

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

**Part Number:** [0877591651](#)  
**Status:** **Active**  
**Overview:** milligrid  
**Description:** 2.00mm (.079") Pitch Milli-Grid™ Header, Surface Mount, Vertical, 16 Circuits, 0.38µm (30µ") Gold (Au) Selective Plating, with Press-fit Plastic Pegs, Lead-free

**Documents:**

[3D Model](#) [Product Specification PS-87761-100 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

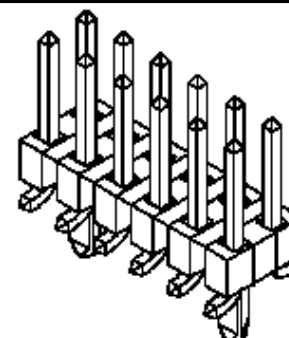
UL E29179

**General**

Product Family PCB Headers  
 Series [87759](#)  
 Application Board-to-Board  
 Overview [milligrid](#)  
 Product Name Milli-Grid™

**Physical**

Breakaway Yes  
 Circuits (Loaded) 16  
 Circuits (maximum) 16  
 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 None  
 Mated Height (in) 0.150 In  
 Mated Height (mm) 3.80 mm  
 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  
 Polarized to Mating Part No  
 Polarized to PCB No  
 Shrouded No  
 Stackable Yes  
 Temperature Range - Operating -55°C to +105°C  
 Termination Interface: Style Surface Mount



Series

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**

[87759Series](#)

**Mates With**

[79107](#) Milli-Grid™ Receptacle, Vertical, Through Hole. [79108](#) Milli-Grid™ Flex-to-Board, Vertical Receptacle. Milli-Grid™ Receptacle, Surface Mount. [79109](#). [87381](#)

**Electrical**

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

**Solder Process Data**

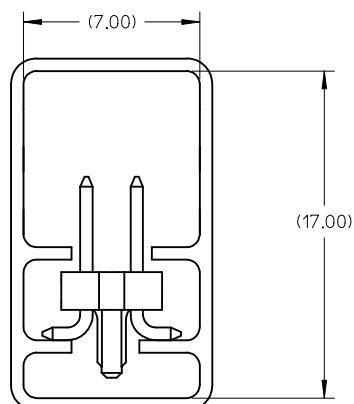
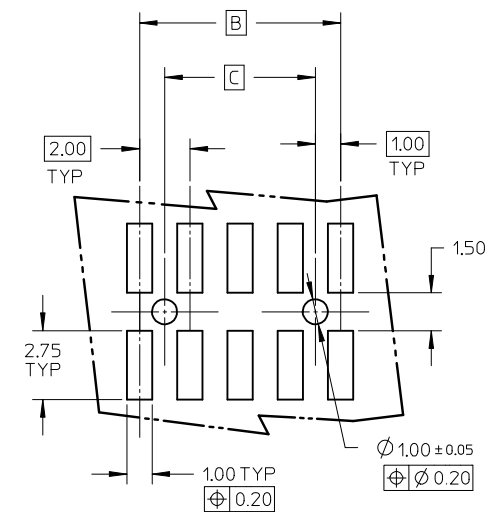
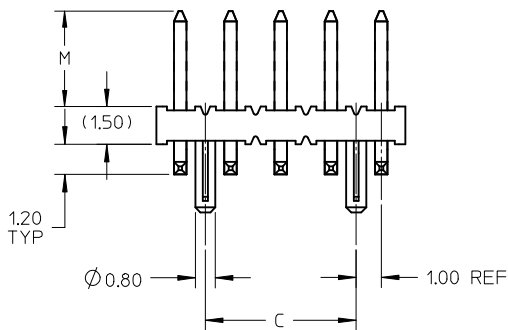
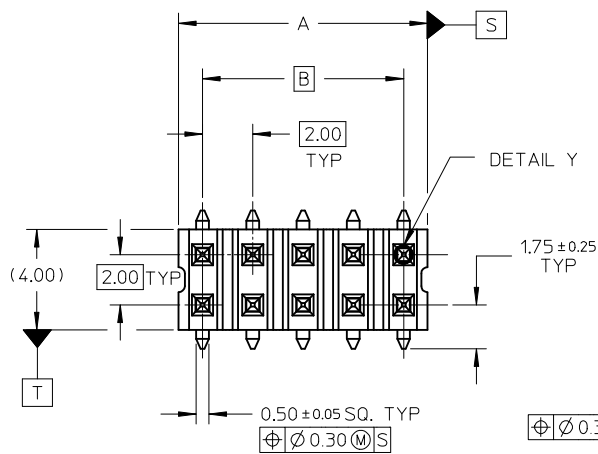
Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	260

