# Micro-Lock Plus 1.25mm Pitch Vertical Header with Potting Capability

One of the smallest wire-to-board "potting" connectors, with 3.00mm- (single-row) and 6.00mm (dual-row) high potting material to safeguard contact and latch areas in applications requiring environmental protection

# molex





### Features and Advantages

### Withstands up to 105°C operating temperatures

Meets the extended temperature requirements of various industries and withstands harsh environments

Receptacle housing 505565\*\*\*\* 2 to 16 circuit 204532\*\*\*\* (low halogen) 2 to 16 circuit

Crimp Terminal 505431\*

Micro-Lock Plus 1.25mm Pitch Vertical Header with Potting Capability (view of board with the connector mounted and potting liquid)

### **Tin-Bismuth terminals**

Prevents whiskering for a clean and uninterrupted signal; supports terminal ruggedness and reliability

Receptacle housing 505432\*\*\*\* 8 to 42 circuit 204523\*\*\*\* (low halogen) 4 to 14 circuit

Plug housing (vertical) 205957\*\*\*\* (low halogen) 2 to 16 circuit

Plug housing (vertical) 207760\*\*\*\* (low halogen) 4 to 14 circuit



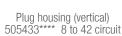


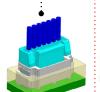


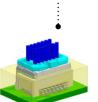




Plug housing (vertical) 505568\*\*\*\* 2 to 16 circuit







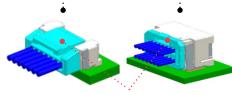


### Robust metal solder tabs

Provides secure PCB retention and strain relief to solder joints

### Smallest 1.25mm-pitch vertical header with positive lock and potting capability

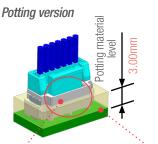
Delivers secure mating retention and environmental protection without sacrificing compactness



#### Wide positive latch that delivers audible click

Offers contact assurance and secure mating retention

### Micro-Lock Plus 1.25 Vertical Header (single-row)



positive lock from being

Provides durability

Added walls to protect

### Potting liquid immersed in potting material

(up to 3.00mm height) Prevents ingress of dust and moisture

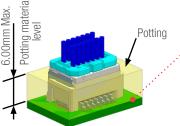
Normal version

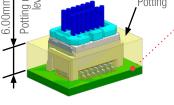
### Positive lock immersed in potting material

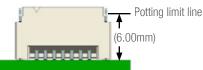


Potting version vs Normal version

### Micro-Lock Plus 1.25 Vertical Header (dual-row)







### Potting liquid (up to 6.00mm height)

Prevents ingress of dust and moisture





Potting version vs Normal version



## Micro-Lock Plus 1.25mm Pitch Vertical Header with Potting Capability

# molex

### **Markets and Applications**

### Industrial

Power tools

Test equipment

Robots

Factory automation

Drones

Vending machines

### Consumer

Refrigerators

Air conditioners

Hot water gas heaters



Power tool



Drone



Refrigerator



Vending machine



Air conditioner



Hot water gas heater

### **Specifications**

#### REFERENCE INFORMATION

Reference Information

Packaging: Embossed (header assembly) Mates With: Micro-Lock Plus Connectors

Designed In: Millimeters

RoHS: Yes Low halogen: Yes

### ELECTRICAL

Voltage (max.): 50V

Current (max.): 3.6A (2 circuit/26 AWG) (single-row)

2.5A (4 circuit/26 AWG) (dual-row)

Contact Resistance (max.): 20 milliohms Dielectric Withstanding Voltage: 500V AC Insulation Resistance (min.): 100 Megohms

Current derating reference information (single-row)

AVAIOU	Amps (A)			
AWG#	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	

### **MECHANICAL**

Crimp Terminal Insertion Force (max.): 4.9N Crimp Terminal Retention Force (min.): 9.8N Crimping Pull Out Force (min.): 19.6N (26 AWG) Housing Lock Strength (min.):

58.8N (14 to16 circuits) (single-row) 49.0N (14 circuits) (dual-row)

Durability (max.): 30 cycles

### PHYSICAL

Header Housing - PA

Header Pin: Copper Alloy, Tin-Bismuth plating Operating Temperature: -40 to +105°C

Current derating reference information (dual-row)

AVAIOU	Amps (A)			
AWG#	4-Circuit	8-Circuit	14-Circuit	
26	2.5	2.4	2.0	
28	2.2	2.1	1.7	
30	1.9	1.8	1.5	

# Micro-Lock Plus 1.25mm Pitch Vertical Header with Potting Capability



### **Ordering Information**

NEW 1.25 Micro-Lock Plus connectors with potting capability

Series No.	Pitch (mm)	Component	Circuits	Rows	Color*	Minimum Order Quantity (MOQ)
205957	1.25	Vertical Header with potting capability (Low Halogen)	2 to 16	Single	Black	Refer to SAP
204532		Receptacle Housing (Low Halogen)	2 to 16	Single	Black	Refer to SAP
207760		Vertical Header with potting capability (Low Halogen)	4 to 14	Dual	Black	Refer to SAP
204523		Receptacle Housing (Low Halogen)	4 to 14	Dual	Black	Refer to SAP

### Existing 1.25 Micro-Lock Plus connectors without potting capability

Series No.	Pitch (mm)	Component	Circuits	Rows	Color*	Minimum Order Quantity (MOQ)
505568	1.25	Vertical Header	2 to 16	Single	Black	Refer to SAP
505567		Right-angle Header	2 to 16	Single	Black	Refer to SAP
<u>505565</u>		Receptacle Housing	2 to 16	Single	Black	Refer to SAP
505433		Vertical Header	8 to 42	Dual	Black	Refer to SAP
505448		Right-angle Header	8 to 42	Dual	Black	Refer to SAP
505432		Receptacle Housing	8 to 42	Dual	Black	Refer to SAP

### Existing 1.25 Micro-Lock Plus crimp terminal

Series No.	Pitch (mm)	Component	Circuits	Rows	Color*	Minimum Order Quantity (MOQ)
<u>505431</u>		Female Receptacle Terminal for 1.25	-	-	=	Refer to SAP

<sup>\*</sup>Black housing color is standard. For non-standard color housing option, please contact Molex for more details.