



The Pico-Lock 1.50mm pitch wire-to-board system offers an ideal combination of low profile, high current capacity and durable locks for consumer applications including LED TVs, Notebooks and Tablet PCs

The Pico-Lock system is able to meet these requirements by offering a 1.50mm pitch that can accommodate 3.0A, and a unique side positive-lock design to achieve the ultra low profile. The system also offers other robust features such as friction locks for additional mating assurance and visual mating confirmation; and a wide solder tab that wraps up into the header and around the housing for additional PCB retention and mechanical system assurance.

A small, thin system like this might normally be difficult for operators to mate. A guide rib on the housing addresses this concern by providing polarization along with mating guidance.

The system is available in 6-10 circuit sizes and RoHS and low-halogen compliant material. Contacts are gold-plated for durability and reliable electrical performance.

For additional information see Molex's website at:
www.molex.com/link/picolock.html

**Pico-Lock™
1.50mm Pitch
SMT Wire-to-
Board System,
2.00mm Height,
Positive Side
Locks**



Pico-Lock 1.50mm Pitch
Wire-to-Board Mated System

Features and Benefits

Ultra-low-profile mated height (2.00mm)	Space savings
Side positive lock	Secure mating retention and additional space savings
Up to 3 amperes current rating	High signal-line current capability
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

Markets and Applications

- Personal Computers
 - Notebook
 - Tablet
- LED/LCD Displays
 - PC BLU Unit
 - TV BLU Unit



Notebook PC



Desktop PC Display



LED TV

Specifications

REFERENCE INFORMATION

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

ELECTRICAL

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

MECHANICAL

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

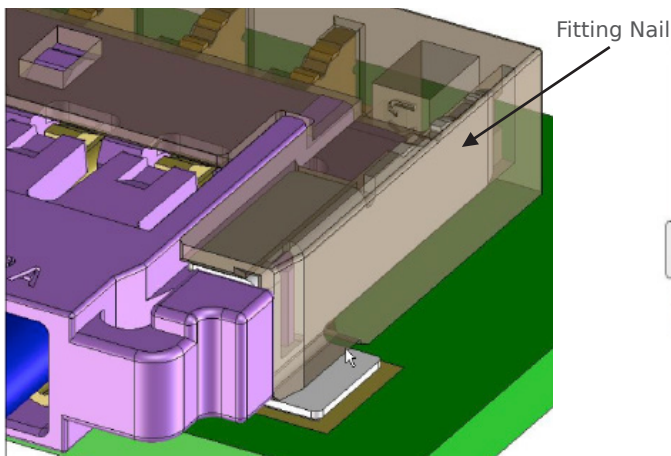
PHYSICAL

Housing/Header: Heat-proof resin
Contact: Copper Alloy
Plating:
Contact Area — Gold
Solder Tail Area — Gold
Underplating — Nickel
Operating Temperature:
-25 to 85°C

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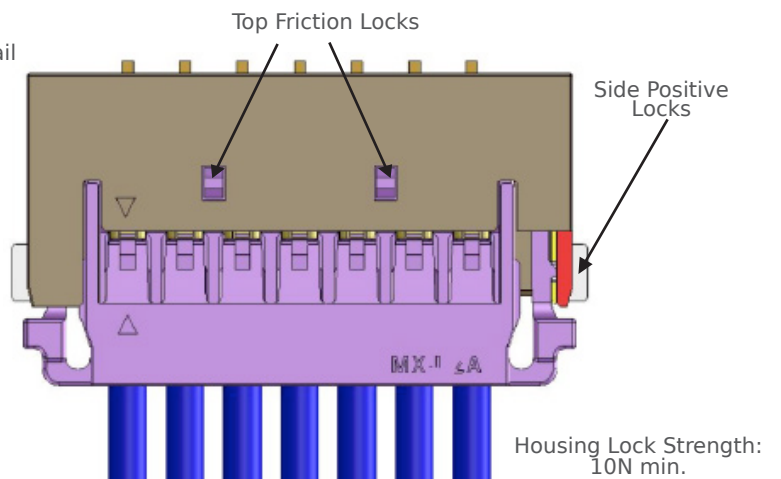
Additional Product Features

Robust Fitting Nail Design



Fitting nails wrap around the header and housing to provide secure PCB retention support and added mechanical stability

High Retention Force Locking Structure



Side positive locks provide secure mating retention and space savings compared to top-style locks

Ordering Information

Crimp Terminal

Order No.	Wire Gauge
504052-0098	AWS # 24- 28
504052-0298	AWS # 30, 32

Crimp Housings

Order No.	Circuit Size
504051-0601	6
504051-0701	7
504051-0801	8
504051-1001	10

SMT PCB Headers

Order No.	Circuit Size
504050-0691	6
504050-0791	7
504050-0891	8
504050-1091	10