

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

**Part Number:** [0877970602](#)  
**Status:** **Active**  
**Overview:** [cgrid\\_sl\\_products](#)  
**Description:** 2.54mm (.100") Pitch C-Grid® Header, Through Hole, Dual Row Dual Body, Vertical, 6 Circuits, 0.76µm (30µ") Gold (Au) Plating, 25.60mm (1.043") Stacking Height, Tray Packaging, Lead-free

**Documents:**

[3D Model](#) [Product Specification PS-87920-019 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

UL E29179

**General**

Product Family PCB Headers  
 Series [87797](#)  
 Application Board-to-Board  
 Overview [cgrid\\_sl\\_products](#)  
 Product Name C-Grid®, Dual Body

**Physical**

Breakaway Yes  
 Circuits (Loaded) 6  
 Circuits (maximum) 6  
 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) 0.197 In  
 Mated Height (mm) 5.00 mm  
 Material - Metal Copper Alloy  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 2  
 Orientation Vertical  
 PC Tail Length (in) 0.118 In  
 PC Tail Length (mm) 3.00 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) 0.100 In  
 Pitch - Mating Interface (mm) 2.54 mm  
 Pitch - Term. Interface (in) 0.100 In  
 Pitch - Term. Interface (mm) 2.54 mm  
 Plating min: Mating (µin) 30  
 Plating min: Mating (µm) 0.75  
 Plating min: Termination (µin) 79  
 Plating min: Termination (µm) 2.00  
 Polarized to Mating Part No

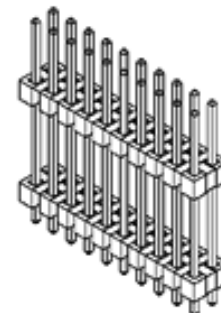


image - Reference only

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**  
[87797Series](#)

Polarized to PCB	No
Shrouded	No
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	3A
Voltage - Maximum	250V

### **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

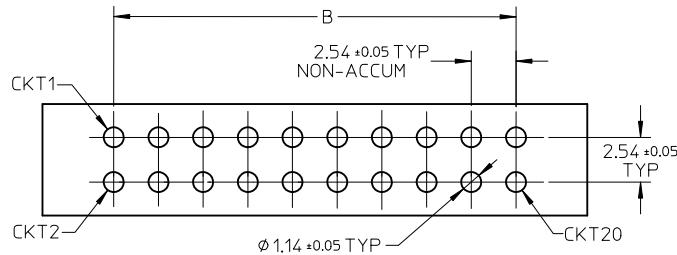
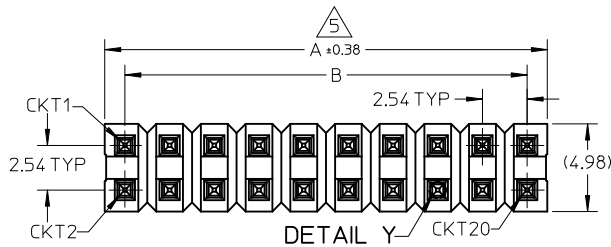
### **Material Info**

