

# Pico-Clasp Wire-to-Board Connectors

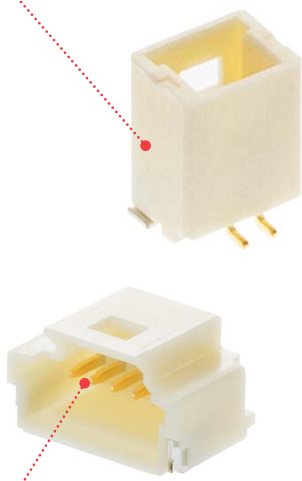
**molex**

Pico-Clasp 1.00mm pitch Wire-to-Board connectors offer a variety of mating styles and orientations plated in Tin or Gold to provide design flexibility in a vast array of compact applications. Newly added 0.38 and 0.76µm Gold Plated Versions.

## Features and Advantages

### Inner Friction Lock

Space saving

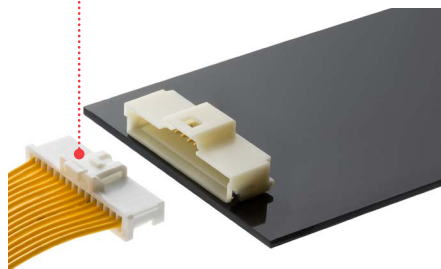


### Thick gold plating options (0.1, 0.38 and 0.76µm)

Superior reliability and durability in harsh environments

### Inner Positive Lock

Secure mating retention. Easy to mate and unmate

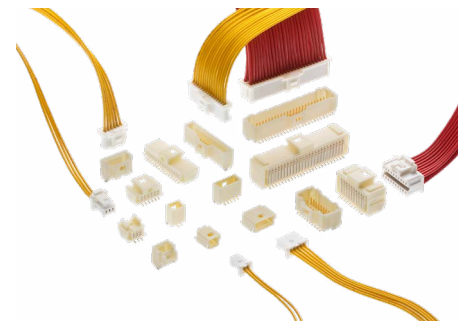


### Smallest pitch for positive lock Wire-to-Board crimp System

Provides space savings for mounting other components

### SMT Mounting

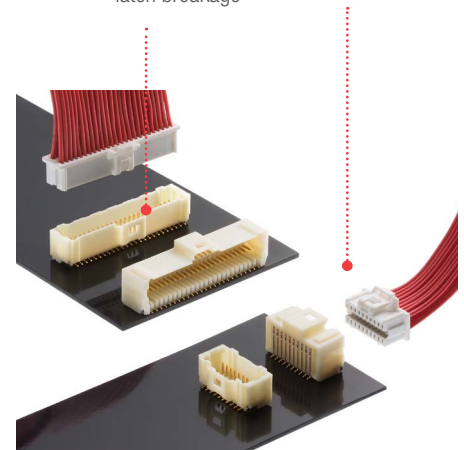
Provides assembly and cost efficiencies. Automated assembly reduces manual labor processes



Pico-Clasp Connectors in Single and Dual-Row Configurations

### Inner Positive Lock

Offers secure mating retention with low mating and unmating forces. Prevents wire tangling and latch breakage



## Applications

### Consumer

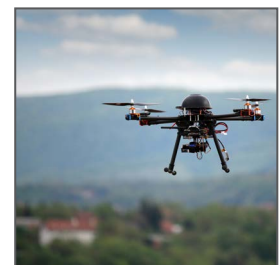
- Drone, UAV
- Smart meter
- Air conditioner
- TV
- Mobile POS Terminals
- Any other innovative electronic devices



Mobile POS Terminals



Servo Motor



Drone

### Medical

- Patient monitoring



Patient Monitor

### Industrial

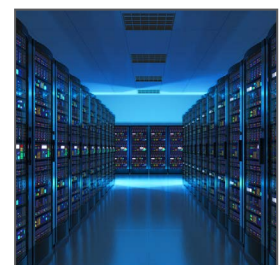
- Servo motor



Automotive module

### Automotive

- Electronic module



Server

### Telecommunications / Networking

- Server

## Specifications

### REFERENCE INFORMATION

Packaging: Terminals – Reel  
Housings, Retainers – Bag  
Headers – Emboss tape on reel  
Designed In: Millimeters  
RoHS: Yes  
Glow Wire Compliant: No  
Halogen Free: No

### ELECTRICAL

Voltage (max.): 50V  
Current (max.): See Derating information  
Contact Resistance: 20 milliohms Max.  
Dielectric Withstanding Voltage:  
250V AC, 1 minute  
Insulation Resistance:  
100 Megaohms min.  
AWG: 28, 30, 32  
UL: 1571

### MECHANICAL

Durability (min.): 30 cycles

### PHYSICAL

Terminal: Phosphor Bronze  
Housing: Nylon  
Plating: Tin or 0.1/0.38/0.76µm Gold  
Operating Temperature: -40 to +105°

## Derating Information

### SINGLE ROW

AWG#	Amps[A]			
	2-circuit	5-circuit	10-circuit	15-circuit
28	2.0	1.5	1.0	1.0
30	1.5	1.0	1.0	1.0
32	1.5	1.0	0.8	0.8

### DUAL ROW

AWG#	Amps[A]	
	20-circuit	50-circuit
28	1.0	
30	1.0	
32	0.8	

- (1) Values are for REFERENCE ONLY.
- (2) Current deratings are based on not exceeding 30° Temperature.
- (3) PCB trace design can greatly affect temperature rise results in Wire-to-Board applications.
- (4) Data is for all circuits powered.
- (5) All data are interpolated information.

## Ordering Information

Circuit	1 or 2 Rows	Plating	Locking: Friction/ Positive	Vertical	Right Angle	Crimp Housing	Terminal	AWG
2 to 15	Single	Tin	2-5 circuit : Friction 6-15 : Positive Inner	<a href="#">501331</a>	<a href="#">501568</a>	501330	<a href="#">501334</a>	28 to 32
		0.1µm Gold		<a href="#">504449</a>	<a href="#">202396</a>		<a href="#">501193-3000</a>	
		0.38µm Gold		<a href="#">203556</a>	<a href="#">203558</a>		<a href="#">501193-6000</a>	
		0.76µm Gold		<a href="#">203557</a>	<a href="#">203559</a>		<a href="#">501193-5000</a>	
3 to 5	Single	Tin	Positive Outer	<a href="#">501940</a>	<a href="#">501953</a>	501939	<a href="#">501334</a>	
		0.1µm Gold		<a href="#">501940</a>	<a href="#">501953</a>		<a href="#">501193-3000</a>	
		0.38µm Gold		<a href="#">203560</a>	<a href="#">203562</a>		<a href="#">501193-6000</a>	
		0.76µm Gold		<a href="#">203561</a>	<a href="#">203563</a>		<a href="#">501193-5000</a>	
20, 30, 40, 50	Dual	0.1µm Gold	Positive Inner	<a href="#">501190</a>	<a href="#">501571</a>	501189	<a href="#">501193-3000</a>	
		0.38µm Gold		<a href="#">203564</a>	<a href="#">203566</a>		<a href="#">501193-6000</a>	
		0.76µm Gold		<a href="#">203565</a>	<a href="#">203567</a>		<a href="#">501193-5000</a>	

[www.molex.com/link/picoclash.html](http://www.molex.com/link/picoclash.html)