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# Micro-Lock Plus 1.25mm-Pitch Connector System >

Ideal for compact applications, the Micro-Lock Plus 1.25mm-Pitch Connector System provides electrical and mechanical reliability, design flexibility and secure mating retention to overcome challenges in high-temperature designs.

# FEATURES AND ADVANTAGES

**Provides secure mating retention. Ensures proper mating** Wide positive latch that delivers audible click

Strengthens lock for more reliable connection

Inner lock for dual-row version; outer lock for single-row version and delivers secure mating retention

**Meets other industry requirements. Withstands harsh environments** Withstands up to 105°C operating temperature

### Offers design flexibility

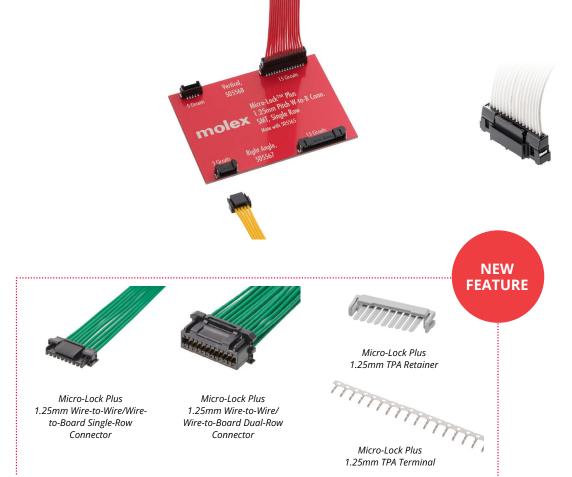
A wire-to-wire solution and single and dual rows, 2 to 42 circuits, vertical and horizontal plug configurations

**Provides secure PCB retention** and strain relief to solder joints Robust metal solder tab

Offers secure contact and terminal retention Dual-contact terminal design Reduces assembly error that results in terminal back-outs; helps ensure secure terminal retention; can use existing mating parts Optional terminal position assurance (TPA)

## Helps prevent dust and moisture ingress Potting liquid (up to 6.00mm height) Note: more potting

information here.



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# **MARKETS AND APPLICATIONS**

**Datacom** Servers

### **Appliances**

White goods Gaming machines Drones Air conditioners Laser printers Vacuum cleaners Desktop PCs Power tools

#### Automotive

Steering wheel, paddle shift, combination switches

Internal connection with other units



Air Conditioners

Servers



White Goods



Drones



Steering Wheel Switches



Industrial Automation

## **SPECIFICATIONS 1.25MM**

### **Reference Information**

Packaging: Reel (Terminal); Embossed (Header Assembly); Bag (Receptacle and Plug Housings); Mates with: Micro-Lock Plus Connectors Designed In: Millimeters RoHS: Yes Low Halogen: Yes \*Depends on series number

#### **Electrical**

Voltage (max.): 50V Current (max.): 3.6A/Single (2 circuit/AWG 26) 2.4A/Dual (8 circuit/AWG 26) Contact Resistance (max.): 20 milliohms Dielectric Withstanding Voltage: 500V AC Insulation Resistance (min.): 100 Megohms

#### Mechanical

Durability (max.): 30 Cycles Crimp Terminal Insertion Force (max.): 4.9N Crimp Terminal Retention Force (min.): 9.8N Crimping Pull Out Force: 19.6N (min.) (AWG 26) Housing Lock Strength: 68.6N(min.) (Single 14-16 circuits) / 98.0N(min.) (Dual 38-42 circuits)

### **Physical**

Housing: Receptacle – PBT Header – PA Crimp terminal: Copper alloy, Tin or Au plating Header pin: Copper alloy, Tin Bismuth or Au plating Operating Temperature: -40 to +105°C

Single					
AWG#	Amps [A]				
	2-circuit	8-circuit	16-circuit		
26	3.6	2.4	2.2		
28	3.1	2.1	1.8		
30	2.8	1.8	1.5		

#### Dual

AWG#	Amps [A]						
AWG#	8-circuit	16-circuit	24-circuit	32-circuit	42-circuit		
26	2.4	1.8	1.7	1.6	1.5		
28	2.1	1.6	1.5	1.4	1.3		
30	1.8	1.4	1.3	1.2	1.1		

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# **ORDERING INFORMATION**

Series No.	Pitch (mm)	Component	Plating	AWG
<u>505431</u>	505431   214524   214529	Receptacle Terminal	Tin/Gold	26
214524		Wire-to-Wire Plug Crimp Terminal	T:-	28
214529		TPA Crimp Terminal	Tin	30

Series No.	Pitch (mm)	Component Circuits		Rows	Cover Type	
<u>505565</u>	1.25	Receptacle Housing	2 to 16	Single	gle	
<u>505432</u>			8 to 42	Dual		
214525		Wire-to-Wire Plug Housing	2 to 0	Single	No	
214526			2 to 9			
214527		TPA Receptacle Housing	8 to 24	Dual		

Series No.	Pitch (mm)	Component	Circuits	Plating	Rows	Cover Type
<u>505567</u>	1.25	Right-Angle Header	2 += 10		Single	No
<u>505568</u>		Vertical Header	2 to 16			Yes (-xx31, -xx51, -xx71, -xx81)
<u>505448</u>		Right-Angle Header		Tin/Gold		No
<u>505433</u>		Vertical Header	8 to 24			Yes (-xx31, -xx51, -xx81, -xx91) No (-xx21, -xx41, -xx61, -xx71)

\*Allowable current is different by combination

## www.molex.com/link/microlockplus.html