### **Reference - Drawing Numbers**

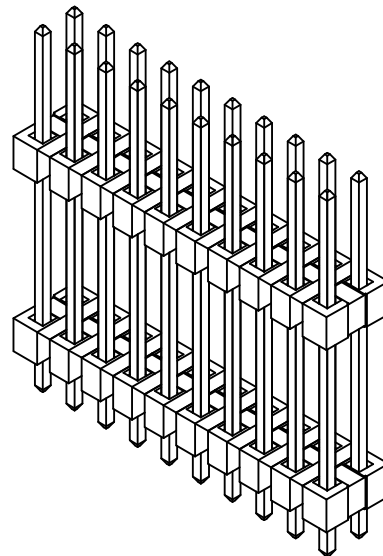
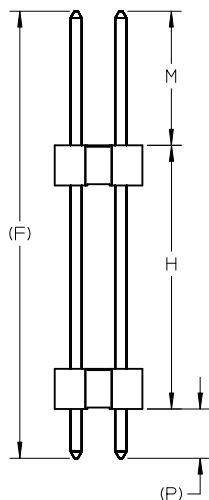
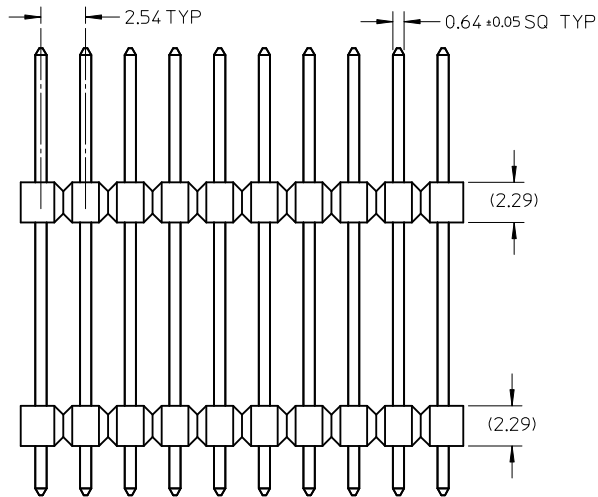
Packaging Specification	PK-89990-489
Product Specification	PS-87920-019
Sales Drawing	SD-87797-171

This document was generated on 05/26/2010

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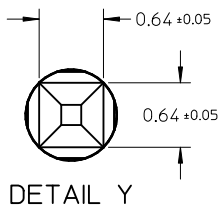


RECOMMENDED PCB LAYOUT: COMPONENT SIDE



NOTES:


1. MATERIAL:
  - HOUSING: LCP, GLASS FILLED, UL94V-0
  - COLOR: BLACK
  - PIN: COPPER ALLOY, SQ, 0.64MM
2. PLATING FINISH:
  - 1) GOLD FLASH OVERALL OVER 1.25μm MIN. NICKEL OVERALL
  - 2) 0.05μm MIN. GOLD IN CONTACT AREA AND 2.50μm MIN. TIN IN SOLDER AREA OVER 1.25μm MIN. NICKEL OVERALL
  - 3) 0.38μm MIN. GOLD IN CONTACT AREA AND 2.50μm MIN. TIN IN SOLDER AREA OVER 1.25μm MIN. NICKEL OVERALL
  - 4) 0.75μm MIN. GOLD IN CONTACT AREA AND 2.50μm MIN. TIN IN SOLDER AREA OVER 1.25μm MIN. NICKEL OVERALL
  - 5) 2.50μm MIN. TIN OVERALL 1.25μm MIN. NICKEL OVERALL
3. FOR PACKING OPTION PLEASE REFER TO THE TABLE.
4. THE ABOVE 20CKTS SHOWN IS FOR ILLUSTRATION ONLY.
5. IRREGULAR CIRCUIT CUTOFF WITHIN BREAKAWAY SECTION IS PERMISSIBLE. CUTTING OR CHIPPING OF THE MAIN BODY IS NOT ACCEPTABLE
6. WAFER TO BE FLAT WITHIN 0.003mm/mm
7. PARTS ARE NOT STACKABLE ON 2.54 CENTERS
8. RECOMMENDED PCB THICKNESS 1.60±0.10mm
9. PRODUCT SPEC: PS-87920-019
10. PACKAGING SPECIFICATION:
  - TRAY: PK-89990-489
  - BULK: PK-89990-491



DETAIL Y

+PN:2035/3024/7213/8025 EC NO: S2010-0917 DRWN:ATSEE CHKD:PATEY APPR:MLONG	2010/04/30 2006/03/03 2010/05/13	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
			$\nabla_{A'}=0$ $\nabla_{E'}=0$ $\nabla_{F'}=0$	mm      INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	MM ONLY	NTS	METRIC		
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: SKL1M01      DATE: 2006/03/01 CHECKED BY:      DATE: APPROVED BY:      DATE: PATEY      2006/03/03	TITLE	CUSTOM HEADER 2.54MM PITCH DUAL ROW HEADER, THRU HOLE, VERT		
					MATERIAL NO.      SEE TABLE SIZE      A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	MOLEX MOLEX INCORPORATED DOCUMENT NO.      SD-87797-171 SHEET NO.      1 OF 2			

