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**Part Number:** [87831-1820](#)  
**Status:** **Active**  
**Overview:** [Milli-Grid™ Connector System](#)  
**Description:** 2.00mm Pitch Milli-Grid™ Header, Vertical, Through Hole, Shrouded, 18 Circuits, 0.38µm Gold (Au) Plating, Center Polarization Slot, with Locking Windows, without PCB Locator, Tube

**Documents:**

[3D Model](#) [Product Specification PS-87831-027 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family PCB Headers  
 Series [87831](#)  
 Application Signal, Wire-to-Board  
 Comments Contact Molex for application in automotive industry  
 Overview [Milli-Grid™ Connector System](#)  
 Product Name Milli-Grid™  
 UPC 822348271931

**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 Compliant 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 0.834/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 0.381µm  
 Plating min - Termination 1.905µm  
 Polarized to PCB No  
 Shrouded Yes  
 Stackable No  
 Surface Mount Compatible (SMC) Yes



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**Low-Halogen Status Not Low-Halogen**

**China RoHS**



**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

[87831Series](#)

**Mates With**

[50394](#) Wire-to-Board Terminals, [51110](#) Wire-to-Board Crimp Housing, [87568](#) Wire-to-Board IDT Housings, [79107](#) Board-to-Board Top Entry Through Hole Receptacle, [79108](#) Board-to-Board FFC/FPC Top Entry Through Hole Receptacle, [79109](#) Board-to-Board Surface Mount PCB Receptacle

|                               |                 |
|-------------------------------|-----------------|
| Temperature Range - Operating | -55°C to +105°C |
| Termination Interface: Style  | Through Hole    |

### **Electrical**

|                               |      |
|-------------------------------|------|
| Current - Maximum per Contact | 2A   |
| Voltage - Maximum             | 125V |

### **Solder Process Data**

|  |                        |
|--|------------------------|
| Duration at Max. Process Temperature (seconds) | 10                     |
| Lead-free Process Capability                   | Wave Capable (TH only) |
| Max. Cycles at Max. Process Temperature        | 1                      |
| Process Temperature max. C                     | 260                    |

### **Material Info**

### **Reference - Drawing Numbers**

|                       |              |
|-----------------------|--------------|
| Product Specification | PS-87831-027 |
| Sales Drawing         | SD-87831-011 |

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