molex



Part Number : 878314021
Product Description : 2.00mm Pitch, Milli-Grid PCB Header, Dual Row, Vertical, Through Hole, Shrouded, 40 Circuits, 0.76µm Gold (Au) Plating, 2.50mm Tail Length, Dual Side Slots, Dual Friction Locks, Center Polarization, Tube
Series Number : 87831
Status : Active
Product Category : PCB Headers and Receptacles

Documents and Resources

Drawings

878314021_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)7771-

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	DC (04 Feb 2026)
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, 40 Circuits, 0.76µm Gold (Au) Plating, 2.50mm Tail Length, Dual Side Slots, Dual Friction Locks, Center Polarization, 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	822348274215

Agency

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CSA	LR19980
UL	E29179

Electrical

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

Physical

Breakaway	No
Circuits (Loaded)	40
Circuits (maximum)	40
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	1.805/g
Number of Rows	2
Orientation	Vertical
Packaging Type	Tube
PCB Locator	No
PCB Retention	No
PCB Thickness - Recommended	1.60mm
PC Tail Length	2.50mm
Pitch - Mating Interface	2.00mm
Pitch - Termination Interface	2.00mm
Plating min - Mating	0.762µm
Plating min - Termination	1.880µm
Polarized to PCB	No

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Shrouded	Shrouded
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

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