

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0878314020](#)  
**Status:** **Active**  
**Overview:** [Milli-Grid Connector System](#)  
**Description:** 2.00mm Pitch Milli-Grid Header, Vertical, Through Hole, Shrouded, 40 Circuits, 0.38µm Gold (Au) Plating, with Center Polarization Slot, with Locking Window, without PCB Locator, Tube

**Documents:**

[3D Model](#) [Packaging Specification PK-87831-001-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-87831-027-001 \(PDF\)](#)

**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 822348272129

**Physical**

Breakaway No  
 Circuits (Loaded) 40  
 Circuits (maximum) 40  
 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 1.837/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



Series image - Reference only

**EU ELV**

**Not Relevant**

**EU RoHS**

**Compliant**

**REACH SVHC**

Not Contained Per -  
 ED/61/2018 (27 June  
 2018)

**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](#)

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**

Duration at Max. Process Temperature (seconds)	010
Lead-free Process Capability	WAVE
Max. Cycles at Max. Process Temperature	001
Process Temperature max. C	260

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

Packaging Specification	PK-87831-001-001
Product Specification	PS-87831-027-001
Sales Drawing	SD-87831-0001-001

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