

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

**Part Number:** [0877591850](#)  
**Status:** **Active**  
**Overview:** milligrd  
**Description:** 2.00mm (.079") Pitch Milli-Grid™ Header, Surface Mount, Vertical, 18 Circuits, 0.38µm (15µ") 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**

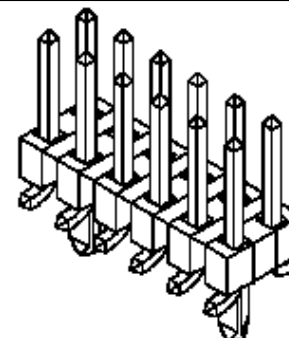
UL E29179

**General**

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

**Physical**

Breakaway Yes  
 Circuits (Loaded) 18  
 Circuits (maximum) 18  
 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) 15  
 Plating min: Mating (µm) 0.38  
 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**

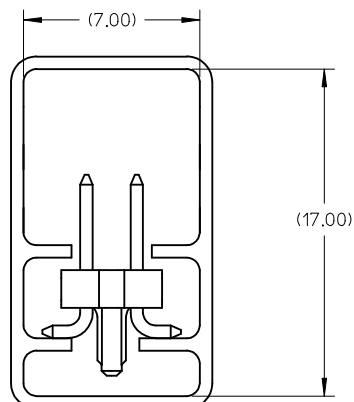
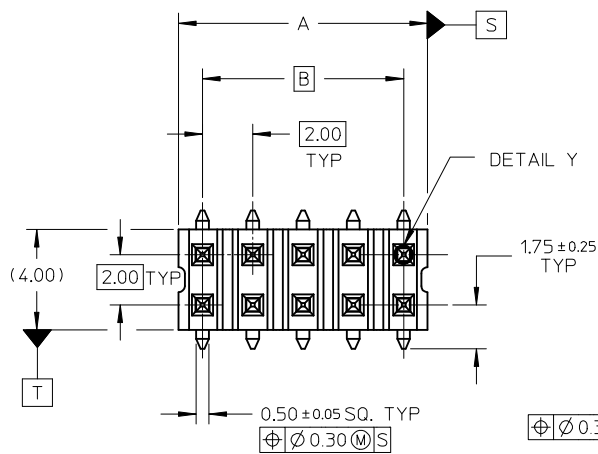
Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	260

**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

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**



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.

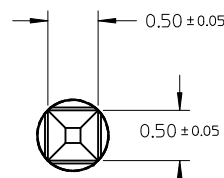
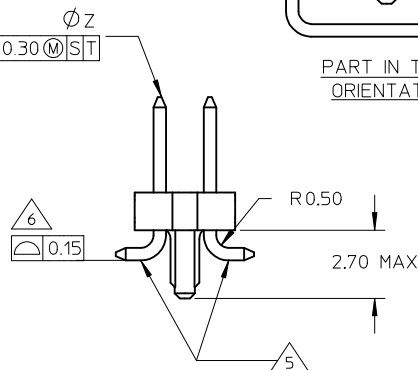
5 BEND DEPRESSION IS ACCEPTABLE SO LONG AS IT DOES NOT  
AFFECT THE OVERALL COPLANARITY OF TAIL.

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

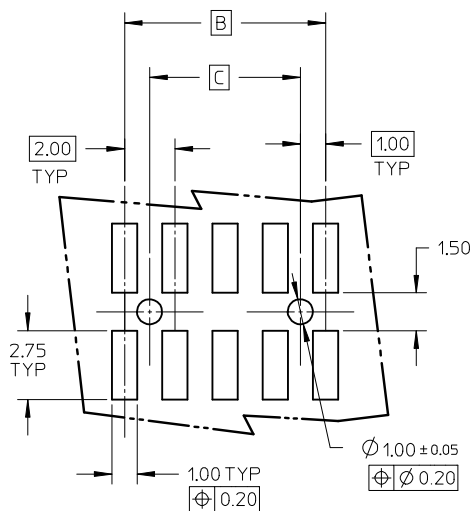
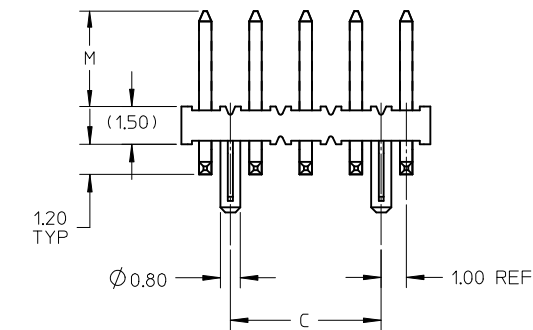
7. FOR ILLUSTRATION PURPOSES, 10CKT IS SHOWN

8. TUBE LENGTH IS 560MM REF STANDARD.

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



DETAIL Y



PDR#S-001876-00-00 EC NO: S2009-0182 DRWN:SKANG 2008/09/24 CHKD:ATSEE 2008/09/24 APPR:MLONG 2008/09/25	REV	DESCRIPTION
	B1	

QUALITY SYMBOLS	▽=0 ∇=0
-----------------	------------

GENERAL TOLERANCES (UNLESS SPECIFIED)	mm	INCH
	4 PLACES ± ---	± ---
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	3 PLACES ± ---	± ---
	2 PLACES ± 0.2	± ---
ANGULAR ± 3 °	1 PLACE ± ---	± ---
	SEE TABLE	

DIMENSION STYLE MM ONLY	
DRAWN BY KSEE	DATE 2003/12/24
CHECKED BY KCLING	DATE 2004/01/12
APPROVED BY SKTOH	DATE 2004/01/12
MATERIAL NO.	

SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
TITLE CUSTOM HEADER MGRID, 2MM DUAL ROW HDR WITH PEG, SMT		
MOLEX INCORPORATED		
DOCUMENT NO. SD-87759-113	SHEET NO. 1 OF 2	

	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						

<b>PDR#S-001876-00-00</b> EC NO: S2009-0182 DRWN:SKANG 2008/09/24 CHKD:ATSEE 2008/09/24 APPR:MLONG 2008/09/25	QUALITY SYMBOLS =0 =0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <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> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.2	± ---	1 PLACE	± ---	± ---	DIMENSION STYLE <b>MM ONLY</b>	SCALE <b>NTS</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION
		mm	INCH																		
	4 PLACES	± ---	± ---																		
	3 PLACES	± ---	± ---																		
2 PLACES	± 0.2	± ---																			
1 PLACE	± ---	± ---																			
DESCRIPTION <b>B1</b>	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY KSEE	DATE 2003/12/24	TITLE <b>CUSTOM HEADER          MGRID, 2MM DUAL ROW          HDR WITH PEG, SMT</b>																	
		CHECKED BY KCLING	DATE 2004/01/12	<b>MOLEX INCORPORATED</b>																	
		APPROVED BY SKTOH	DATE 2004/01/12	MATERIAL NO. <b>SEE TABLE</b>	DOCUMENT NO. <b>SD-87759-113</b>	SHEET NO. <b>2 OF 2</b>															