# molex

Part Number: 5054481471

**Product Description :** 1.25mm Pitch, Micro-Lock Plus PCB Header, Dual Row, Right-Angle, Surface Mount, Tin-Bismuth Plating, Positive

Lock, 14 Circuits, Black Series Number: 505448

**Status:** Active

**Product Category: PCB Headers and** 

Receptacles



#### **Documents & Resources**

#### **Drawings**

Drawing 5054481471\_sd.pdf

#### 3D Models and Design Files

2D Drawing DXF 5054481471.dxf 2D Drawing DXF (PDF) 5054481471.pdf

3D Model 5054481471\_stp.zip

## Specifications

Application Specification 5054320000-AS-000.pdf
Packaging Specification 5054489200-200.pdf
Product Specification 2145270000-PS-000.pdf
Product Specification 5054320000-002.pdf
Product Specification 5054320000-005.pdf
Product Specification 5054321000-PS-002.pdf
Product Specification 5054321000-PS-006.pdf

# **Product Environment Compliance**

#### Compliance

GADSL/IMDS	Not Relevant
China RoHS	<b>©</b>
EU ELV	Not Relevant
Low-Halogen Status	Not Low-Halogen per IEC 61249-2- 21
REACH SVHC	Not Contained per D(2024)4144-DC (27 June 2024)
EU RoHS	Compliant per EU 2015/863

# Multiple Part Product Compliance Statements

- Eu RoHS
- REACH SVHC
- Low-Halogen

# Multiple Part Industry Compliance Documents

- IPC 1752A Class C
- IPC 1752A Class D
- Molex Product Compliance Declaration
- IEC-62474
- chemSHERPA (xml)

# EU RoHS Certificate of Compliance

## **Part Details**

#### General

Status	Active
Category	PCB Headers and Receptacles
Series	505448
Description	1.25mm Pitch, Micro-Lock Plus PCB Header, Dual Row, Right-Angle, Surface Mount, Tin-Bismuth Plating, Positive Lock, 14 Circuits, Black
Application	Signal, Wire-to-Board
Component Type	PCB Header
Product Family	Micro-Lock Connector System
Product Name	Micro-Lock Plus
UPC	889056765091

