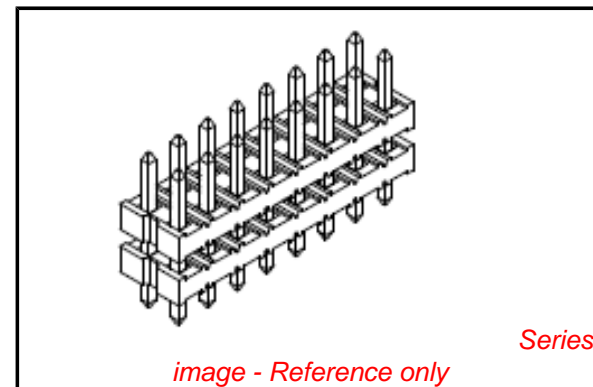


**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0877615021](#)  
**Status:** **Active**  
**Overview:** milligrd  
**Description:** 2.00mm (.079") Pitch Milli-Grid™ Header, Dual Row Dual Body, Through Hole, Vertical, 50 Circuits, 0.38µm (15µ") Gold (Au) Selective Plating, 8.70mm (.343") Stacking Height, Tray, Lead-free

**Documents:**

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



**General**

Product Family	PCB Headers
Series	<a href="#">87761</a>
Application	Board-to-Board
Comments	Without Cap, In Tray Packaging
Overview	<a href="#">milligrd</a>
Product Name	Dual Body, Milli-Grid™

**Physical**

Breakaway	Yes
Circuits (Loaded)	50
Circuits (maximum)	50
Color - Resin	Black
Durability (mating cycles max)	100
First Mate / Last Break	No
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	Copper Alloy
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	Nylon
Number of Rows	2
Orientation	Vertical
PCB Locator	No
PCB Retention	None
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)	15.2
Plating min: Mating (µm)	0.38
Plating min: Termination (µin)	79
Plating min: Termination (µm)	2.00
Polarized to Mating Part	No
Polarized to PCB	No
Robotic Placement	None
Shrouded	No
Stackable	No
Temperature Range - Operating	-55°C to +105°C
Termination Interface: Style	Through Hole

**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**

[87761Series](#)

**Mates With**

[79109 Board-to-Board Top/Bottom Entry SMT Receptacle](#)

**Electrical**

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

**Solder Process Data**

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

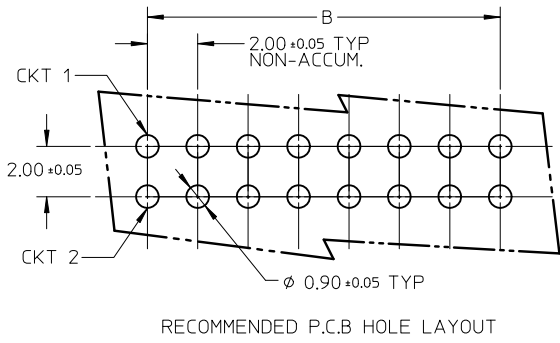
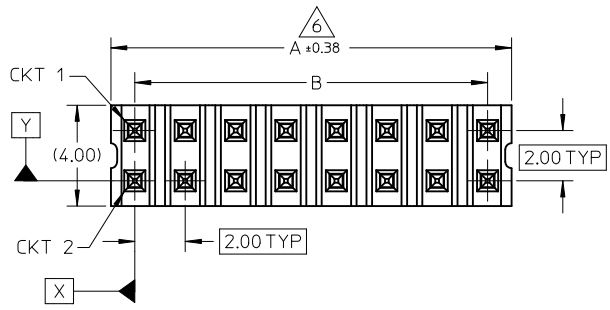
**Material Info****Reference - Drawing Numbers**

