



**Part Number :** [878331820](#)  
**Product Description :** 2.00mm Pitch, Milli-Grid PCB Header, Dual Row, Right-Angle, Through Hole, 18 Circuits, 0.38µm Gold (Au) Plating, without PCB Locator, with Locking Windows, Center Polarization Slot, Tube  
**Series Number :** 87833  
**Status :** Active  
**Product Category :** PCB Headers and Receptacles

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**Documents & Resources**

**Drawings**

- [878331820 sd.pdf](#)
- [PK-87831-001-001.pdf](#)
- [PK-87831-002-001.pdf](#)
- [PK-87831-300-001.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](#)
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**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<br>(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         | 87833                                                                                                                                                                                      |
| Description    | 2.00mm Pitch, Milli-Grid PCB Header, Dual Row, Right-Angle, Through Hole, 18 Circuits, 0.38µm Gold (Au) Plating, without PCB Locator, with Locking Windows, Center Polarization Slot, Tube |
| Application    | Signal, Wire-to-Board                                                                                                                                                                      |
| Comments       | Contact Molex for application in automotive industry                                                                                                                                       |
| Component Type | PCB Header                                                                                                                                                                                 |
| Product Name   | Milli-Grid                                                                                                                                                                                 |
| UPC            | 822348189144                                                                                                                                                                               |

**Agency**

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

## Electrical

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

## Physical

|                                |                 |
|--------------------------------|-----------------|
| Breakaway                      | No              |
| Circuits (Loaded)              | 18              |
| Circuits (maximum)             | 18              |
| 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          | Yes             |
| Lock to Mating Part            | Yes             |
| Material - Metal               | Phosphor Bronze |
| Material - Plating Mating      | Gold            |
| Material - Plating Termination | Tin             |
| Material - Resin               | Nylon           |
| Net Weight                     | 0.958/g         |
| Number of Rows                 | 2               |
| Orientation                    | Right Angle     |
| Packaging Type                 | Tube            |
| PCB Locator                    | No              |
| PCB Retention                  | None            |
| PCB Thickness - Recommended    | 1.60mm          |
| PC Tail Length                 | 2.16mm          |
| 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                      | Fully          |
| Stackable                     | No             |
| Temperature Range - Operating | -55° to +105°C |
| Termination Interface Style   | Through Hole   |

## Solder Process Data

|                              |          |
|------------------------------|----------|
| Max-Duration                 | 11       |
| Lead-Free Process Capability | SMC&WAVE |
| Max-Cycle                    | 1        |
| Max-Temp                     | 265      |

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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> |