# Agency

## **Electrical**

Current - Maximum per Contact	1.5A
Voltage - Maximum	50V AC (RMS)/DC

# Physical

Circuits (Loaded) Circuits (maximum) 14 Circuits (maximum) 14 Color - Resin Black Durability (mating cycles max) First Mate / Last Break No Glow-Wire Capable No Guide to Mating Part No Keying to Mating Part Ves Lock to Mating Part Yes Material - Metal Brass Material - Plating Mating Tin-Bismuth Material - Plating Termination Net Weight Net Weight Net Weight Number of Rows 2 Orientation Right Angle Packaging Type Embossed Tape on Reel PCB Locator No PCB Retention Yes Pitch - Mating Interface Plating min - Mating Plating min - Mating Plating min - Termination Polarized to PCB Robotic Placement Yes Robotic Placement Vacuum Pick-Up Area Shrouded Fully Stackable Termination Interface Style Fundosed Mont		
Color - Resin Black  Durability (mating cycles max) 30  First Mate / Last Break No  Glow-Wire Capable No  Guide to Mating Part Yes  Lock to Mating Part Yes  Material - Metal Brass  Material - Plating Mating Tin-Bismuth  Material - Resin Polyamide  Net Weight 1372.500/mg  Number of Rows 2  Orientation Right Angle  Packaging Type Embossed Tape on Reel  PCB Locator No  PCB Retention Yes  Pitch - Mating Interface 1.25mm  Plating min - Mating 1.000µm  Plating min - Termination 1.000µm  Polarized to Mating Part Yes  Robotic Placement Yes  Robotic Placement Vacuum Pick-Up Area  Shrouded Fully  Stackable No  Temperature Range - Operating -40° to +105°C	Circuits (Loaded)	14
Durability (mating cycles max)  First Mate / Last Break  Ro Glow-Wire Capable  No Guide to Mating Part  Keying to Mating Part  Material - Metal  Material - Plating Mating  Net Weight  Packaging Type  PCB Locator  PCB Retention  PItch - Termination  Plating min - Mating  Plating min - Termination  Polarized to PCB  Robotic Placement  Shrouded  Stackable  Ton-Bismuth  Tin-Bismuth  Tin-Bismuth  Polyamide  Tin-Bismuth  Fully  Stackable  No  Temperature Range - Operating  Aves  No  Vacuum Pick-Up Area  Fully  No  Temperature Range - Operating  -40° to +105°C	Circuits (maximum)	14
First Mate / Last Break Glow-Wire Capable No Guide to Mating Part No Keying to Mating Part Lock to Mating Part Pes Material - Metal Material - Plating Mating Material - Plating Termination Material - Resin No Net Weight Net Weight Number of Rows Orientation PCB Retention PCB Retention Pitch - Termination Interface Plating min - Mating Plating min - Termination Polarized to PCB Robotic Placement Shrouded Fully Stackable No PCB Retention Polarized Robotic Placement Polarized Robotic Placement Polarized Robotic Placement Pulty Stackable No PCB Retention PCB Retention Polarized Robotic Placement Polarized Robotic P	Color - Resin	Black
Glow-Wire Capable Guide to Mating Part No Keying to Mating Part Lock to Mating Part Yes  Material - Metal Brass Material - Plating Mating Tin-Bismuth Material - Plating Termination Material - Resin Polyamide Net Weight Net Weight Net Weight Packaging Type Embossed Tape on Reel PCB Locator No PCB Retention Pitch - Mating Interface Pitch - Termination Interface Plating min - Mating Plating min - Termination Polarized to Mating Part Polarized to PCB Robotic Placement Shrouded Fully Stackable No Temperature Range - Operating  No Yes Pes Polarized to Hotology Polarized to Hotology Polarized Coperating Part Part Polarized Coperating Part Part Part Part Part Part Part Part	Durability (mating cycles max)	30
Guide to Mating Part  Keying to Mating Part  Lock to Mating Part  Yes  Material - Metal  Material - Plating Mating  Material - Plating Termination  Material - Resin  Polyamide  Net Weight  Number of Rows  Orientation  Packaging Type  Embossed Tape on Reel  PCB Locator  No  PCB Retention  Pitch - Mating Interface  Plating min - Mating  Plating min - Termination  Polarized to Mating Part  Polarized to PCB  Robotic Placement  Stackable  Temperature Range - Operating  Pyes  Pres  Pres  Pass  Pass  Pres  Pass  No  Polarized to +105°C	First Mate / Last Break	No
