



Available in both 1.00 and 1.50mm pitch versions, the Pico-Lock™ wire-to-board system offers an ideal combination of low profile, high current and durable locking for any application requiring space savings and secure mating retention.

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)	Provides mating guidance and pin/contact protection
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

- › Commercial/Industrial
 - Smart Meters
 - Factory Automation
 - Power Supplies
 - Security/Surveillance
- › Personal Computers
 - Notebook
 - Tablet
- › Automotive
 - Infotainment
 - Interior Electronics
- › LED/LCD Displays
 - PC
 - TV
- › Network/Telecom
 - Wireless Modem
- › Lighting
 - LED Lamp
 - Transformer
- › Gaming



Notebook PC



Automotive



Game Machine



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.):
1.00mm Pitch: 1.5A
1.50mm Pitch: 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:
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

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:
-25 to +85°C

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

1.00mm Pitch Type

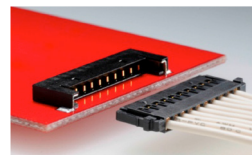
503765 Crimp Terminal
503764 Crimp Housing
503763 Right-Angle Header

1.50mm Pitch Type

504052 Crimp Terminal
504051 Crimp Housing
504050 Right-Angle Header



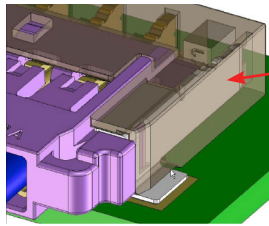
Pico-Lock 1.00mm Pitch



Pico-Lock 1.50mm Pitch

Additional Product Features

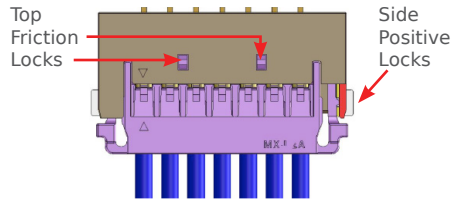
Robust Fitting Nail Design



Fitting Nail

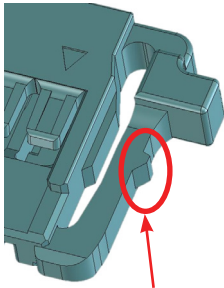
Fitting nails wrap around the header and housing to provide secure PCB retention support and added mechanical stability. (1.50mm pitch version shown)

High Retention Force Locking Structure



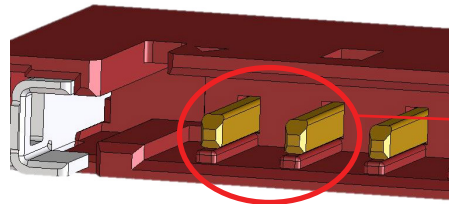
Side positive locks provide secure mating retention and space savings compared to top-style locks. (1.50mm pitch version shown)

Side Positive Locks

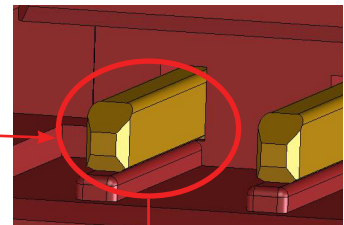


Spring-type side positive locks provide secure locking and space savings. (1.00mm pitch version shown)

Pin/Contact Protection Feature



Detail



Header pins have a beveled shape and are set back on housing ridge to provide mating guidance and protection. (1.00mm pitch version shown)

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

1.00mm Pitch Type

- 503765** Crimp Terminal
- 503764** Crimp Housing
- 503763** Right-Angle Header

1.50mm Pitch Type

- 504052** Crimp Terminal
- 504051** Crimp Housing
- 504050** Right-Angle Header

Ordering Information

Crimp Terminal

1.00mm Pitch	
Order No.	Wire Gauge (AWG)
503765-0098	28 to 30

1.50mm Pitch	
Order No.	Wire Gauge (AWG)
504052-0098	24 to 28
504052-0298	30 to 32

Crimp Housings

1.00mm Pitch	
Order No.	Circuit Size
503764-0201	2
503764-0401	4

1.50mm Pitch	
Order No.	Circuit Size
504051-0401	4
504051-0601	6
504051-0701	7
504051-0801	8
504051-1001	10
504051-1201	12

Right Angle SMT Headers

1.00mm Pitch	
Order No.	Circuit Size
503763-0291	2
503763-0491	4

1.50mm Pitch	
Order No.	Circuit Size
504050-0491	4
504050-0691	6
504050-0791	7
504050-0891	8
504050-1091	10
504050-1291	12