

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

**Part Number:** [0877581816](#)  
**Status:** **Active**  
**Overview:** milligrid  
**Description:** 2.00mm (.079") Pitch Milli-Grid™ Header, Through Hole, Vertical, 18 Circuits, 0.38µm (15µ") Gold (Au) Selective Plating, Pocket Tray Packaging, 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 [87758](#)  
 Application Board-to-Board  
 Overview [milligrid](#)  
 Product Name Milli-Grid™

**Physical**

Breakaway Yes  
 Circuits (Loaded) 18  
 Circuits (maximum) 18  
 Color - Resin Black  
 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) 0.157 In  
 Mated Height (mm) 4.00 mm  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin Nylon  
 Number of Rows 2  
 Orientation Vertical  
 PC Tail Length (in) 0.102 In  
 PC Tail Length (mm) 2.60 mm  
 PCB Locator No  
 PCB Retention None  
 PCB Thickness Recommended (in) 0.063 In  
 PCB Thickness Recommended (mm) 1.60 mm  
 Packaging Type Tray  
 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 No



*image - Reference only*

Series

**EU RoHS**

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

**China RoHS**



**Not Halogen-Free**

**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**

[87758Series](#)

**Mates With**

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

Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-55°C to +105°C
Termination Interface: Style	Through Hole

**Electrical**

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

**Solder Process Data**

Duration at Max. Process Temperature (seconds)	3
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	250

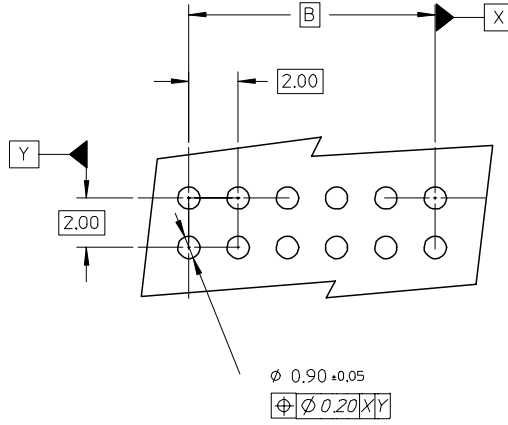
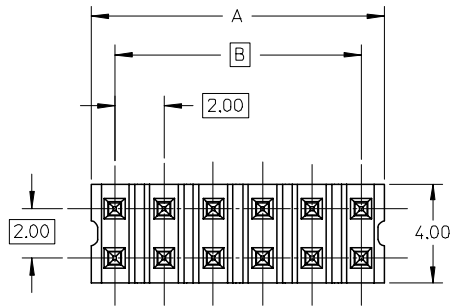
**Material Info****Reference - Drawing Numbers**

Product Specification	PS-87761-100
Sales Drawing	SD-87758-107

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10 9 8 7 6 5 4 3 2 1



**LEGEND**  
 87758- \* \* \* \*  
 CKT SIZE (SEE SHT 2 TABLE) PLATING (SEE NOTE 2)

**NOTES:**

**1. MATERIAL:**

HOUSING: 30% G.F. NYLON 46, 94V-0, COLOR: BLACK  
 PIN: 0.50mm SQ. PHOSPHOR BRONZE 510

**2. PLATING:**

- \*\*16 - 0.38um MIN GOLD IN CONTACT AREA.  
TIN IN SOLDER AREA, BOTH OVER  
NICKEL OVERALL.
- \*\*17 - 0.76um MIN GOLD IN CONTACT AREA,  
TIN IN SOLDER AREA, BOTH OVER  
NICKEL OVERALL.
- \*\*18 - 2.54um MIN TIN OVER  
NICKEL OVERALL.

