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**Part Number:** [0878320628](#)  
**Status:** **Active**  
**Overview:** [milligrid](#)  
**Description:** 2.00mm (.079") Pitch Milli-Grid™ Header, Surface Mount, Vertical, Shrouded, Lead-free, 6 Circuits, 0.38µm (15µ") Gold (Au) Plating, without PCB Locator, with Locking Window, Pick-and-Place Cap, Embossed Tape on Reel

**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 [87832](#)  
Application Wire-to-Board  
Comments With Cap|Contact Molex for application in automotive industry  
Overview [milligrid](#)  
Product Name Milli-Grid™

**Physical**

Breakaway No  
Circuits (Loaded) 6  
Circuits (maximum) 6  
Color - Resin Black  
First Mate / Last Break No  
Flammability 94V-0  
Glow-Wire Compliant 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  
Number of Rows 2  
Orientation Vertical  
PCB Locator No  
PCB Retention None  
Packaging Type Embossed Tape on Reel  
Pitch - Mating Interface (in) 0.079 In  
Pitch - Mating Interface (mm) 2.00 mm  
Pitch - Term. Interface (in) 0.079 In  
Pitch - Term. Interface (mm) 2.00 mm  
Plating min: Mating (µin) 15  
Plating min: Mating (µm) 0.38  
Plating min: Termination (µin) 75  
Plating min: Termination (µm) 1.88  
Polarized to Mating Part Side Slots (2)  
Polarized to PCB No  
Shrouded Fully  
Stackable No

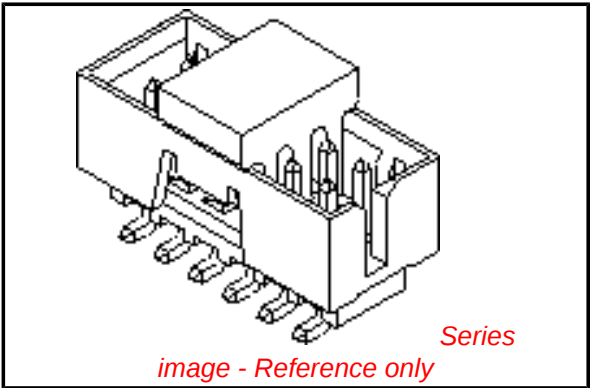


image - Reference only

**EU RoHS**  
**ELV and RoHS**  
**Compliant**  
**REACH SVHC**  
**Contains SVHC: No**  
**Halogen-Free**  
**Status**  
**Not Reviewed**

**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**  
[87832Series](#)

**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. L

|                               |                 |
|-------------------------------|-----------------|
| Temperature Range - Operating | -55°C to +105°C |
| Termination Interface: Style  | Surface Mount   |

