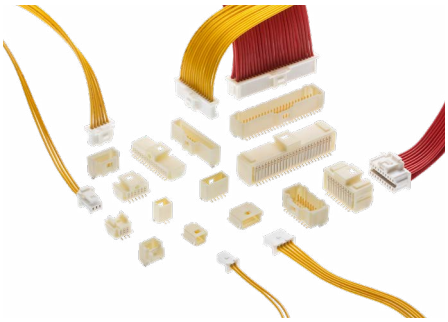
Pico-Clasp Wire-to-Board Connectors

molex

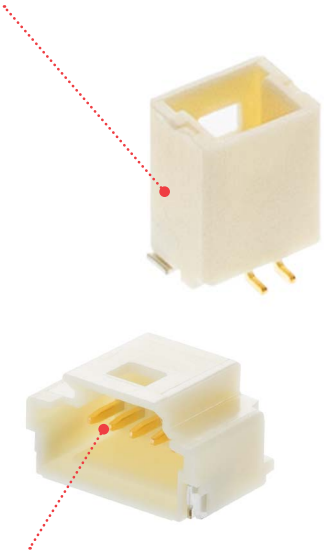
Pico-Clasp 1.00mm pitch Wire-to-Board connectors offer a variety of mating styles and orientations plated in Tin or Gold to provide design flexibility in a vast array of compact applications. Newly added 0.38 and 0.76µm Gold Plated Versions.



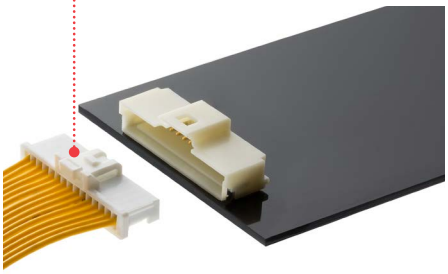
Pico-Clasp Connectors in Single and Dual-Row Configurations

Features and Advantages

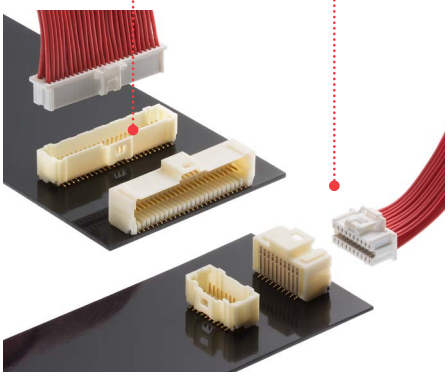
Inner Friction Lock
Space saving



Inner Positive Lock
Secure mating retention.
Easy to mate and unmate



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



Thick gold plating options (0.1, 0.38 and 0.76µm)
Superior reliability and durability in harsh environments

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

Applications

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

Medical
- Patient monitoring

Industrial
- Servo motor

Automotive
- Electronic module

Telecommunications / Networking
- Server



Mobile POS Terminals



Servo Motor



Drone



Patient Monitor



Automotive module



Server

Pico-Clasp Wire-to-Board Connectors

molex

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	501331	501568	501330	501334	28 to 32
		0.1µm Gold	6-15 : Positive Inner	504449	202396		501193-3000	
		0.38µm Gold		203556	203558		501193-6000	
		0.76µm Gold		203557	203559		501193-5000	
3 to 5	Single	Tin	Positive Outer	501940	501953	501939	501334	
		0.1µm Gold		501940	501953		501193-3000	
		0.38µm Gold		203560	203562		501193-6000	
		0.76µm Gold		203561	203563		501193-5000	
20, 30, 40, 50	Dual	0.1µm Gold	Positive Inner	501190	501571	501189	501193-3000	
		0.38µm Gold		203564	203566		501193-6000	
		0.76µm Gold		203565	203567		501193-5000	

www.molex.com/link/picoclasp.html

Molex is a registered trademark of Molex, LLC in the United States of America and may be registered in other countries; all other trademarks listed herein belong to their respective owners.

Order No. 987651-6111 Rev. 3 APN/0k/GF/2018.11
©2018 Molex