**3. 12 CKT USED FOR ILLUSTRATION ONLY**

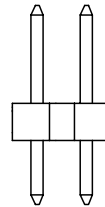
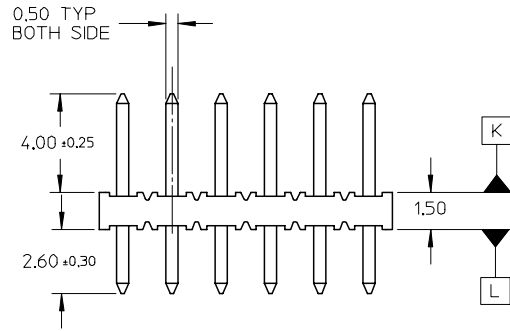
**4. PACKED IN POCKET TRAY**

**5. PIN PUSHOUT FORCE: 1KG MIN IN EITHER DIRECTION**

**6. CKT 4 AND 6 IS CUT FROM CKT 8 AND 12 RESPECTIVELY.  
 CKT 2 ARE CUT FROM ANY LARGER CKT SIZE.ROUGH EDGES  
 ARE EXPECTED ALONG THE CUTTING EDGES.**

**7. PRODUCT SPEC PS-87761-100 APPLIES.**

**8. RECOMMENDED PCB THICKNESS IS 1.60±0.10**



$\phi 0.71 \pm 0.07$   
 $\phi \phi 0.30 \text{ (M)}$



**VIEW P**

$\phi 0.71 \pm 0.07$   
 $\phi \phi 0.30 \text{ (M)}$



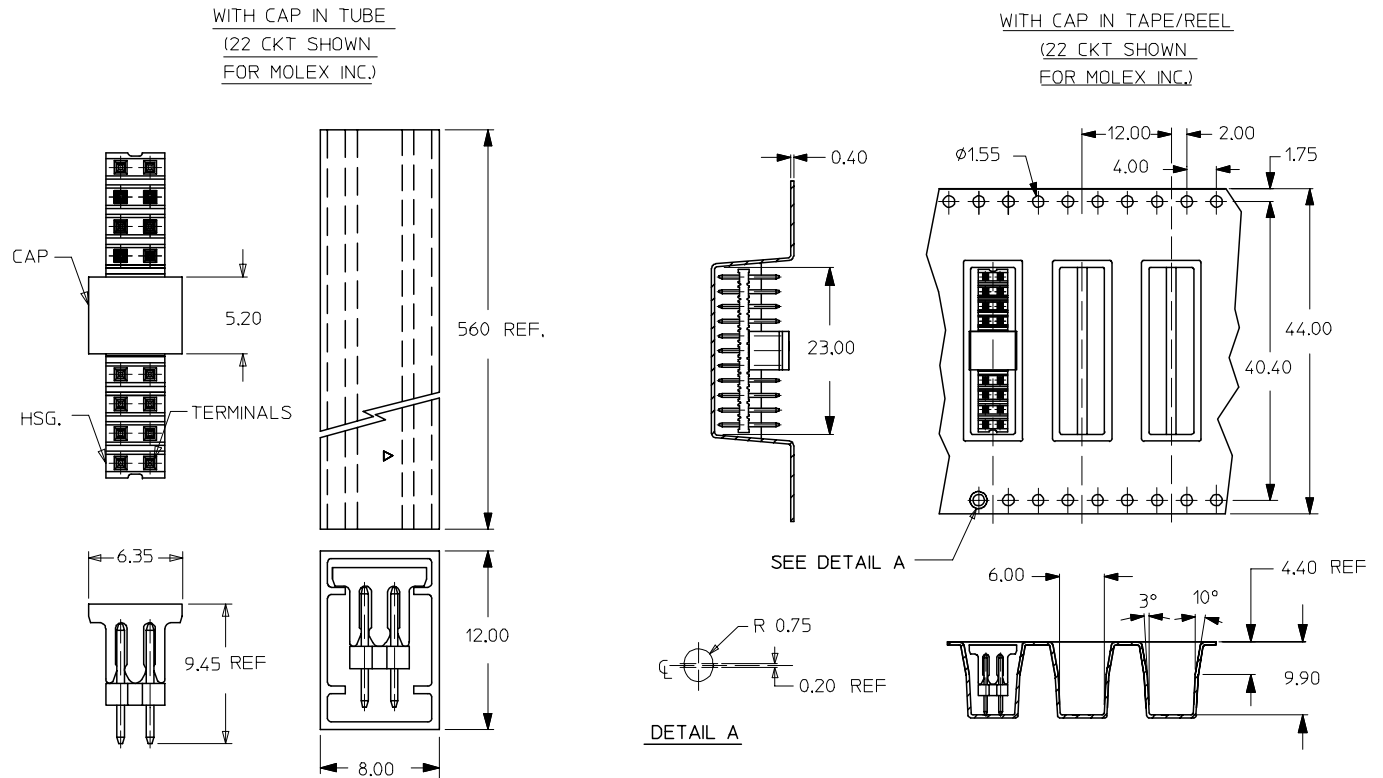
**VIEW Q**

EC NO: S2005-0715 2005/05/16 DRAWN:KCHO 2005/05/18 CHKD:PTLIM APPR:SCLOW 2005/05/19	QUALITY SYMBOLS $\nabla = 0$ $\sphericalangle = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		4 PLACES $\pm$ --- $\pm$ --- 3 PLACES $\pm$ --- $\pm$ --- 2 PLACES $\pm 0.20$ $\pm$ --- 1 PLACE $\pm$ --- $\pm$ --- ANGULAR $\pm 3^\circ$	mm INCH	DRAWN BY KSEE DATE 2003/10/30	TITLE SALES DRAWING 2MM DUAL ROW SINGLE WAFER, VERTICAL T/H HDR		
A2	DESCRIPTION REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		CHECKED BY KCL ING DATE 2004/01/05	APPROVED BY SKTOH DATE 2004/01/05	MOLEX INCORPORATED	SHEET NO. 1 OF 2
		SEE TABLE		MATERIAL NO.	DOCUMENT NO. SD-87758-107	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	

