-Lock SMT Wire-to-Board System, With Positive Side Locks

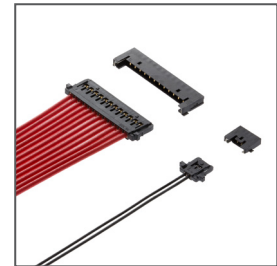
Right Angle, 1.00 and 1.50mm Pitch, Single Row

molex®

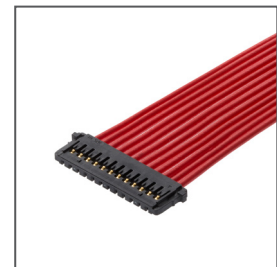
Available in both 1.00 and 1.50mm pitch, Pico-Lock Wire-to-Board is ideal for any application requiring ultra low profile, high current and secure locking connector system

Features and Benefits

Ultra-low-profile mated heights	Space savings
Side positive locks	Secure mating retention and additional space savings
Up to 3.0A current rating (1.50 pitch version)	Capable to run more current while saving PCB space
Wide robust fitting nails (solder tabs)	Secure PCB retention and additional mechanical stability
Polarization/mating guide features	Prevents mismating while guiding the housing into the header
Top friction locks	Additional mating retention and visual mating assurance



Pico-Lock 1.00 and 1.50mm Pitch



Pico-Lock 1.50mm Pitch

Applications

Commercial/Industrial

Smart Meters
Factory Automation
Power Supplies
Security/Surveillance

Personal Computers

Notebook
Tablet

Automotive

Infotainment
Interior Electronics
HOD (Hands off detention)

LED/LCD Displays

PC
TV

Network/Telecom

Wireless Modem

Lighting

LED Lamp
Transformer

Gaming



Automotive



LED TV



Smart Meters



Security Camera

Specifications

REFERENCE INFORMATION

Packaging: Header (Embossed Tape); Housing (Bag); Terminal (reel)
Designed In: mm
RoHS: Yes
Halogen Free: Low Halogen

MECHANICAL

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

ELECTRICAL

Voltage (max.): 150V
Current (max.): 3.0A
* see more detail at derating table
Contact Resistance: 20 milliohms max.
Dielectric Withstanding Voltage:
500V AC (r.m.s.) for 1 minute
Insulation Resistance: 1,000 Megohm min.

PHYSICAL

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

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Additional Product Features

Derating Information

1.0mm Pitch Pico-Lock Rated Current (Max)

Wire Size (AWG)	Current (A)	
	2-Circuit	4-Circuit
28	2.5	2.0
32	2.0	1.5

Notes: 1) Values are for Reference only. 2) Current deratings are based on not exceeding 30C 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.

1.5mm 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

Ordering Information

1.00mm Pitch				
Circuit Size	Applicable Wire Gauge	Terminal	Housing	PCB Header
2	AWG 28 to 30	503765-0098	503764-0201	503763-0291
4			503764-0401	503763-0491

1.50mm Pitch			
Applicable Wire Gauge and Terminal	Circuit Size	Housing	PCB Header
24 to 28 504052-0098 30 to 32 504052-0298	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
	10	504051-1001	504050-1091
	12	504051-1201	504050-1291

www.molex.com/link/picolock.html

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