

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

**Part Number:** [0877594651](#)  
**Status:** **Active**  
**Overview:** milligrd  
**Description:** 2.00mm (.079") Pitch Milli-Grid™ Header, Surface Mount, Vertical, 46 Circuits, 0.38µm (30µ") Gold (Au) Selective Plating, without Press-fit Plastic Pegs, Lead-free

**Documents:**

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

**Agency Certification**

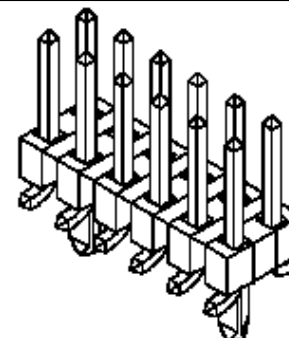
UL E29179

**General**

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

**Physical**

Breakaway Yes  
 Circuits (Loaded) 46  
 Circuits (maximum) 46  
 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**

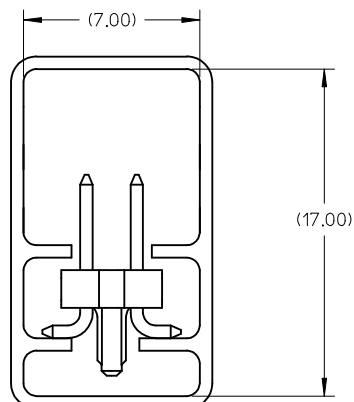
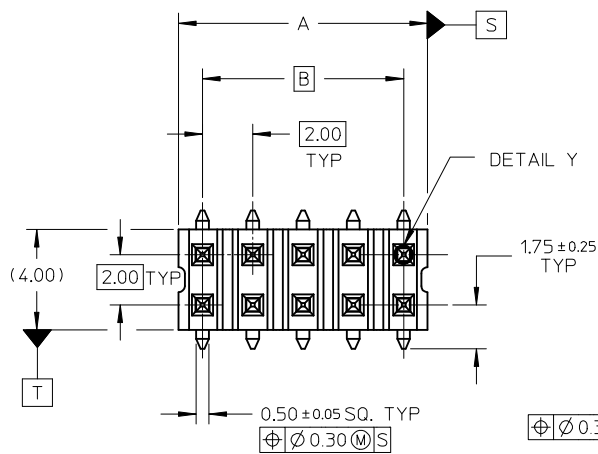
Lead-free Process Capability Reflow Capable (SMT only)  
Process Temperature max. C 250

**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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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.

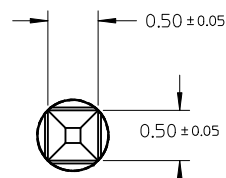
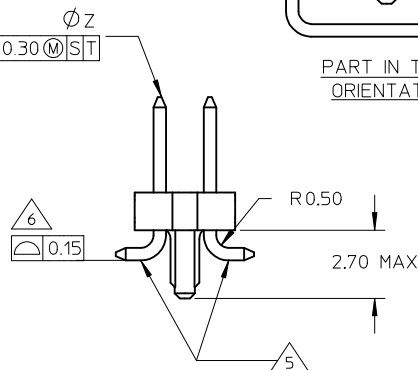
5 BEND DEPRESSION IS ACCEPTABLE SO LONG AS IT DOES NOT  
AFFECT THE OVERALL COPLANARITY OF TAIL.

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

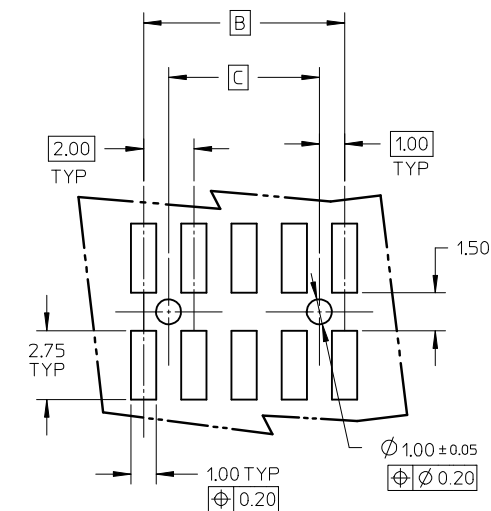
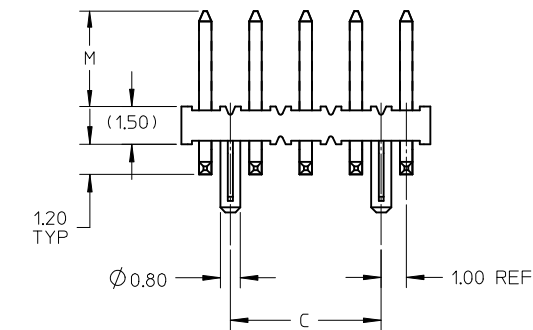
7. FOR ILLUSTRATION PURPOSES, 10CKT IS SHOWN

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	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0 ∠=0	mm INCH	MM ONLY	NTS	METRIC	
		4 PLACES ± --- ± ---	DRAWN BY DATE	TITLE		
		3 PLACES ± --- ± ---	CHECKED BY DATE	CUSTOM HEADER		
	2 PLACES ± 0.2 ± ---	APPROVED BY DATE	MGRID, 2MM DUAL ROW			
	1 PLACE ± --- ± ---	SKTOH 2004/01/12	HDR WITH PEG, SMT			
	ANGULAR ± 3 °	MATERIAL NO.	MOLEX INCORPORATED			
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	SD-87759-113			
		SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

DESCRIPTION	DATE	BY
REV		
B1		

DRAWN BY	DATE	TITLE
KSEE	2003/12/24	CUSTOM HEADER
CHECKED BY	DATE	MGRID, 2MM DUAL ROW
KCLING	2004/01/12	HDR WITH PEG, SMT
APPROVED BY	DATE	MOLEX INCORPORATED
SKTOH	2004/01/12	SD-87759-113
MATERIAL NO.	SEE TABLE	
SIZE	A3	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	
SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	
SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	

	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	REV DESCRIPTION <b>B1</b>	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		= 0 = 0	mm INCH	MM ONLY	NTS	METRIC		
			4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	DRAWN BY DATE KSEE 2003/12/24 CHECKED BY DATE KCLING 2004/01/12 APPROVED BY DATE SKTOH 2004/01/12	TITLE	CUSTOM HEADER MGRID, 2MM DUAL ROW HDR WITH PEG, SMT		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. <b>SEE TABLE</b>	SKETCH NO. DOCUMENT NO.	MOLEX INCORPORATED SD-87759-113	SHEET NO. 2 OF 2		