Keying to Mating Part  Lock to Mating Part  Yes  Material - Metal  Material - Plating Mating  Material - Plating Termination  Material - Resin  Polyamide  Net Weight  Net Weight  1372.500/mg  Number of Rows  Orientation  Packaging Type  Embossed Tape on Reel  PCB Locator  No  PCB Retention  Pitch - Mating Interface  Plating min - Mating  Plating min - Termination  Polarized to Mating Part  Polarized to PCB  Robotic Placement  Shrouded  Temperature Range - Operating  Passs  Tin-Bismuth  Fin-Bismuth  Polyamide  Tin-Bismuth  Polyamide  Tin-Bismuth  Polyamide  Embossed Tapeon Reel  No  1.372.500/mg  Embossed Tape on Reel  No  PCB Retention  Yes  Pitch - Termination  1.25mm  1.000µm  Polarized to Mating Part  Yes  Polarized to PCB  Yes  Robotic Placement  Vacuum Pick-Up Area  Fully  Stackable  No  Temperature Range - Operating  -40° to +105°C	Glow-Wire Capable	No
Lock to Mating Part  Material - Metal  Material - Plating Mating  Material - Plating Termination  Material - Resin  Net Weight  Net Weight  Number of Rows  Orientation  PCB Locator  PCB Retention  Pitch - Mating Interface  Plating min - Mating  Plating min - Termination  Polarized to PCB  Robotic Placement  Shrouded  Stackable  Temperature Range - Operating  Tin-Bismuth  Tin-Bismuth  Tin-Bismuth  Tin-Bismuth  Tin-Bismuth  Polyamide  Tin-Bismuth  Tenne Brismuth  Tin-Bismuth  Tin-Bismuth  Tenne Brismuth  Tenne Brismuth  Tenne Brismuth  Tin-Bismuth  Tin-Bismuth  Tenne Brismuth  Tin-Bismuth  Tene Brismuth  Tene Brismuth  Tene Brismuth  Tin-Bismuth  Tene Brismuth  Tene Brismuth  Tin-Bismuth  Tene Brismuth  Tene Brismuth  Tin-Bismuth  Tene Brismuth  Tin-Bismuth  Tene Brismuth  Tane Brismuth  Tane Brismuth  Tane Brismuth  Tane Brismuth  Tin-Bismuth  Tane Brismuth  Tane B	Guide to Mating Part	No
Material - Metal  Material - Plating Mating  Material - Plating Termination  Material - Resin  Material - Resin  Net Weight  Number of Rows  Orientation  PCB Locator  PCB Retention  Pitch - Termination Interface  Plating min - Termination  Polarized to PCB  Robotic Placement  Stackable  Temperature Range - Operating  Tin-Bismuth  Tendesmuth  Polyamide  Polyamide  Embossed Tape on Reel  Pres  Embossed Tape on Reel  No  Tin-Bismuth  Tendesmuth  Polyamide  1.372.500/mg  Right Angle  Embossed Tape on Reel  Ptembossed Tape on Reel  Polarized to Reel  1.25mm  1.25mm  1.000µm  Polarized to Mating  1.000µm  Polarized to Mating Part  Yes  Polarized to PCB  No  Temperature Range - Operating	Keying to Mating Part	Yes
Material - Plating MatingTin-BismuthMaterial - Plating TerminationTin-BismuthMaterial - ResinPolyamideNet Weight1372.500/mgNumber of Rows2OrientationRight AnglePackaging TypeEmbossed Tape on ReelPCB LocatorNoPCB RetentionYesPitch - Mating Interface1.25mmPlating min - Mating1.000μmPlating min - Termination1.000μmPolarized to Mating PartYesPolarized to PCBYesRobotic PlacementVacuum Pick-Up AreaShroudedFullyStackableNoTemperature Range - Operating-40° to +105°C	Lock to Mating Part	Yes
Material - Plating Termination  Material - Resin  Polyamide  Net Weight  Number of Rows  Orientation  Packaging Type  Embossed Tape on Reel  PCB Locator  No  PCB Retention  Pitch - Mating Interface  Plating min - Mating  Plating min - Termination  Polarized to PCB  Robotic Placement  Shrouded  Temperature Range - Operating  Plating min - Hating  Tin-Bismuth  Polyamide  1372.500/mg  Right Angle  Embossed Tape on Reel  Packaging Type  Embossed Tape on Reel  No  1.25mm  1.25mm  1.25mm  1.000  1.000  Yes  Ves  Ves  Polarized to Mating Part  Yes  Polarized to PCB  Yes  No  Temperature Range - Operating	Material - Metal	Brass
Material - Resin Polyamide  Net Weight 1372.500/mg  Number of Rows 2  Orientation Right Angle  Packaging Type Embossed Tape on Reel  PCB Locator No  PCB Retention Yes  Pitch - Mating Interface 1.25mm  Plating min - Mating 1.000µm  Plating min - Termination 1.000µm  Polarized to Mating Part Yes  Robotic Placement Yes  Robotic Placement Vacuum Pick-Up Area  Shrouded Fully  Stackable No  Temperature Range - Operating -40° to +105°C	Material - Plating Mating	Tin-Bismuth
Net Weight 1372.500/mg  Number of Rows 2  Orientation Right Angle  Packaging Type Embossed Tape on Reel  PCB Locator No  PCB Retention Yes  Pitch - Mating Interface 1.25mm  Pitch - Termination Interface 1.000  Plating min - Mating 1.000µm  Plating min - Termination 1.000µm  Polarized to Mating Part Yes  Polarized to PCB Yes  Robotic Placement Vacuum Pick-Up Area  Shrouded Fully  Stackable No  Temperature Range - Operating -40° to +105°C	Material - Plating Termination	Tin-Bismuth
