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**Part Number:** [0878312221](#)  
**Status:** **Active**  
**Overview:** [Milli-Grid Connector System](#)  
**Description:** 2.00mm Pitch, Milli-Grid PCB Header, Dual Row, Vertical, Through Hole, Shrouded, 22 Circuits, 0.76µm Gold (Au) Plating, with Center Polarization Slot, with Locking Window, without PCB Locator, Tube

**Documents:**

|  |  |
|--|--|
| <a href="#">3D Model</a>                                     | <a href="#">Application Specification 503940001-AS-000 (PDF)</a> |
| <a href="#">Drawing (PDF)</a>                                | <a href="#">Packaging Specification PK-87831-001-001 (PDF)</a>   |
| <a href="#">3D Model (PDF)</a>                               | <a href="#">RoHS Certificate of Compliance (PDF)</a>             |
| <a href="#">Product Specification PS-87831-027-001 (PDF)</a> |  |

**Agency Certification**

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

**General**

|                |  |
|----------------|--|
| Product Family | PCB Headers  |
| Series         | <a href="#">87831</a>                                |
| Application    | Signal, Wire-to-Board                                |
| Comments       | Contact Molex for application in automotive industry |
| Overview       | <a href="#">Milli-Grid Connector System</a>          |
| Product Name   | Milli-Grid   |
| UPC            | 822348331932   |

**Physical**

|                                |                 |
|--------------------------------|-----------------|
| Breakaway                      | No              |
| Circuits (Loaded)              | 22              |
| Circuits (maximum)             | 22              |
| 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                     | 0.987/g         |
| Number of Rows                 | 2               |
| Orientation                    | Vertical        |
| PC Tail Length                 | 2.50mm          |
| PCB Locator                    | No              |
| PCB Retention                  | None            |
| PCB Thickness - Recommended    | 1.60mm          |
| Packaging Type                 | Tube            |
| Pitch - Mating Interface       | 2.00mm          |
| Pitch - Termination Interface  | 2.00mm          |
| Plating min - Mating           | 0.762µm         |
| Plating min - Termination      | 1.905µm         |
| Polarized to PCB               | No              |
| Shrouded                       | Yes             |
| Stackable                      | No              |



Series image - Reference only

**EU ELV**

**Not Relevant**

**EU RoHS**

**Compliant**

**REACH SVHC**

Not Contained Per -  
D(2021)4569-DC (8  
July 2021)

**Halogen-Free**

**Status**

**Not Low-Halogen**

For more information, please visit [Contact US](#)

China ROHS

ELV

RoHS Phthalates

**China RoHS**

Green Image

Not Relevant

Not Contained

**Search Parts in this Series**

[87831 Series](#)

**Mates With**

Milli-Grid Vertical Through Hole Receptacle [79107](#) , [78787](#) , Milli-Grid Flex-to-Board Vertical Receptacle [79108](#) , Milli-Grid Vertical Surface Mount Receptacle [79109](#) , [78788](#) , Milli-Grid Crimp Housing [51110](#) , Milli-Grid Cable-to-Board Receptacle [87568](#)

|                                |                |
|--------------------------------|----------------|
| Surface Mount Compatible (SMC) | Yes            |
| Temperature Range - Operating  | -55° to +105°C |
| Termination Interface: Style   | Through Hole   |

**Electrical**

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

**Solder Process Data**

|                             |      |
|-----------------------------|------|
| Lead-freeProcess Capability | WAVE |
|-----------------------------|------|

**Material Info****Reference - Drawing Numbers**

|                           |                   |
|---------------------------|-------------------|
| Application Specification | 503940001-AS-000  |
| Packaging Specification   | PK-87831-001-001  |
| Product Specification     | PS-87831-027-001  |
| Sales Drawing             | SD-87831-0001-001 |

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