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**Part Number:** [0877594051](#)  
**Status:** **Active**  
**Overview:** milligrd  
**Description:** 2.00mm (.079") Pitch Milli-Grid™ Header, Surface Mount, Vertical, 40 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**

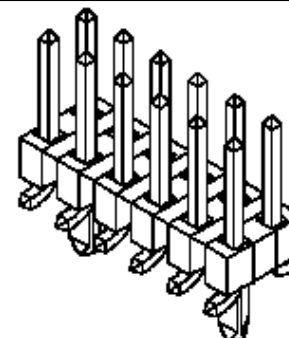
UL E29179

**General**

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

**Physical**

Breakaway Yes  
 Circuits (Loaded) 40  
 Circuits (maximum) 40  
 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**

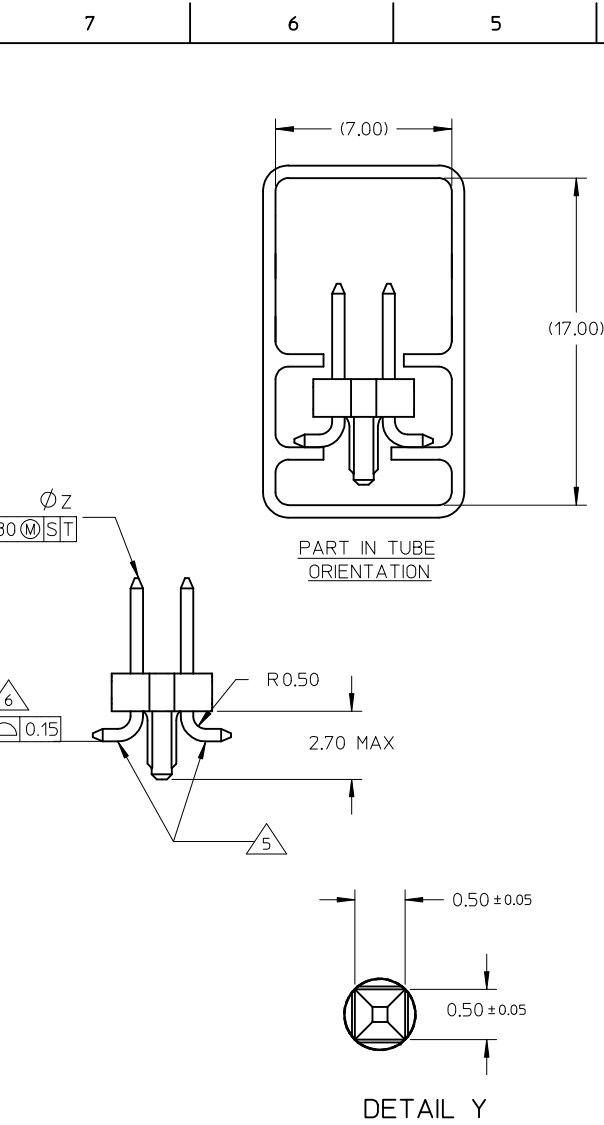
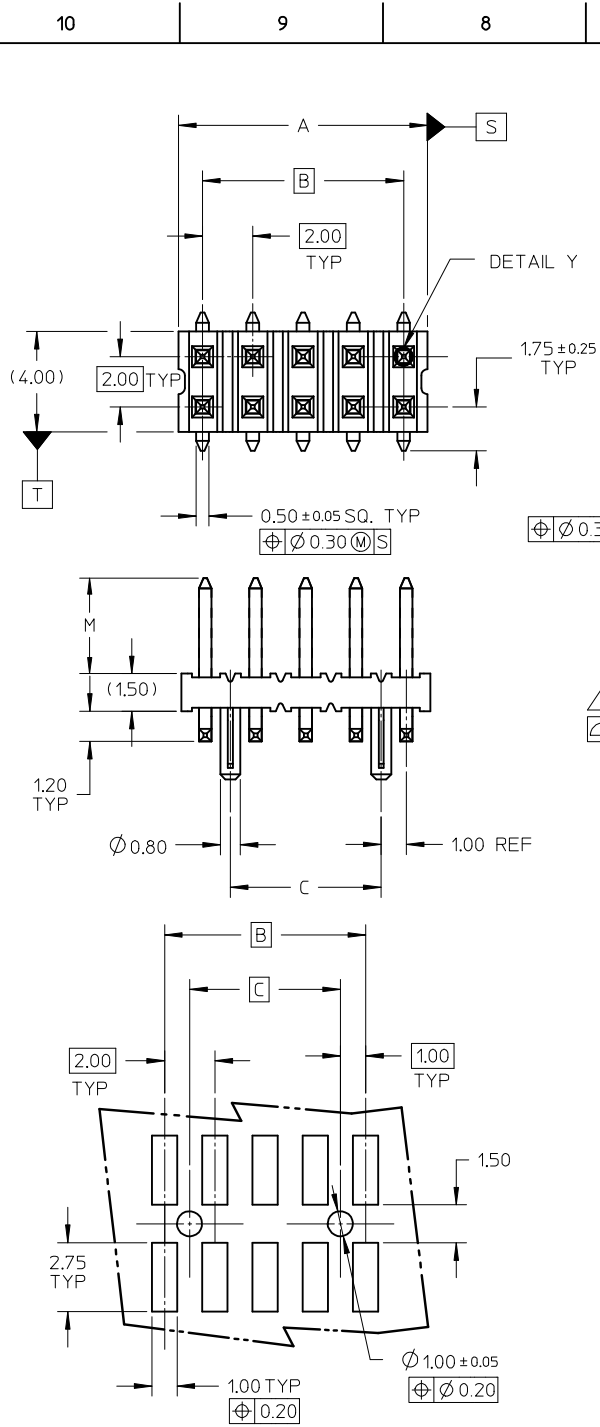
Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	260