9 8 7 6 5 4 3 2 1

PART NUMBER	CKT SIZE	A	B
87758-02**	2	NA	NA
87758-04**	4	NA	2.00
87758-06**	6	NA	4.00
87758-08**	8	7.90	6.00
87758-10**	10	9.90	8.00
87758-12**	12	11.90	10.00
87758-14**	14	13.90	12.00
87758-16**	16	15.90	14.00
87758-18**	18	17.90	16.00
87758-20**	20	19.90	18.00
87758-22**	22	21.90	20.00
87758-24**	24	23.90	22.00
87758-26**	26	25.90	24.00
87758-28**	28	27.90	26.00
87758-30**	30	29.90	28.00
87758-32**	32	31.90	30.00
87758-34**	34	33.90	32.00
87758-36**	36	35.90	34.00
87758-38**	38	37.90	36.00
87758-40**	40	39.90	38.00
87758-42**	42	41.90	40.00
87758-44**	44	43.90	42.00
87758-46**	46	45.90	44.00
87758-48**	48	47.90	46.00
87758-50**	50	49.90	48.00

CKT SIZE	PART NO. WITH CAP IN TUBE	PART NO. WITH CAP IN TAPE/REEL	PLATING TYPE
8	87758-0814	87758-0815	**16
22	87758-5126	87758-5111	MOLEX INC.



EC NO: S2005-0715 2005/05/16 DRAWN:KCHO 2005/05/18 CHKD:PTLIM 2005/05/19 APPR:SCLOW	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.20 ± ---	1 PLACE ± --- ± ---	ANGULAR ± 3°	DRAWN BY KSEE	DATE 2003/10/30	TITLE SALES DRAWING 2MM DUAL ROW SINGLE WAFER, VERTICAL T/H HDR		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					APPROVED BY SKTOH	DATE 2004/01/05	MOLEX INCORPORATED		
		SIZE A3					MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-87758-107	SHEET NO. 2 OF 2	