

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

**Part Number:** [0873812217](#)  
**Status:** **Active**  
**Description:** 2.00mm (.079") Pitch Milli-Grid™ Receptacle, Surface Mount, Top Entry, 0.76µm (30µ") Gold (Au) Plating, without Cap, with Locating Peg, 22 Circuits, Leadfree

**Documents:**

[3D Model](#) [Product Specification PS-87380-002 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family PCB Receptacles  
 Series [87381](#)  
 Application Board-to-Board  
 Obsolete Date 2006/06/01  
 Product Literature Order No 987650-1991  
 Product Name Milli-Grid™

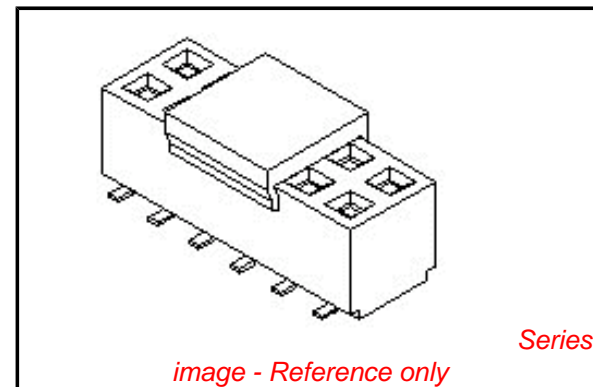
**Physical**

Circuits (Loaded) 22  
 Circuits (maximum) 22  
 Color - Resin Black  
 Durability (mating cycles max) 25  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Lock to Mating Part None  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 2  
 Orientation Vertical  
 PCB Locator Yes  
 PCB Retention None  
 Packaging Type Tube  
 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) 30  
 Plating min: Mating (µm) 0.76  
 Plating min: Termination (µin) 50  
 Plating min: Termination (µm) 1.27  
 Polarized to PCB Yes  
 Surface Mount Compatible (SMC) N/A  
 Temperature Range - Operating -55°C to +105°C  
 Termination Interface: Style Surface Mount

**Electrical**

Current - Maximum per Contact 1.9A  
 Voltage - Maximum 125V

**Material Info**



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Not Reviewed**  
**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**

[87381Series](#)

**Mates With**

[87758](#) Vertical, Through Hole, Stackable PCB Header, [87759](#) Vertical, Surface Mount, Stackable PCB Header, [87760](#) Right Angle, Through Hole, Stackable PCB Header, [87831](#) Vertical, Through Hole PCB Header, [87832](#) Vertical, Surface Mount PCB

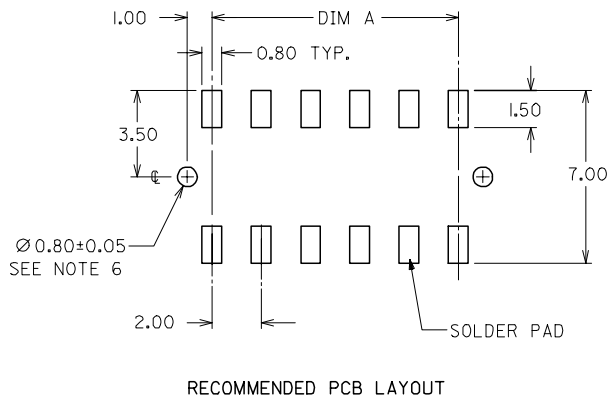
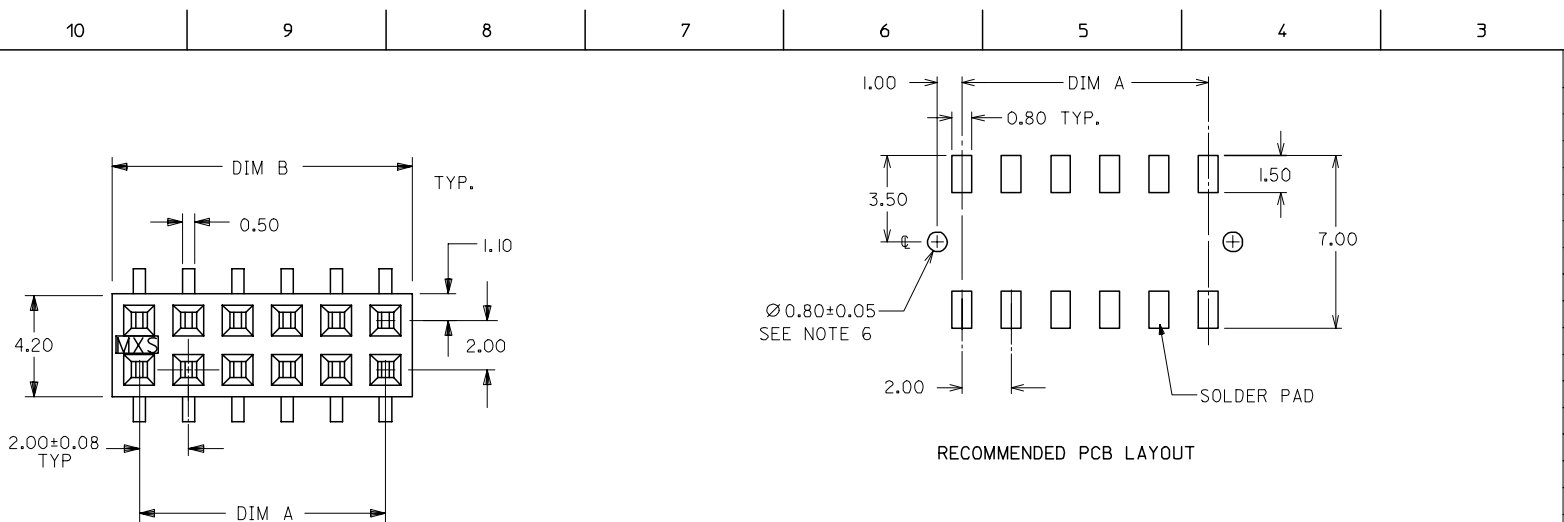
**Reference - Drawing Numbers**