Number of Rows  Orientation  Right Angle  Packaging Type  Embossed Tape on Reel  PCB Locator  No  PCB Retention  Pitch - Mating Interface  Pitch - Termination Interface  Plating min - Mating  Plating min - Termination  Polarized to Mating Part  Polarized to PCB  Robotic Placement  Shrouded  Temperature Range - Operating  Pight Angle  Embossed Tape on Reel  No  1.25mm  1.25mm  1.25mm  1.000  1.000  PW  Yes  Yes  Yes  Polarized to Mating Part  Yes  No  Temperature Range - Operating	Material - Resin	Polyamide
Orientation Right Angle Packaging Type Embossed Tape on Reel PCB Locator No PCB Retention Yes Pitch - Mating Interface 1.25mm Pitch - Termination Interface 1.000µm Plating min - Mating 1.000µm Plating min - Termination 1.000µm Polarized to Mating Part Yes Polarized to PCB Yes Robotic Placement Vacuum Pick-Up Area Shrouded Fully Stackable No Temperature Range - Operating -40° to +105°C	Net Weight	1372.500/mg
Packaging Type Embossed Tape on Reel  PCB Locator No  PCB Retention Yes  Pitch - Mating Interface 1.25mm  Pitch - Termination Interface 1.000µm  Plating min - Mating 1.000µm  Plating min - Termination 1.000µm  Polarized to Mating Part Yes  Polarized to PCB Yes  Robotic Placement Vacuum Pick-Up Area  Shrouded Fully  Stackable No  Temperature Range - Operating -40° to +105°C	Number of Rows	2
PCB Locator PCB Retention Yes Pitch - Mating Interface Pitch - Termination Interface Plating min - Mating Plating min - Termination Polarized to Mating Part Polarized to PCB Robotic Placement Shrouded Temperature Range - Operating  Yes  No  1.25mm 1.25mm 1.000µm 1.000µm Yes Yes Yes Yes Yes Vacuum Pick-Up Area Fully No	Orientation	Right Angle
PCB Retention  Pitch - Mating Interface  Pitch - Termination Interface  Plating min - Mating  Plating min - Termination  Polarized to Mating Part  Polarized to PCB  Robotic Placement  Shrouded  Temperature Range - Operating  Yes  1.25mm  1.000µm  1.000µm  Yes  Yes  Vacuum Pick-Up Area  Fully  No	Packaging Type	Embossed Tape on Reel
Pitch - Mating Interface 1.25mm  Pitch - Termination Interface 1.25mm  Plating min - Mating 1.000µm  Plating min - Termination 1.000µm  Polarized to Mating Part Yes  Polarized to PCB Yes  Robotic Placement Vacuum Pick-Up Area  Shrouded Fully  Stackable No  Temperature Range - Operating -40° to +105°C	PCB Locator	No
Pitch - Termination Interface  Plating min - Mating  Plating min - Termination  Polarized to Mating Part  Polarized to PCB  Robotic Placement  Shrouded  Stackable  Temperature Range - Operating  1.000µm  1.000µm  Yes  Yes  Yes  Yes  Vacuum Pick-Up Area  Fully  No  -40° to +105°C	PCB Retention	Yes
Plating min - Mating  Plating min - Termination  Polarized to Mating Part  Polarized to PCB  Robotic Placement  Shrouded  Stackable  Temperature Range - Operating  1.000µm  1.000µm  Yes  Yes  Yes  Yes  Vacuum Pick-Up Area  Fully  No	Pitch - Mating Interface	1.25mm
Plating min - Termination  Polarized to Mating Part  Polarized to PCB  Robotic Placement  Shrouded  Stackable  Temperature Range - Operating  1.000µm  Yes  Yes  Vacuum Pick-Up Area  Fully  No  -40° to +105°C	Pitch - Termination Interface	1.25mm
Polarized to Mating Part  Polarized to PCB  Robotic Placement  Shrouded  Stackable  Temperature Range - Operating  Yes  Vacuum Pick-Up Area  Fully  No  -40° to +105°C	Plating min - Mating	1.000µm
Polarized to PCB  Robotic Placement  Shrouded  Stackable  Temperature Range - Operating  Yes  Vacuum Pick-Up Area  Fully  No  -40° to +105°C	Plating min - Termination	1.000µm
Robotic Placement  Shrouded  Stackable  Temperature Range - Operating  Vacuum Pick-Up Area  Fully  No  -40° to +105°C	Polarized to Mating Part	Yes
Shrouded Fully  Stackable No  Temperature Range - Operating -40° to +105°C	Polarized to PCB	Yes
Stackable No Temperature Range - Operating -40° to +105°C	Robotic Placement	Vacuum Pick-Up Area
Temperature Range - Operating -40° to +105°C	Shrouded	Fully
	Stackable	No
Termination Interface Style Surface Mount	Temperature Range - Operating	-40° to +105°C
	Termination Interface Style	Surface Mount

# Mates With / Use With

# Mates with Part(s)

Description	Part Number
2 00 0 [0 0. 0	1 5.1 5 1 1 5.1 1 5 5 1

1.25mm Pitch, Micro-Lock Plus Dual Row Receptacle Housings	505432
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