

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

**Part Number:** [0873814017](#)  
**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, 40 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  
 Product Literature Order No 987650-1991  
 Product Name Milli-Grid™

**Physical**

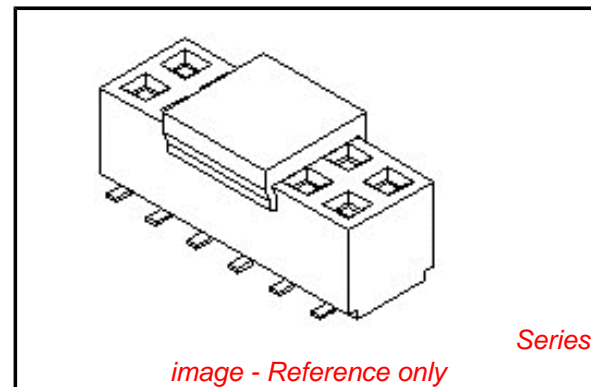
Circuits (Loaded) 40  
 Circuits (maximum) 40  
 Color - Resin Black  
 Durability (mating cycles max) 25  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Lock to Mating Part None  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin-Lead  
 Material - 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

**Solder Process Data**

Lead-free Process Capability Reflow Capable (SMT only)  
 Process Temperature max. C 245



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**Halogen-Free Status**

**China RoHS**



**Not Reviewed**

**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

**Material Info**

**Reference - Drawing Numbers**

Product Specification

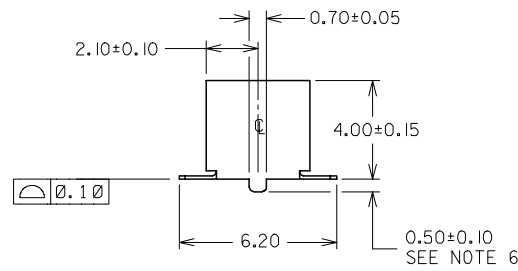
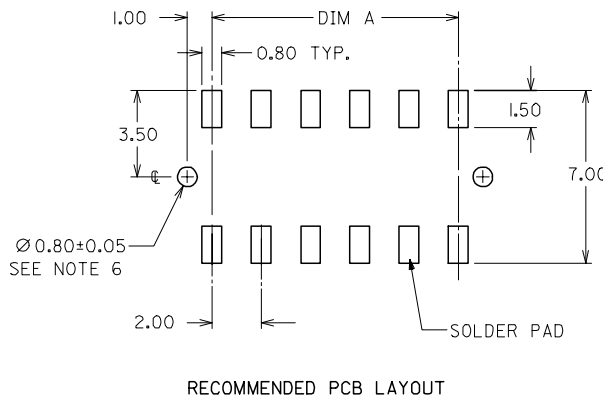
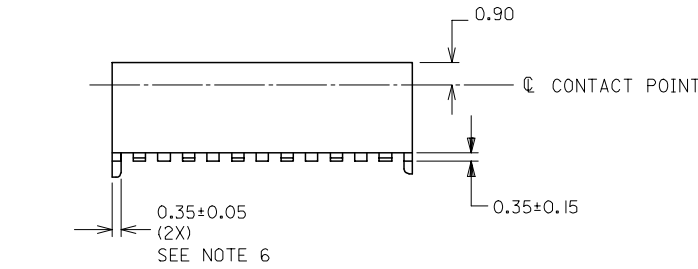
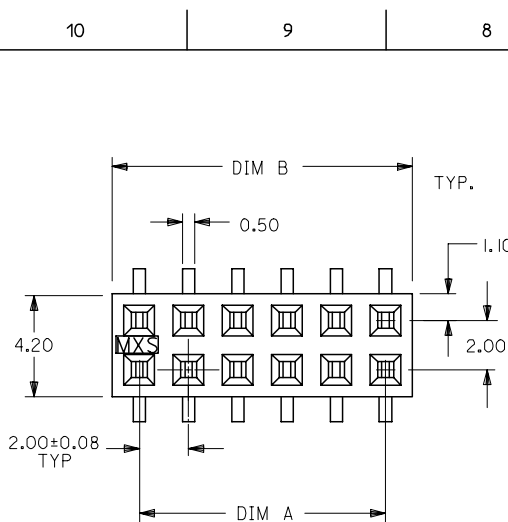
Sales Drawing

PS-87380-002

SD-87381-\*\*\*\*

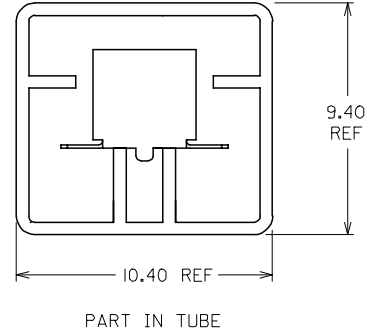
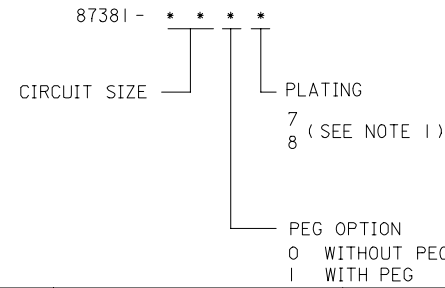
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PART NUMBER	CKT. SIZE	DIM A	DIM B
87381-06**	6	4.00	6.00
87381-08**	8	6.00	8.00
87381-10**	10	8.00	10.00
87381-12**	12	10.00	12.00
87381-14**	14	12.00	14.00
87381-16**	16	14.00	16.00
87381-18**	18	16.00	18.00
87381-20**	20	18.00	20.00
87381-22**	22	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. EC NO: S2008-0281 DRWNS:KANG 2007/10/31 CHKD:ATSEE 2007/11/01 APPR:MLONG 2007/11/01	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION																
		<table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr><td>4 PLACES</td><td>± ---</td><td>± ---</td></tr> <tr><td>3 PLACES</td><td>± ---</td><td>± ---</td></tr> <tr><td>2 PLACES</td><td>± 0.10</td><td>± ---</td></tr> <tr><td>1 PLACE</td><td>± ---</td><td>± ---</td></tr> </tbody> </table>			mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.10	± ---	1 PLACE	± ---	± ---	DRAWN BY TAY		DATE 1993/01/21	TITLE <b>MGRID 4MM HT., WITH LOC. PEG</b>		
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1 PLACE	± ---	± ---																						
ANGULAR ± 3 °		CHECKED BY SKTOH		DATE 1993/01/26																				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY RWONG		DATE 1993/01/27	MOLEX INCORPORATED DOCUMENT NO. SD-87381-****			SHEET NO. 1 OF 1																
SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																						