**Electrical**

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

**Solder Process Data**

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

**Material Info**

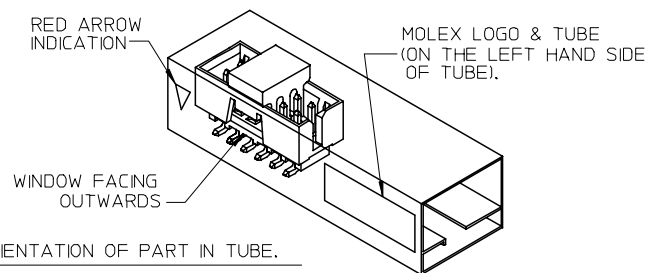
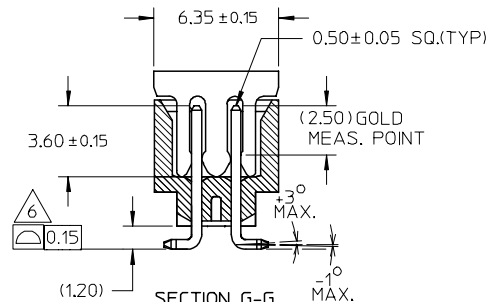
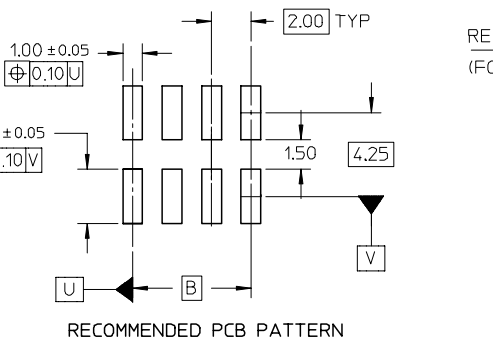
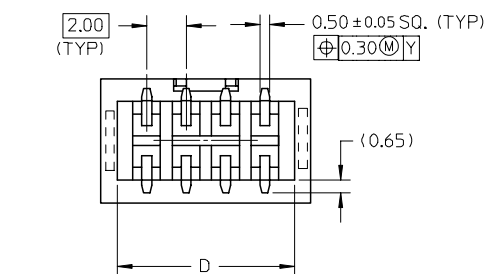
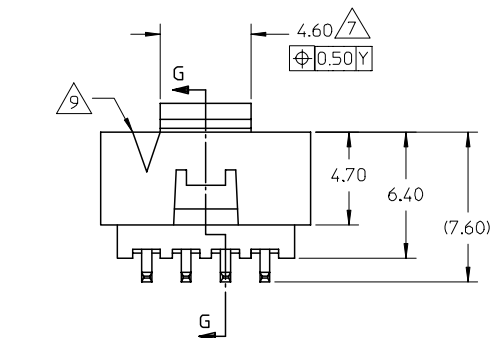
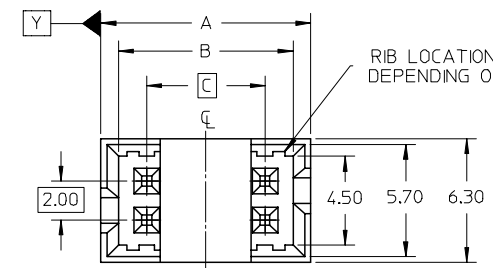
**Reference - Drawing Numbers**

|                       |              |
|-----------------------|--------------|
| Product Specification | PS-87831-027 |
| Sales Drawing         | SD-87832-030 |

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10 9 8 7 6 5 4 3 2 1



REF : ORIENTATION OF PART IN TUBE.  
(FOR THE REFERENCE OF PART/TUBE ASSEMBLY.)

| P/N WITHOUT<br>CAP IN TUBE | P/N WITH<br>CAP IN TUBE | P/N WITH CAP<br>IN TAPE/REEL | CKT<br>SIZE | DIMENSION |       |       |       |
|----------------------------|-------------------------|------------------------------|-------------|-----------|-------|-------|-------|
|                            |                         |                              |             | A         | B     | C     | D     |
| 87832-0624                 | 87832-0626              | 87832-0628                   | 6           | 8.65      | 6.85  | 4.00  | 7.00  |
| 87832-0824                 | 87832-0826              | 87832-0828                   | 8           | 10.65     | 8.85  | 6.00  | 9.00  |
| 87832-1024                 | 87832-1026              | 87832-1028                   | 10          | 12.65     | 10.85 | 8.00  | 11.00 |
| 87832-1224                 | 87832-1226              | 87832-1228                   | 12          | 14.65     | 12.85 | 10.00 | 13.00 |

