Customer Presentation (Extension)

MICRO-LOCK PLUS 2.00 DUAL ROW

The addition of the Dual Row feature to the PSBU Signal's core product 2.00mm pitch Micro-Lock Plus helps cover more circuit sizes and enables to have design into various size requirements in the consumer market.

PRESENTER:

AUGUST 7, 2024 I EXTERNAL

creating connections for life

Micro-Lock Plus 2.00 Dual Row

Ideal for compact applications, the Micro-Lock Plus Connector System provides electrical and mechanical reliability, excellent space savings and robust solutions in a high-temperature design to meet stringent industry requirements including those in harsh environments.

Key Product Information

Category: Micro-Lock Plus Connectors

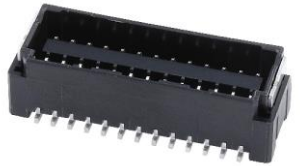
Current: 4.5A (AWG #22)
4.0A (AWG #24)
3.4A (AWG #26)

Voltage (max.): 250V AC rms / DC

Circuit Range: 4 to 26

Plating: Tin

Operating Temperature: -40 to 105°C



View Product Landing Page

Download Datasheet

Series

220200	**2.0WB MLP DUAL REC HSG**
220201	**2.0WB MLP SMT VT PLUG ASSY**
220205	**2.0WB MLP SMT RA PLUG ASSY**

Vital Product Information

Micro-Lock Plus 2.00 Dual Row

What makes this product different from the competition?

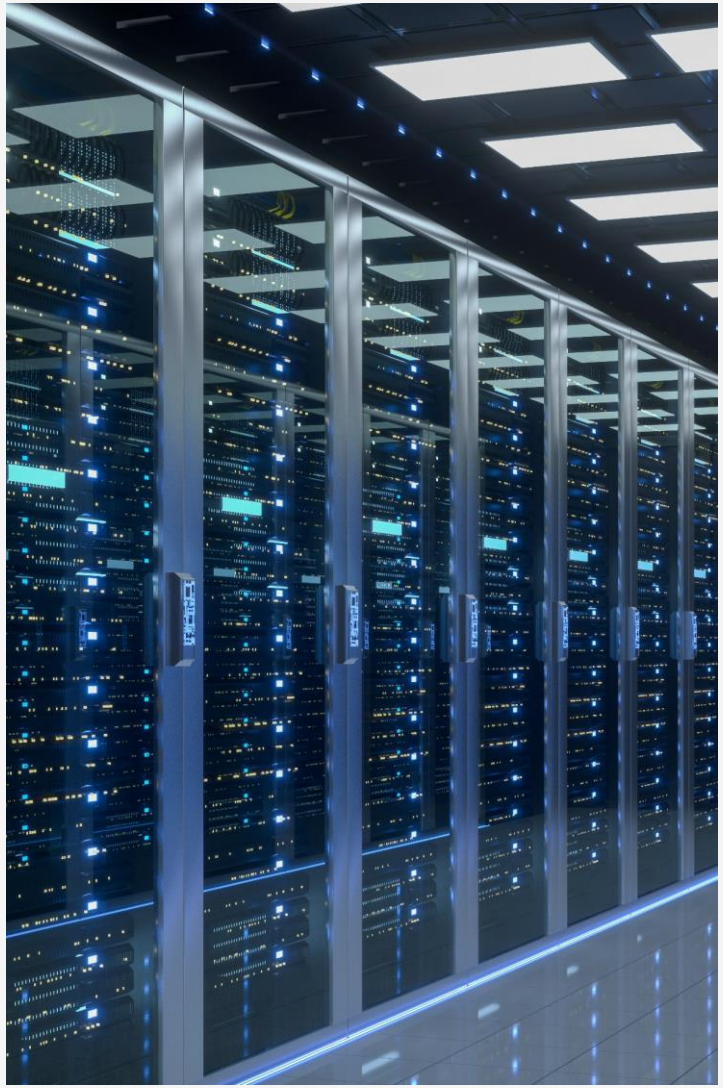
By adding two rows of 4 to 26 poles, the Micro-Lock Plus connector system allows for a higher density of connections in the same footprint compared to single-row connectors. This dual row setup improves design flexibility and provides excellent space-saving benefits through an inner positive lock mechanism.

How does this product/solution create value for our customers?

The Micro-Lock Plus 2.00 Dual-Row Connectors offers low halogen and high temperature capabilities. The robust design of these connectors ensures durability and long-term performance, even in challenging environments.