CKT SIZE	DIMENSION		PART NO FOR TRAY PACKAGING	PART NO FOR BULK PACKAGING	CKT SIZE	PEG OPTION	VOID POSITION	PLATING TYPE	DIMENSION			
	A	B							F	MATING END	STACKER HEIGHT	SOLDER TAIL
										M	H	P
04	5.08	2.54		-	6	NO	-	4	26.80	4.00	20.00	2.80
06	7.62	5.08	87797-0600	-	6	NO	-	4	11.00	3.00	5.00	3.00
08	10.16	7.62	87797-0601	-	6	NO	-	5	33.60	5.00	25.60	3.00
10	12.70	10.16	87797-0602	-	6	NO	-	4	33.60	5.00	25.60	3.00
12	15.24	12.70	87797-0603	-	6	NO	-	5	35.70	7.90	25.00	2.80
14	17.78	15.24	87797-0604	-	6	NO	-	4	18.54	3.05	12.70	2.79
16	20.32	17.78	87797-0800	-	8	NO	-	5	32.14	10.80	19.05	2.29
18	22.86	20.32	87797-1001	-	10	NO	-	5	18.54	8.13	7.62	2.79
20	25.40	22.86	87797-1002	-	10	NO	-	2	19.30	9.04	8.00	2.26
22	27.94	25.40	87797-1200	-	12	NO	-	4	20.96	9.91	8.00	3.05
24	30.48	27.94	87797-1400	-	14	NO	-	4	13.00	4.00	5.00	4.00
26	33.02	30.48	87797-1401	-	14	NO	-	5	28.00	12.21	9.35	6.44
28	35.56	33.02	87797-1800	-	18	NO	11 & 12	1	21.30	3.10	15.10	3.10
30	38.10	35.56	87797-0020	-	20	NO	-	5	36.32	5.18	25.98	5.16
32	40.64	38.10	87797-0200	-	20	NO	-	3	20.68	2.79	15.10	2.79
34	43.18	40.64	87797-0201	-	20	NO	-	5	31.00	8.50	14.00	8.50
36	45.72	43.18	87797-2000	-	20	NO	-	4	33.60	5.00	25.60	3.00
38	48.26	45.72	87797-2002	-	20	NO	-	4	33.60	5.00	25.60	3.00
40	50.80	48.26	87797-2003	-	20	NO	-	5	33.60	5.00	25.60	3.00
42	53.34	50.80	87797-2004	-	20	NO	-	4	33.40	5.00	25.60	2.80
44	55.88	53.34	87797-2035	-	20	NO	-	5	31.37	8.00	19.94	3.43
46	58.42	55.88	87797-2600	-	26	NO	-	3	19.30	7.25	9.00	3.05
48	60.96	58.42	87797-2801	-	28	NO	-	5	22.80	7.40	12.10	3.30
50	63.50	60.96	87797-2802	-	28	NO	-	5	34.40	7.40	23.70	3.30
52	66.04	63.50	87797-3024	-	30	NO	-	4	23.62	9.40	11.43	2.79
54	68.58	66.04	87797-0400	-	40	NO	-	3	25.40	9.91	12.70	2.79
56	71.12	68.58	-	87797-0500	50	NO	-	3	18.55	6.48	9.40	2.67
58	73.66	71.12	-	87797-6400	64	NO	-	3	23.62	5.59	15.24	2.79
60	76.20	73.66	87797-7213	-	72	NO	-	3	14.35	6.22	5.08	3.05
62	78.74	76.20	87797-8025	-	80	NO	-	5	22.73	8.10	11.43	3.20
64	81.28	78.74										
66	83.82	81.28										
68	86.36	83.82										
70	88.90	86.36										
72	91.44	88.90										
74	93.98	91.44										
76	96.52	93.98										
78	99.06	96.52										
80	101.60	99.06										

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	REV	SIZE: A3	SEE TABLE	MATERIAL NO.	DOCUMENT NO.	SHEET NO.