- NOTES:
- FOR ILLUSTRATION PURPOSES, 8 CIRCUIT SIZE WAFER IS SHOWN.
  - MATERIAL :  
HOUSING & CAP : 30% G.F., NYLON 46, UL94V-0, COLOR BLACK.  
PIN : 0.50MM SQ.PHOSPHOR BRONZE.
  - PLATING :  
0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN  
SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
  - PIN PUSHOUT FORCE : 0.91 KG MIN. IN EITHER DIRECTION.
  - PRODUCT SPECIFICATION PS-87831-027 APPLIES.
  - COPLANARITY IS TO BE MEASURED BY RESTING THE SOLDER TAIL  
ON A GAUGE SURFACE.
  - BEND DEPRESSION ON SMT TAIL IS ACCEPTACLE SO LONG AS IT  
DOES NOT AFFECT THE OVERALL COPLANARITY OF THE TAIL.
  - CAP TO BE POSITION IN THE CENTER OF HEADER FOR  
PICK AND PLACE.
  - CKT 4 & 6 HAS NO IDENTIFICATION TAG.
  - FOR 4 CKT OPTION, REFER TO 87832-0406.
  - THIS HEADER MATES WITH MOLEX:  
a) CRIMP RECEPTACLE HOUSING, 51110 SERIES  
WITH CRIMP TERMINAL, 50394 SERIES.  
b) 2MM MILLIGRID DUAL ROW IDT, 87568 SERIES.
  - PARTS SHALL BE PACKED WITH MOISTURE BARRIER BAG WITH  
DESICCANT GEL.

|                                                                              |                                        |             |                                      |                                                            |       |                            |             |                          |                                                           |                                                                                                                                  |  |           |  |        |  |
|------------------------------------------------------------------------------|----------------------------------------|-------------|--------------------------------------|------------------------------------------------------------|-------|----------------------------|-------------|--------------------------|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--|-----------|--|--------|--|
| REVISED<br>EC NO: S2008-0049<br>DRWN:SKANG<br>CHKD:ATSEE<br>APPR:MLONG<br>A5 | 2007/10/31<br>2007/10/31<br>2007/11/01 | DESCRIPTION | QUALITY<br>SYMBOLS<br><br>▽=0<br>▽=0 | GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                   |       | DIMENSION STYLE<br>MM ONLY |             | SCALE<br>NTS             | DESIGN UNITS<br>METRIC                                    | THIRD ANGLE<br>PROJECTION                                                                                                        |  |           |  |        |  |
|                                                                              |                                        |             |                                      |                                                            | mm    | INCH                       | DRAWN BY    | DATE                     | TITLE<br>MGRID, 2MM, SHROUDED HDR<br>SMT, IN TUBE AND T&R |                                                                                                                                  |  |           |  |        |  |
|                                                                              |                                        |             |                                      | 4 PLACES                                                   | ± --- | ± ---                      | KSEE        | 2004/03/11               |                                                           |                                                                                                                                  |  |           |  |        |  |
|                                                                              |                                        |             |                                      | 3 PLACES                                                   | ± --- | ± ---                      | CHECKED BY  | DATE                     |                                                           |                                                                                                                                  |  |           |  |        |  |
|                                                                              |                                        |             |                                      | 2 PLACES                                                   | ± 0.2 | ± ---                      | PTL IM      | 2004/03/30               |                                                           |                                                                                                                                  |  |           |  |        |  |
|                                                                              |                                        |             |                                      | 1 PLACE                                                    | ± --- | ± ---                      | APPROVED BY | DATE                     |                                                           |                                                                                                                                  |  |           |  |        |  |
|                                                                              |                                        |             |                                      | ANGULAR ± 3 °                                              |       | SCLOW                      | 2004/04/01  | molex MOLEX INCORPORATED |                                                           | DOCUMENT NO.                                                                                                                     |  | SHEET NO. |  |        |  |
|                                                                              |                                        |             |                                      | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |       |                            |             | MATERIAL NO.             |                                                           | SD-87832-030                                                                                                                     |  |           |  | 1 OF 2 |  |
|                                                                              |                                        |             |                                      |                                                            |       |                            |             | SEE TABLE                |                                                           |                                                                                                                                  |  |           |  |        |  |
|                                                                              |                                        |             |                                      |                                                            |       |                            |             | SIZE<br>A3               |                                                           | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |           |  |        |  |