What is the Molex advantage?

Global manufacturing capability, robust engineering support, and the latest and most high-performance components make Molex a unique partner in finding capability solutions.



Product Overview

Micro-Lock Plus 2.00 Dual Row

Space Savings

The Micro-Lock Plus 2.00 Dual Row Connectors are designed with more contact points to allow for a higher density of connections within the limited space, where there is a need to connect a large number of wires or components.

Robustness

The robust metal solder tab of the Micro-Lock Plus Dual Row Connectors enhance the overall reliability and durability of the connection by securely holding the connector to the PCB and protecting the solder joints from mechanical strain.

Compactness

The dual row pin configuration, reduced pitch size, low-profile design, compact housing, and effective locking mechanism of the Micro-Lock Plus Dual Row Connectors allows them to fit more connections into a smaller area, making them compact and suitable for applications where reliability and space efficiency are crucial.

Markets and Applications

Micro-Lock Plus 2.00 Dual Row

Steering wheels

AUTOMOTIVE

- Steering wheels, paddle shifts, combination switches
- Internal connections with other units
- Industrial automation equipment

Servers

POWER FOR DATA CENTER

- Servers

White goods

APPLIANCES

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

Product Advantages and Features

Micro-Lock Plus 2.00 Dual Row

Provides more contact points within the same

The addition of the dual-row feature allows for a higher density of connections because of more contact points within the limited space where there is a need to connect a large number of wires or components.

Helps improve signal integrity

Additional contacts in the dual row connectors improve signal integrity by reducing crosstalk and increasing impedance control.

Provides secure PCB retention and strain relief to solder joints

The robust metal solder tab enhances the overall reliability and durability of the connection by securely holding the connector to the PCB and protecting the solder joints from mechanical strain.

Delivers secure mating retention and compactness

The connectors are designed to offer a positive-lock feature that keeps the connections firmly together by maintaining a small size, making them ideal for applications where reliability and space efficiency are key considerations.

Helps ensure proper mating connection

The wide positive latch with an audible click enhances the user experience by providing a reliable mating connection with a tactile and audible feedback that the connection is complete and properly engaged

Key Specifications			
Number of Rows	Single		Dual
Termination Style	Wire-to-Board	Wire-to-Wire	Wire-to-Board
Circuit Range	2 to 16	2 to 9	4 to 26
Configuration	Vertical/Right angle	-	Vertical/Right angle
Plating	Tin/Gold	Tin	Tin
Current	4.7A (AWG #22) 3.9A (AWG #24) 2.9A (AWG #26)	4.7A (AWG #22) 3.9A (AWG #24) 2.9A (AWG #26)	4.5A (AWG #22) 4.0A (AWG #24) 3.4A (AWG #26)
Operating Temperatures	-40 to 105°C	-40 to 105°C	-40 to 105°C

Product Specifications

Micro-Lock Plus 2.00 Dual Row

Reference Information

Packaging: Reel (Terminal);
Embossed (Header Assembly);
Bag (Receptacle Housing);
Mates With: Micro-Lock Plus Connectors
Designed In: Millimeters
RoHS: Yes
Low Halogen : Yes

Mechanical

Pitch: 2.00mm
Crimp Terminal Insertion Force (max.):
9.8N
Crimping Pull Out Force (min.): 39.2N
(AWG 22)
Housing Lock Strength (min.):
Single row: 80N (6 to 16 circuits)
Dual row: 68.6N (12 to 26 circuits)
Durability (max.): 30 Cycles

Electrical

Voltage (max.): 250V AC rms / DC
Current (max.):
Single row: 4.7A (2-circuit/AWG 22)
Dual row: 4.5A (4-circuit/AWG 22)
Circuit Range:
Single row: 2 to 16
Dual row: 4 to 26
Contact Resistance (max.): 10 Milliohms
Dielectric Withstanding Voltage: 800V AC
Insulation Resistance (min.): 1000 Megaohms

Physical

Housing:
Receptacle−PBT
Header−PA
Header Pin:
Single row: Brass, Tin and Gold
Dual row: Brass and Tin
Crimp Terminal:
Single row: Copper Alloy, Tin and Gold
Dual row: Copper Alloy and Tin
Operating Temperature: -40 to +105˚C

Additional Resources	
Web Overview Page	Micro-Lock Plus Connectors | Molex
Datasheet	987651-4888.pdf
Global Product Manager	Momoka Yao, CCS, PSBU

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