

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

**Part Number:** [0878304021](#)  
**Status:** **Active**  
**Overview:** milligrid  
**Description:** 2.00mm (.079") Pitch Milli-Grid™ Straddle Mount Header, 40 Circuits, 0.38µm (15µ") Gold (Au) Selective Plating, Tray Packaging, Lead-free

**Documents:**

[3D Model](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Drawing \(PDF\)](#)

**General**

Product Family	PCB Headers
Series	<a href="#">87830</a>
Application	Board-to-Board
Overview	<a href="#">milligrid</a>
Product Name	Milli-Grid™

**Physical**

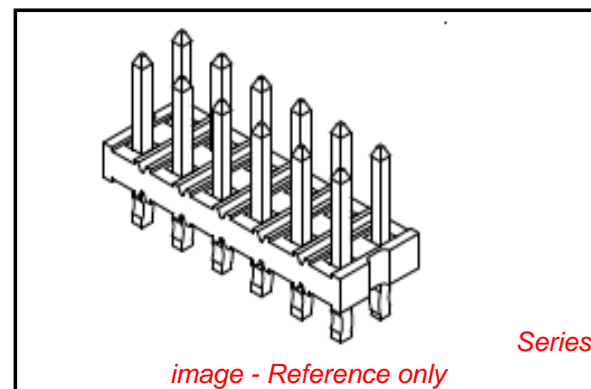
Breakaway	Yes
Circuits (Loaded)	40
Circuits (maximum)	40
First Mate / Last Break	No
Glow-Wire Compliant	No
Guide to Mating Part	No
Keying to Mating Part	None
Lock to Mating Part	None
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Number of Rows	2
Orientation	Vertical
PCB Locator	No
PCB Retention	None
PCB Thickness Recommended (in)	0.039 In
PCB Thickness Recommended (mm)	1.00 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
Plating min: Termination (µin)	75
Plating min: Termination (µm)	1.90
Polarized to Mating Part	No
Polarized to PCB	No
Shrouded	No
Stackable	Yes
Temperature Range - Operating	-55°C to +105°C
Termination Interface: Style	Straddle Mount

**Electrical**

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

**Solder Process Data**

Duration at Max. Process Temperature (seconds)	14
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**EU RoHS**

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

**China RoHS**



**Not Reviewed**

**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**

[87830Series](#)

**Mates With**

[79107](#) Board-to-Board Top Entry Through Hole Receptacle. [79108](#) Board-to-Board FFC/FPC Top Entry Through Hole Receptacle. [79109](#) Board-to-Board Top/Bottom Entry SMT Receptacle. [87381](#) Board-to-Board Top Entry SMT Receptacle

Lead-free Process Capability  
Max. Cycles at Max. Process Temperature  
Process Temperature max. C

Reflow Capable (SMT only)  
1  
265

**Material Info**

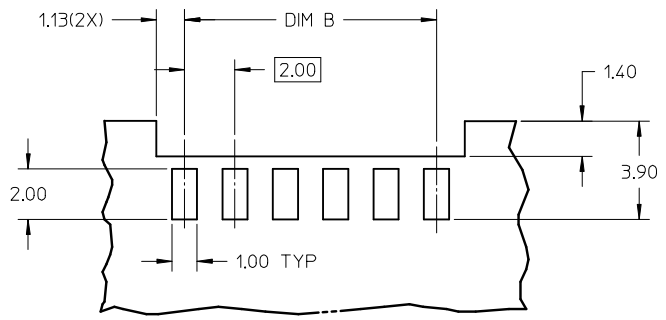
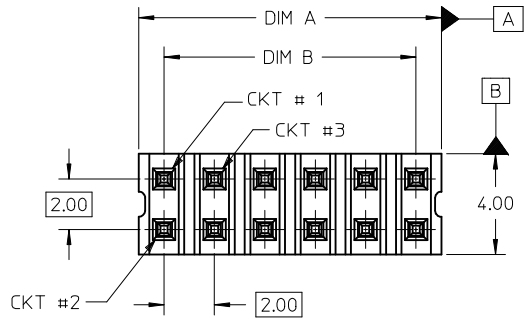
**Reference - Drawing Numbers**

Sales Drawing

SD-87830-003

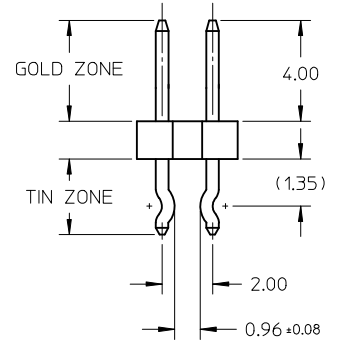
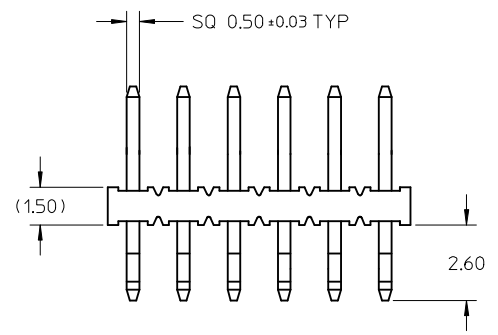
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RECOMMENDED PCB PATTERN  
(PATTERN TYPICAL BOTH SIDES)

PART NUMBER	CKT SIZE	DIM A	DIM B
87830-04**	4	3.90	2.00
87830-06**	6	5.90	4.00
87830-08**	8	7.90	6.00
87830-10**	10	9.90	8.00
87830-12**	12	11.90	10.00
87830-14**	14	13.90	12.00
87830-16**	16	15.90	14.00
87830-18**	18	17.90	16.00
87830-20**	20	19.90	18.00
87830-22**	22	21.90	20.00
87830-24**	24	23.90	22.00
87830-26**	26	25.90	24.00
87830-28**	28	27.90	26.00
87830-30**	30	29.90	28.00
87830-32**	32	31.90	30.00
87830-34**	34	33.90	32.00
87830-36**	36	35.90	34.00
87830-38**	38	37.90	36.00
87830-40**	40	39.90	38.00
87830-42**	42	41.90	40.00
87830-44**	44	43.90	42.00
87830-46**	46	45.90	44.00
87830-48**	48	47.90	46.00
87830-50**	50	49.90	48.00



PART NUMBER LEGEND  
87830 - \*\* 2 1  
CKT SIZE  
CONFIGURATION

- NOTES:
- DRAWING SHOWS 12 CIRCUITS FOR ILLUSTRATION.
  - PIN PUSHOUT FORCE : 2 LBS. MIN. BEFORE SOLDERING.
  - WAFER TO BE FLAT WITHIN 0.003 mm/mm
  - PIN SOLDERABILITY PER MOLEX SPEC. ES-152
  - THIS PRODUCT IS INTENDED FOR EDGE OF BOARD MOUNTING  
RECOMMENDED BOARD THICKNESS IS 1.02 <sup>+0.05</sup> <sub>-0.13</sub>
  - PRODUCT SPECIFICATION: PS-87761-100 APPLIES.

REVISE DIM EC NO: S2010-0047 DRWN:SKANG 2009/07/27 CHKD:ATSEE 2009/07/28 APPR:MLONG 2009/07/28	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0 ∇=0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °	MM ONLY	NTS	METRIC	
	DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: RSHAN CHECKED BY: KCLING APPROVED BY: SKTOH DATE: 2003/11/07 DATE: 2003/11/26 DATE: 2003/11/26	TITLE	MILLI-GRID HEADER EDGE MOUNT	
	REV	SIZE	SEE TABLE		MOLEX INCORPORATED DOCUMENT NO. SD-87830-003	