molex



**Part Number :** 878315920
**Product Description :** 2.00mm Pitch, Milli-Grid PCB Header, Dual Row, Vertical, Through Hole, Shrouded, 20 Circuits, 13 Position Voided, 0.38µm Gold (Au) Plating, with Center Polarization Slot, with Locking Window, without PCB Locator,  Void Position Circuit 13, Tube
**Series Number :** 87831
**Status :** Active
**Product Category :** PCB Headers and Receptacles

## Documents & Resources

### Drawings

878315920_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)4165-DC (25 June 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

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## 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, 13 Position Voided, 0.38µm Gold (Au) Plating, with Center Polarization Slot, with Locking Window, without PCB Locator, Void Position Circuit 13, Tube |
| Application | Signal, Wire-to-Board |
| Comments | Contact Molex for application in automotive industry |
| Component Type | PCB Header |
| Product Name | Milli-Grid |
| UPC | 883906425852 |

## 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 | 0.919/g |
| Number of Rows | 2 |
| Orientation | Vertical |
| Packaging Type | Tube |
| PCB Locator | No |
| PCB Retention | None |
| 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 | 1.905µm |
| 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 | 11 |
| Lead-Free Process Capability | WAVE |
| Max-Cycle | 1 |
| Max-Temp | 265 |

## 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 |