



Part Number : 878312020

Series Number : 87831

Product Category : PCB Headers and Receptacles

Product Description : 2.00mm Pitch, Milli-Grid PCB Header, Dual Row, Vertical, Through Hole, Shrouded, 20 Circuits, 0.38µm Gold (Au) Plating, with Center Polarization Slot, with Locking Window, without PCB Locator, Tube

Status : Active

Documents & Resources

Drawings

- Drawing 878312020_sd.pdf
- Packaging Design Drawing PK-87831-001-001.pdf

3D Models and Design Files

- 3D Model 878312020_stp.zip

Specifications

- Application Specification 503940001-AS-000.pdf
- Product Specification PS-87831-027-001.pdf

Product Environment Compliance

Compliance

GADSL/IMDS	Compliant with Exemption 44; 34; 33
China RoHS	
EU ELV	Compliant per 2000/53/EC
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	87831
Description	2.00mm Pitch, Milli-Grid PCB Header, Dual Row, Vertical, Through Hole, Shrouded, 20 Circuits, 0.38µm Gold (Au) Plating, with Center Polarization Slot, with Locking Window, without PCB Locator, Tube
Application	Signal, Wire-to-Board
Comments	Contact Molex for application in automotive industry
Component Type	PCB Header
Product Family	Milli-Grid Connector System
Product Name	Milli-Grid
UPC	822348274130

Agency

CSA	LR19980
UL	E29179

Electrical

Current - Maximum per Contact	2.0A
Voltage - Maximum	125V

Physical

Breakaway	No
Circuits (Loaded)	20

Circuits (maximum)	20
Color - Resin	Black
Durability (mating cycles max)	100
First Mate / Last Break	No
Flammability	94V-0
Glow-Wire Capable	No
Guide to Mating Part	No
Keying to Mating Part	None
Lock to Mating Part	Yes
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	Nylon
Net Weight	0.935/g
Number of Rows	2
Orientation	Vertical
Packaging Type	Tube
PC Tail Length	2.50mm
PCB Locator	No
PCB Retention	None
PCB Thickness - Recommended	1.60mm
Pitch - Mating Interface	2.00mm
Pitch - Termination Interface	2.00mm
Plating min - Mating	0.381µm
Plating min - Termination	1.905µm
Polarized to PCB	No
Shrouded	Yes
Stackable	No
Temperature Range - Operating	-55° to +105°C
Termination Interface Style	Through Hole

Solder Process Data

Max-Duration	10
Lead-Free Process Capability	WAVE
Max-Cycle	1

Max-Temp	260
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Mates With / Use With

Mates with Part(s)

Description	Part Number
Milli-Grid Dual Row Receptacle Housings	<u>51110</u>
Milli-Grid Vertical Through Hole PCB Receptacles	<u>78787</u>
Milli-Grid Top Entry Surface Mount PCB Receptacles	<u>78788</u>
Milli-Grid Vertical Through Hole PCB Receptacles	<u>79107</u>
Milli-Grid Vertical Through Hole PCB Receptacles	<u>79108</u>
Milli-Grid Top/Bottom Entry Surface Mount PCB Receptacles	<u>79109</u>
Milli-Grid Dual Row Cable-to-Board Receptacles	<u>87568</u>