molex



Part Number : 878312028
Product Description : 2.00mm Pitch, Milli-Grid PCB Header, Dual Row, Vertical, Through Hole, Shrouded, 20 Circuits, 0.38µm Gold (Au) Plating, 2.50mm Tail Length, Dual Side Slots, Dual Friction Locks, Center Polarization, with Peg, Tube
Series Number : 87831
Status : Active
Product Category : PCB Headers and Receptacles

Documents and Resources

Drawings

878312028_sd.pdf

PK-87831-001-001.pdf

3D Models and Design Files

STEP AP242

SOLIDWORKS

Creo

Symbol and Footprint (Multi-Format)

Specifications

503940001-AS-000.pdf

PS-87831-027-001.pdf

Product Environment Compliance

Compliance

GADSL/IMDS	Compliant with Exemption 44; 34; 33
China RoHS	per SJ/T 11365-2006
EU ELV	Not Relevant
Low-Halogen Status	Not Low-Halogen per IEC 61249-2-21
REACH SVHC	Not Contained per D(2025)6375-

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	DC (05 Nov 2025)
EU RoHS	Compliant per EU 2015/863

Compliance Statements
- EU RoHS
- REACH SVHC
- Low-Halogen

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

Substances of Interest
- PFAS

EU RoHS Certificate of Compliance

Additional Product Compliance Information

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, 2.50mm Tail Length, Dual Side Slots, Dual Friction Locks, Center Polarization, with Peg, Tube
Application	Signal, Wire-to-Board, Board-to-Board
Comments	Contact Molex for application in automotive industry
Component Type	PCB Header
Product Name	Milli-Grid
UPC	822348332458

Agency

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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)	50
First Mate / Last Break	No
Glow-Wire Capable	No
Guide to Mating Part	Yes
Keying to Mating Part	No
Lock to Mating Part	Yes
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	Nylon
Net Weight	0.948/g
Number of Rows	2
Orientation	Vertical
Packaging Type	Tube
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness - Recommended	1.60mm
PC Tail Length	2.50mm
Pitch - Mating Interface	2.00mm
Pitch - Termination Interface	2.00mm
Plating min - Mating	0.381µm
Plating min - Termination	1.880µm
Polarized to PCB	Yes

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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

Mates With / Use With

Mates with Part(s)

Description	Part Number
Milli-Grid Dual Row Receptacle Housings	51110
Milli-Grid Vertical Through Hole PCB Receptacles	78787
Milli-Grid Top Entry Surface Mount PCB Receptacles	78788
Milli-Grid Vertical Through Hole PCB Receptacles	79107
Milli-Grid Vertical Through Hole PCB Receptacles	79108
Milli-Grid Top/Bottom Entry Surface Mount PCB Receptacles	79109
Milli-Grid Dual Row Cable-to-Board Receptacles	87568
Milli-Grid Dual Row BMI Receptacle Housings	151014

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