



**Part Number :** [878313420](#)  
**Product Description :** 2.00mm Pitch, Milli-Grid PCB Header, Dual Row, Vertical, Through Hole, Shrouded, 34 Circuits, 0.38µm Gold (Au) Plating, with Center Polarization Slot, with Locking Window, without PCB Locator, Tube  
**Series Number :** 87831  
**Status :** Active  
**Product Category :** PCB Headers and Receptacles



## Documents & Resources

### Drawings

[878313420 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         | <br>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

## 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, 34 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 Name   | Milli-Grid                                                                                                                                                                                            |
| UPC            | 822348231942                                                                                                                                                                                          |

### Agency

|     |         |
|-----|---------|
| CSA | LR19980 |
| UL  | E29179  |

## Electrical

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

## Physical

|                                |                 |
|--------------------------------|-----------------|
| Breakaway                      | No              |
| Circuits (Loaded)              | 34              |
| Circuits (maximum)             | 34              |
| 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                     | 1.519/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                 | 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><a href="#">51110</a></u> |
| Milli-Grid Vertical Through Hole PCB Receptacles          | <u><a href="#">78787</a></u> |
| Milli-Grid Top Entry Surface Mount PCB Receptacles        | <u><a href="#">78788</a></u> |
| Milli-Grid Vertical Through Hole PCB Receptacles          | <u><a href="#">79107</a></u> |
| Milli-Grid Vertical Through Hole PCB Receptacles          | <u><a href="#">79108</a></u> |
| Milli-Grid Top/Bottom Entry Surface Mount PCB Receptacles | <u><a href="#">79109</a></u> |
| Milli-Grid Dual Row Cable-to-Board Receptacles            | <u><a href="#">87568</a></u> |