Product Specification	PS-87761-100
Sales Drawing	SD-87761-052

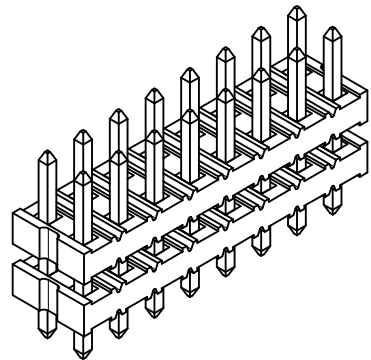
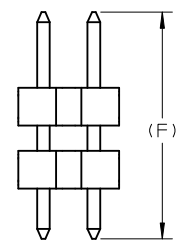
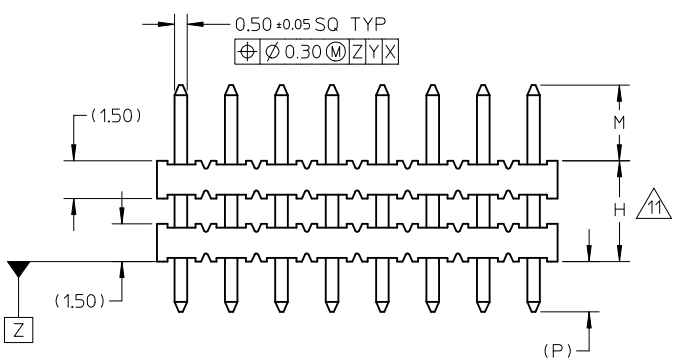
This document was generated on 05/26/2010

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

- NOTES:
- MATERIAL:  
HSG: NYLON, GLASS-FILLED, UL94V-0 COLOR: BLACK  
PIN: 0.50MM SQ, COPPER ALLOY
  - PLATING FINISH:
    - 0.38µm MIN. GOLD OVER  
1.25µm MIN. NICKEL OVERALL.
    - GOLD FLASH ON CONTACT AND  
2.50µm MIN. TIN ON SOLDER TAIL OVER  
1.25µm MIN. NICKEL OVERALL.
    - 0.38µm MIN. GOLD PLATE ON CONTACT AND  
2.00µm MIN. TIN ON SOLDER TAIL OVER  
1.25µm MIN. NICKEL OVERALL.
    - 0.75µm MIN. GOLD PLATE ON CONTACT AND  
2.00µm MIN. TIN ON SOLDER TAIL OVER  
1.25µm MIN. NICKEL OVERALL.
    - 2.50µm MIN. TIN OVERALL  
1.25µm MIN. NICKEL OVERALL.
    - 0.38µm MIN. GOLD PLATE ON CONTACT AND  
0.05µm MIN. GOLD ON SOLDER TAIL OVER  
1.25µm MIN. NICKEL OVERALL.
    - 0.75µm MIN. GOLD PLATE ON CONTACT AND  
0.05µm MIN. GOLD ON SOLDER TAIL OVER  
1.25µm MIN. NICKEL OVERALL.
    - 0.75µm MIN. GOLD OVERALL  
1.25µm MIN. NICKEL OVERALL.
  - PIN PUSHOUT FORCE: 0.85KgF MIN IN EITHER DIRECTION.
  - THE ABOVE 16CKTS SHOWN IS FOR ILLUSTRATION ONLY.
  - FOR PACKING OPTION PLEASE REFER TO THE TABLE.
  - IRREGULAR CIRCUIT CUTOFF WITHIN BREAKAWAY SECTION IS PERMISSIBLE. CUTTING OR CHIPPING OF THE MAIN BODY IS NOT ACCEPTABLE
  - PRODUCT SPEC PS-87761-001 APPLIES.
  - RECOMMENDED PCB THICKNESS 1.60MM.
  - WAFER TO BE FLAT WITHIN 0.003 mm/mm
  - PACKAGING SPECIFICATION:  
TRAY: PK-89990-487  
BULK: PK-89990-490  
TUBE: PK-89990-475
  - WHEN WAFER ARE STACK TOGETHER, DIMENSION 'H' SHOULD BE TAKEN AS REFERENCE.



