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**Part Number:** [0877580450](#)  
**Status:** **Active**  
**Overview:** milligrid  
**Description:** 2.00mm (.079") Pitch Milli-Grid™ Header, Through Hole, Vertical, 4 Circuits, 0.38µm (15µ") Gold (Au) Selective Plating, 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) 4  
 Circuits (maximum) 4  
 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) 0.217 In  
 Mated Height (mm) 5.50 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) 0.062 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



image - Reference only

Series

**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC**  
 Not Reviewed  
**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**

[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](#)

Stackable	No
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

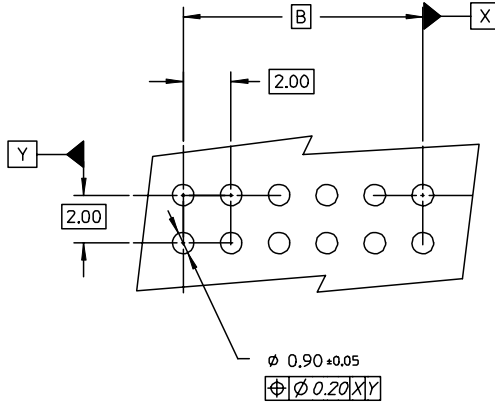
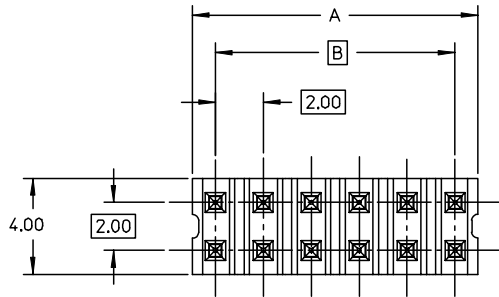
#### **Material Info**

#### **Reference - Drawing Numbers**

Product Specification	PS-87761-100
Sales Drawing	SD-87758-112

This document was generated on 05/25/2010

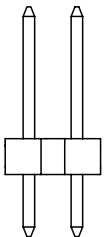
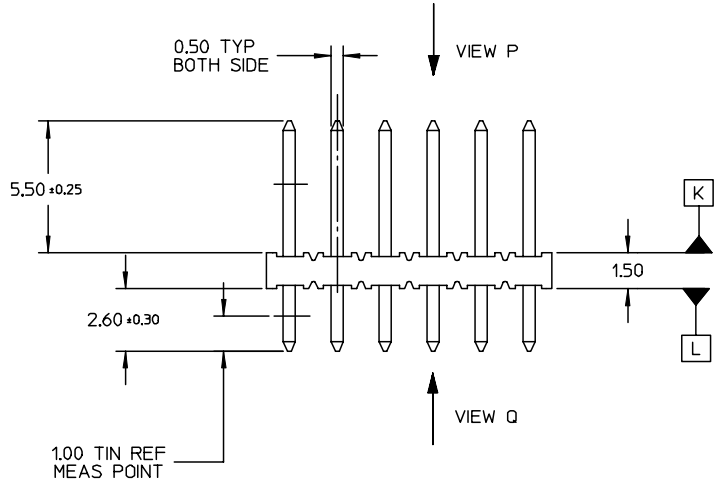
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**LEGEND**  
 87758- \*\* 5 0  
 CKT SIZE (SEE SHT 2 TABLE)      PLATING (SEE NOTE 2)

**NOTES:**

1. MATERIAL:  
 HOUSING: 30% G.F. NYLON 46, 94V-0, COLOR: BLACK  
 PIN: 0.50mm SQ. PHOSPHOR BRONZE 510
2. PLATING:  
 \*\*50 - 0.38um MIN GOLD IN CONTACT AREA,  
 TIN IN SOLDER AREA, BOTH 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.



$\phi 0,71 \pm 0,07$   
 $\phi 0,30$  K





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

$\phi 0,71 \pm 0,07$   
 $\phi 0,30$  L



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EC NO: S2004-0215 DRWN:KSEE 2004/01/20 CHKD:KCLING 2004/01/20 APPR:SKTOH 2004/01/20	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE NTS	DESIGN UNITS	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY
		$\nabla = 0$ $\sphericalangle = 0$	mm	INCH	DIMENSION STYLE	TITLE		
A	REV		4 PLACES	± ---	± ---	MM ONLY	2MM DUAL ROW SINGLE WAFER, VERTICAL THROUGH HOLE HEADER	
			3 PLACES	± ---	± ---	DRAWN BY DATE	KSEE 2003/10/30	
			2 PLACES	± 0.2	± ---	CHECKED BY DATE	KCLING 2004/01/05	
			1 PLACE	± ---	± ---	APPROVED BY DATE	SKTOH 2004/01/05	
			ANGULAR ± 3 °		MATERIAL NO.		DOCUMENT NO.	SHEET NO.
			DRAFT WHERE APPLICABLE		SEE TABLE		SD-87758-112	1 OF 2
			MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

PART NUMBER	CKT SIZE	A	B
87758-0450 	4	NA	2.00
87758-0650 	6	NA	4.00
87758-0850	8	7.90	6.00
87758-1050	10	9.90	8.00
87758-1250	12	11.90	10.00
87758-1450	14	13.90	12.00
87758-1650	16	15.90	14.00
87758-1850	18	17.90	16.00
87758-2050	20	19.90	18.00
87758-2250	22	21.90	20.00
87758-2450	24	23.90	22.00
87758-2650	26	25.90	24.00
87758-2850	28	27.90	26.00
87758-3050	30	29.90	28.00
87758-3250	32	31.90	30.00
87758-3450	34	33.90	32.00
87758-3650	36	35.90	34.00
87758-3850	38	37.90	36.00
87758-4050	40	39.90	38.00
87758-4250	42	41.90	40.00
87758-4450	44	43.90	42.00
87758-4650	46	45.90	44.00
87758-4850	48	47.90	46.00
87758-5050	50	49.90	48.00

EC NO: S2004-0215 DRWN:KSEE 2004/01/20 CHKD:KCLING 2004/01/20 APPR:SKTOH 2004/01/20	DESCRIPTION REV: A	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	SCALE NTS	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION	REVISE ON CAD ONLY	
		▽ = 0 ◻ = 0	mm    INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	DIMENSION STYLE MM ONLY		TITLE 2MM DUAL ROW SINGLE WAFER, VERTICAL THROUGH HOLE HEADER		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY DATE KSEE 2003/10/30 CHECKED BY DATE KCLING 2004/01/05 APPROVED BY DATE SKTOH 2004/01/05	MATERIAL NO. SEE TABLE DOCUMENT NO. SD-87758-112 SHEET NO. 2 OF 2		 MOLEX INCORPORATED	
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						B