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

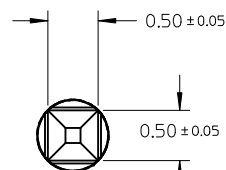
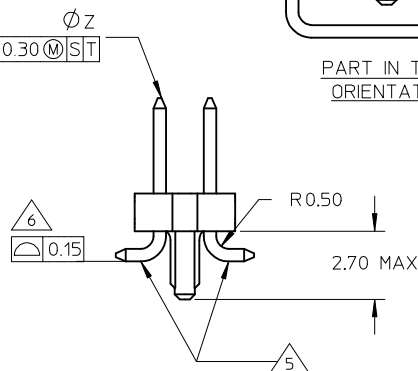
Packaging Specification	PK-89990-475
Product Specification	PS-87761-100
Sales Drawing	SD-87759-113

This document was generated on 05/25/2010

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PART IN TUBE  
ORIENTATION



DETAIL Y

NOTE:

1. MATERIAL:

HSG - HIGH TEMPERATURE THERMOPLASTIC,  
UL 94V-0, COLOUR BLACK

PIN - 0.50 SQ PHOSPHOR BRONZE

2. PLATING:

\*\*50 / \*\*52 - 0.38um MIN GOLD PLATE AT CONTACT AREA,  
TIN PLATE AT SOLDER AREA,  
BOTH OVER NICKEL UNDERPLATE

\*\*51 - 0.76um MIN GOLD PLATE AT CONTACT AREA,  
TIN PLATE AT SOLDER AREA,  
BOTH OVER NICKEL UNDERPLATE

(\*\* - REPRESENTS DIFFERENT CKT SIZE . SEE TABLE AT SHT 2)

3. PIN PUSHOUT FORCE: 1KG MIN IN EITHER DIRECTION

4. PRODUCT SPEC PS-87761-100 APPLIES.

5. BEND DEPRESSION IS ACCEPTABLE SO LONG AS IT DOES NOT  
AFFECT THE OVERALL COPLANARITY OF TAIL.

6. COPLANARITY IS TO BE MEASURED BY RESTING THE SOLDER TAIL  
ON A FLAT SURFACE.

7. FOR ILLUSTRATION PURPOSES, 10CKT IS SHOWN

8. TUBE LENGTH IS 560MM REF STANDARD.

9. RECOMMENDED PCB BOARD THK IS 1.60 ± 0.10 MM.

PDR#S-001876-00-00 EC NO: S2009-0182 DRWN:SKANG 2008/09/24 CHKD:ATSEE 2008/09/24 APPR:MLONG 2008/09/25	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION														
	<p>▽=0</p> <p>∠=0</p>	<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>± 0.2</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </tbody> </table> <p>ANGULAR ± 3 °</p>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.2	± ---	1 PLACE	± ---	± ---	MM ONLY	NTS	METRIC
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DRAWN BY KSEE	DATE 2003/12/24	TITLE CUSTOM HEADER MGRID, 2MM DUAL ROW HDR WITH PEG, SMT
	CHECKED BY KCLING	
APPROVED BY SKTOH	DATE 2004/01/12	MOLEX INCORPORATED DOCUMENT NO. SD-87759-113 SHEET NO. 1 OF 2
MATERIAL NO.	SEE TABLE	

SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION
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	10	9		8		7	6	5	4	3	2	1
	PART NUMBER WITHOUT CAP IN TUBE	CKT SIZE	A	B	C	M						
F	87759-0850/0851	08	7.90	6.00	4.00	3.80						
	87759-0852	08	7.90	6.00	4.00	9.60						
	87759-1050/1051	10	9.90	8.00	6.00	3.80						
	87759-1250/1251	12	11.90	10.00	8.00	3.80						
	87759-1450/1451	14	13.90	12.00	10.00	3.80						
	87759-1650/1651	16	15.90	14.00	12.00	3.80						
E	87759-1850/1851	18	17.90	16.00	14.00	3.80						
	87759-2050/2051	20	19.90	18.00	16.00	3.80						
	87759-2250/2251	22	21.90	20.00	18.00	3.80						
	87759-2450/2451	24	23.90	22.00	20.00	3.80						
	87759-2650/2651	26	25.90	24.00	22.00	3.80						
	87759-2850/2851	28	27.90	26.00	24.00	3.80						
D	87759-3050/3051	30	29.90	28.00	26.00	3.80						
	87759-3250/3251	32	31.90	30.00	28.00	3.80						
	87759-3450/3451	34	33.90	32.00	30.00	3.80						
	87759-3650/3651	36	35.90	34.00	32.00	3.80						
	87759-3850/3851	38	37.90	36.00	34.00	3.80						
	87759-4050/4051	40	39.90	38.00	36.00	3.80						
C	87759-4250/4251	42	41.90	40.00	38.00	3.80						
	87759-4450/4451	44	43.90	42.00	40.00	3.80						
	87759-4650/4651	46	45.90	44.00	42.00	3.80						
	87759-4850/4851	48	47.90	46.00	44.00	3.80						
	87759-5050/5051	50	49.90	48.00	46.00	3.80						

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