RECOMMENDED P.C.B. HOLE LAYOUT



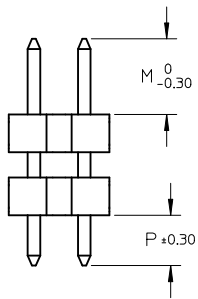
0087-DW-FUJITSU EC NO: S2010-0896 DRWN:SKANG 2010/04/23 CHKD:ATSEE 2010/05/24 APPR:MLONG 2010/05/29	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY	DATE	TITLE			
		4 PLACES	± ---	± ---	KCHO	2005/02/23	2MM DUAL ROW DUAL WAFER HEADER, VERTICAL T/H			
		3 PLACES	± ---	± ---	CHECKED BY	DATE				
	± 0.20	± ---	PTL IM	2005/04/26						
	± ---	± ---	APPROVED BY	DATE						
	ANGULAR ± 3 °		MLONG	2009/12/02						
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.	SEE TABLE		MOLEX INCORPORATED DOCUMENT NO. SD-87761-052		SHEET NO. 1 OF 3		
			SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

10 9 8 7 6 5 4 3 2 1

CKT SIZE	DIMENSION	
	A	B
04	4.00	2.00
06	6.00	4.00
08	8.00	6.00
10	10.00	8.00
12	12.00	10.00
14	14.00	12.00
16	16.00	14.00
18	18.00	16.00
20	20.00	18.00
22	22.00	20.00
24	24.00	22.00
26	26.00	24.00
28	28.00	26.00
30	30.00	28.00
32	32.00	30.00
34	34.00	32.00
36	36.00	34.00
38	38.00	36.00
40	40.00	38.00
42	42.00	40.00
44	44.00	42.00
46	46.00	44.00
48	48.00	46.00
50	50.00	48.00

PART NUMBERS	CKT SIZE	VOID POSITION	KINK POSITION	DIMENSION				PLATING OPTION	PACKAGING TYPE	
				MATING END	STACKER HEIGHT	SOLDER TAIL	(F)			
				M	H	(P)				
87761-0401	4	----	----	4.00	15.50	3.50	23.00	3	TRAY	
87761-0600	6	----	----	7.00	5.00	2.80	14.80	5		
87761-0801	8	3,4,5,6	----	4.00	15.50	3.50	23.00	3		
87761-0800	8	----	----	8.70	16.00	3.50	28.20	4		BULK
87761-0802	8	----	----	3.50	21.34	3.50	28.34	8		
87761-1006	10	1	----	1.16	3.05	3.99	8.20	5	TRAY	
87761-1009	10	----	----	1.16	3.05	3.99	8.20	5		
87761-1007	10	----	----	2.60	34.00	2.60	39.20	5		
87761-1000	10	----	----	5.50	27.50	3.43	36.43	4		
87761-1001	10	----	----	2.50	14.50	4.00	21.00	4		
87761-0012	12	----	----	2.60	10.00	3.70	16.30	5		
87761-1200	12	----	----	4.00	24.00	2.79	30.79	4		
87761-0016	16	----	----	4.00	11.15	3.85	17.00	3		
87761-0017	16	----	----	3.00	3.00	2.70	8.70	5		
87761-1600	16	----	----	7.00	5.00	2.80	14.80	5		
87761-0020	20	----	----	6.00	4.00	2.90	12.90	5		
87761-0031	20	----	----	3.00	4.00	2.03	9.00	6		
87761-2000	20	----	----	4.00	24.00	2.79	30.79	4		
87761-2001	20	----	----	2.50	14.50	4.00	21.00	4		
87761-2018	20	----	----	4.50	10.16	4.45	19.10	3		
87761-2400	24	----	----	5.50	27.50	2.80	35.80	4		
87761-2401	24	----	----	2.00	60.00	2.00	64.00	7		
87761-2402	24	----	----	2.00	42.00	2.00	46.00	7		
87761-2610	26	----	----	5.30	6.30	2.70	14.30	4		
87761-3000	30	----	----	4.00	17.30	4.00	25.30	1		
87761-0024	40	----	----	8.89	15.88	3.43	28.20	4		
87761-4000	40	----	----	2.60	3.00	2.60	8.20	5		
87761-4218	42	----	----	4.50	10.16	4.45	19.10	3		
87761-4400	44	----	----	7.00	5.00	4.00	16.00	5		
87761-0026	50	----	----	8.89	15.88	3.43	28.20	4		
87761-5000	50	----	----	3.50	10.00	3.50	17.00	5		