Product Specification  
Sales Drawing

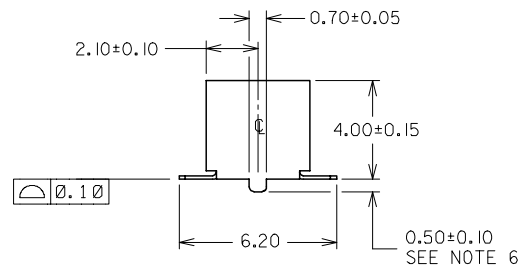
PS-87380-002  
SD-87381-\*\*\*\*

This document was generated on 03/18/2010

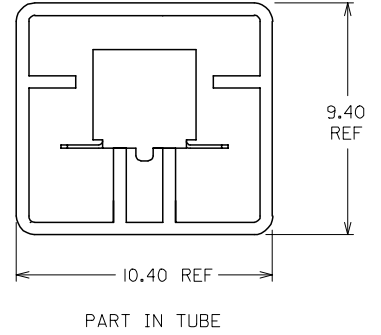
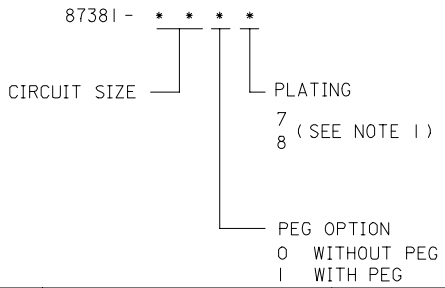
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| PART NUMBER | CKT. SIZE | DIM A | DIM B |
|-------------|-----------|-------|-------|
| 87381-06**  | 6         | 4.00  | 6.00  |
| 87381-08**  | 8         | 6.00  | 8.00  |
| 87381-10**  | 10        | 8.00  | 10.00 |
| 87381-12**  | 12        | 10.00 | 12.00 |
| 87381-14**  | 14        | 12.00 | 14.00 |
| 87381-16**  | 16        | 14.00 | 16.00 |
| 87381-18**  | 18        | 16.00 | 18.00 |
| 87381-20**  | 20        | 18.00 | 20.00 |
| 87381-22**  | 22        | 20.00 | 22.00 |
| 87381-24**  | 24        | 22.00 | 24.00 |
| 87381-26**  | 26        | 24.00 | 26.00 |
| 87381-28**  | 28        | 26.00 | 28.00 |
| 87381-30**  | 30        | 28.00 | 30.00 |
| 87381-32**  | 32        | 30.00 | 32.00 |
| 87381-34**  | 34        | 32.00 | 34.00 |
| 87381-36**  | 36        | 34.00 | 36.00 |
| 87381-38**  | 38        | 36.00 | 38.00 |
| 87381-40**  | 40        | 38.00 | 40.00 |
| 87381-42**  | 42        | 40.00 | 42.00 |
| 87381-44**  | 44        | 42.00 | 44.00 |
| 87381-46**  | 46        | 44.00 | 46.00 |
| 87381-48**  | 48        | 46.00 | 48.00 |
| 87381-50**  | 50        | 48.00 | 50.00 |



PART NO. LEGEND



NOTES:

- PLATING FINISH :
  - 7 - 0.76um MIN. GOLD IN CONTACT AREA  
1.27um MIN. TIN IN SOLDER TAIL AREA  
BOTH OVER 1.27um MIN NICKEL OVERALL
  - 8 - 0.38um MIN. GOLD IN CONTACT AREA  
1.27um MIN. TIN IN SOLDER TAIL AREA  
BOTH OVER 1.27um MIN NICKEL OVERALL
- 12 CKT SIZE SHOWN FOR ILLUSTRATION ONLY. SEE CHART FOR ALL AVAILABLE PART SIZES
- PRODUCT SPECIFICATION PS-87380 APPLIES
- COPLANARITY OF SOLDER TAILS ARE TO BE MEASURED BY RESTING THE PART ON A FLAT GAUGE SURFACE
- OTHER PLATING OPTIONS AVAILABLE. PLEASE CONTACT FACTORY
- PEG AND PCB HOLE OPTIONAL. SEE PART LEGEND FOR PART CONFIGURATON
- PARTS SHALL BE PACKED IN MOISTURE BARRIER BAG.

|   |                               |  |  |                                      |  |   |                        |                        |  |
|---|-------------------------------|--|--|--------------------------------------|--|---|------------------------|------------------------|--|
| ADD NOTE 7.<br>EC NO: S2008-0281<br>DRWNS:KANG 2007/10/31<br>CHKD:ATSEE 2007/11/01<br>APPR:MLONG 2007/11/01 | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)                |  | DIMENSION STYLE<br>MM ONLY           |  | SCALE<br>NTS  | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION |  |
|   |                               |  |  | DRAWN BY DATE<br>TAY 1993/01/21      |  | TITLE<br>MGRID<br>4MM HT., WITH LOC. PEG  |                        |                        |  |
|   |                               |  |  | CHECKED BY DATE<br>SKTOH 1993/01/26  |  |   |                        |                        |  |
|   |                               |  |  | APPROVED BY DATE<br>RWONG 1993/01/27 |  | MOLEX INCORPORATED<br>DOCUMENT NO. SD-87381-**** SHEET NO. 1 OF 1   |                        |                        |  |
|   |                               | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |  | SEE TABLE                            |  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                        |                        |  |