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

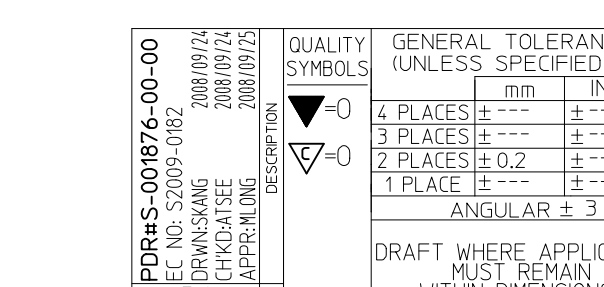
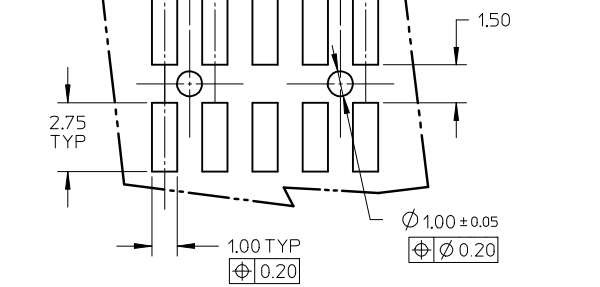
Packaging Specification	PK-89990-475
Product Specification	PS-87761-100
Sales Drawing	SD-87759-113

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- NOTE:
- MATERIAL:  
HSG - HIGH TEMPERATURE THERMOPLASTIC, UL 94V-0, COLOUR BLACK  
PIN - 0.50 SQ PHOSPHOR BRONZE
  - 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)
  - PIN PUSHOUT FORCE: 1KG MIN IN EITHER DIRECTION
  - PRODUCT SPEC PS-87761-100 APPLIES.
  - BEND DEPRESSION IS ACCEPTABLE SO LONG AS IT DOES NOT AFFECT THE OVERALL COPLANARITY OF TAIL.
  - COPLANARITY IS TO BE MEASURED BY RESTING THE SOLDER TAIL ON A FLAT SURFACE.
  - FOR ILLUSTRATION PURPOSES, 10CKT IS SHOWN
  - TUBE LENGTH IS 560MM REF STANDARD.
  - RECOMMENDED PCB BOARD THK IS 1.60±0.10 MM.



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

	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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		=0 =0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	MM ONLY	NTS	METRIC		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	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		
				MATERIAL NO. SEE TABLE SIZE A3	MOLEX INCORPORATED DOCUMENT NO. SD-87759-113 SHEET NO. 2 OF 2	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		