NOTES:  
 12. APPLY ONLY FOR PART#87761-5021 & 87761-5022



<b>0087-DW-FUJITSU</b> EC NO: S2010-0896 DRWN:SKANG 2010/04/23 CHKD:ATSEE 2010/05/24 APPR:MLONG 2010/05/29	QUALITY SYMBOLS $\nabla=0$ $\square=0$	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr><th colspan="2">mm</th><th>INCH</th></tr> <tr><td>4 PLACES</td><td><math>\pm</math> ---</td><td><math>\pm</math> ---</td></tr> <tr><td>3 PLACES</td><td><math>\pm</math> ---</td><td><math>\pm</math> ---</td></tr> <tr><td>2 PLACES</td><td><math>\pm</math> 0.20</td><td><math>\pm</math> ---</td></tr> <tr><td>1 PLACE</td><td><math>\pm</math> ---</td><td><math>\pm</math> ---</td></tr> </table>	mm		INCH	4 PLACES	$\pm$ ---	$\pm$ ---	3 PLACES	$\pm$ ---	$\pm$ ---	2 PLACES	$\pm$ 0.20	$\pm$ ---	1 PLACE	$\pm$ ---	$\pm$ ---	DIMENSION STYLE <b>MM ONLY</b> DRAWN BY: KCHO DATE: 2005/02/23 CHECKED BY: PTL IM DATE: 2005/04/26 APPROVED BY: MLONG DATE: 2009/12/02	SCALE: NTS DESIGN UNITS: METRIC THIRD ANGLE PROJECTION	TITLE: 2MM DUAL ROW DUAL WAFER HEADER, VERTICAL T/H MOLEX INCORPORATED DOCUMENT NO. SD-87761-052	SHEET NO. 2 OF 3
	mm		INCH																		
	4 PLACES	$\pm$ ---	$\pm$ ---																		
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C10	REV	SIZE: A3																			

9 8 7 6 5 4 3 2 1

PART NUMBERS	CKT SIZE	VOID POSITION	KINK POSITION	DIMENSION				PLATING OPTION	PACKAGING TYPE
				MATING END	STACKER HEIGHT	SOLDER TAIL	(F)		
				M	H	(P)			
87761-5001	50	----	----	2.50	10.30	4.00	16.80	4	TRAY
△ 87761-5021	50	----	----	4.00	8.70	2.50	15.20	3	
△ 87761-5022	50	----	----	4.00	5.71	2.50	12.21	3	

<b>0087-DW-FUJITSU</b> EC NO: S2010-0896 DRWN:SKANG 2010/04/23 CHKD:ATSEE 2010/05/24 APPR:MLONG 2010/05/29	DESCRIPTION REV	<b>QUALITY SYMBOLS</b> =0 =0	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b> <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <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>± 0.20</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.20	± ---	1 PLACE	± ---	± ---	<b>DIMENSION STYLE</b> <b>MM ONLY</b>	<b>SCALE</b> NTS	<b>DESIGN UNITS</b> METRIC	THIRD ANGLE PROJECTION
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		<b>DRAWN BY</b> KCHO	<b>DATE</b> 2005/02/23	<b>TITLE</b> 2MM DUAL ROW DUAL WAFER HEADER, VERTICAL T/H																		
		<b>CHECKED BY</b> PTLIM	<b>DATE</b> 2005/04/26	<b>MOLEX INCORPORATED</b>																		
		<b>APPROVED BY</b> MLONG	<b>DATE</b> 2009/12/02	<b>MATERIAL NO.</b> SEE TABLE	<b>DOCUMENT NO.</b> SD-87761-052	<b>SHEET NO.</b> 3 OF 3																
		<b>DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</b>	<b>SIZE</b> A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																		