

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

**Part Number:** [0878331219](#)  
**Status:** **Active**  
**Overview:** milligrd  
**Description:** 2.00mm (.079") Pitch Milli-Grid™ Header, Right Angle, Fully Shrouded, Lead-free, 12 Circuits, Gold (Au) Flash Plating, without PCB Locator, without Locking Window, Center Polarization Slot, Tube

**Documents:**

[3D Model](#) [Product Specification PS-87831-027 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

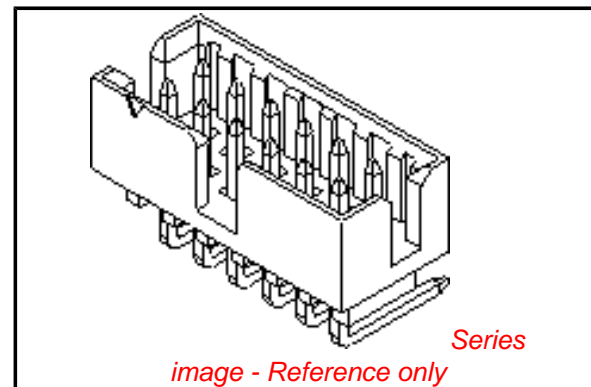
CSA LR19980  
 UL E29179

**General**

Product Family PCB Headers  
 Series [87833](#)  
 Application Wire-to-Board  
 Comments Contact Molex for application in automotive industry  
 Overview [milligrd](#)  
 Product Name Milli-Grid™

**Physical**

Breakaway No  
 Circuits (Loaded) 12  
 Circuits (maximum) 12  
 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  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin Nylon  
 Number of Rows 2  
 Orientation Right Angle  
 PC Tail Length (in) 0.085 In  
 PC Tail Length (mm) 2.16 mm  
 PCB Locator No  
 PCB Retention None  
 PCB Thickness Recommended (in) 0.062 In  
 PCB Thickness Recommended (mm) 1.60 mm  
 Packaging Type Tube  
 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) 2  
 Plating min: Mating (µm) 0.05  
 Plating min: Termination (µin) 75  
 Plating min: Termination (µm) 1.88



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**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**

[87833Series](#)

**Mates With**

[50394](#) Wire-to-Board Terminals. [51110](#) Wire-to-Board Crimp Housing. [87568](#) Wire-to-Board IDT Housings. [79107](#) Board-to-Board Top Entry Through Hole Receptacle. [79108](#) Board-to-Board FFC/FPC Top Entry Through Hole Receptacle. L

Polarized to Mating Part	Side Slots (2)
Polarized to PCB	No
Shrouded	Fully
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

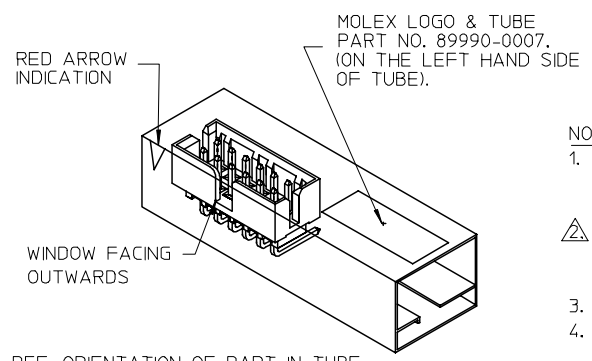
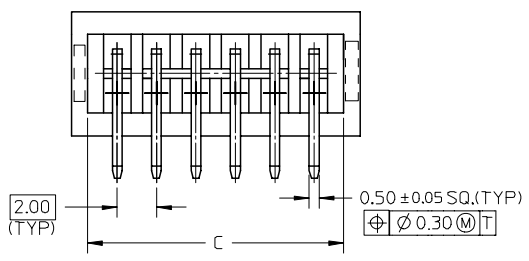
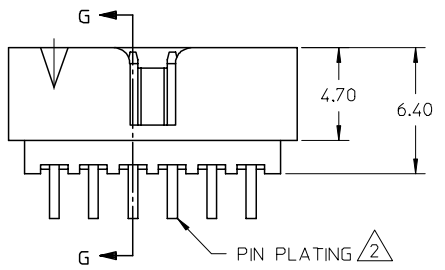
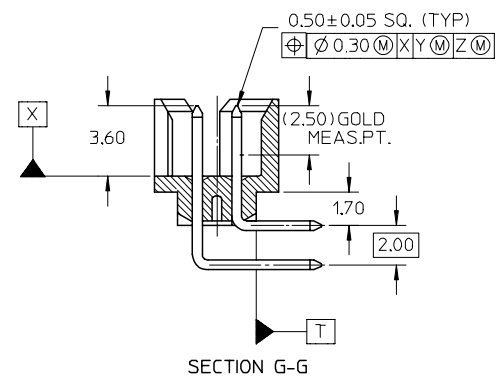
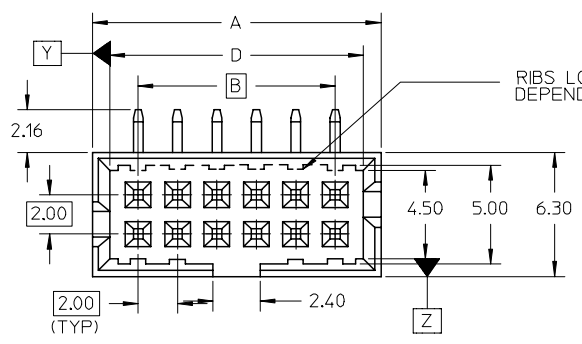
**Material Info****Reference - Drawing Numbers**

Product Specification	PS-87831-027
-----------------------	--------------

This document was generated on 05/26/2010

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

10 9 8 7 6 5 4 3 2 1

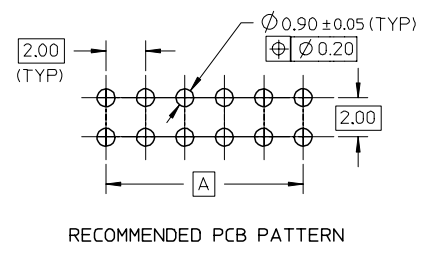


PART NO.	CKT SIZE	DIMENSION			
		A	B	C	D
87833-0419	4	6.65	2.00	5.00	4.85
87833-0619	6	8.65	4.00	7.00	6.85
87833-0819	8	10.65	6.00	9.00	8.85
87833-1019	10	12.65	8.00	11.00	10.85
87833-1219	12	14.65	10.00	13.00	12.85
87833-1419	14	16.65	12.00	15.00	14.85
87833-1619	16	18.65	14.00	17.00	16.85
87833-1819	18	20.65	16.00	19.00	18.85
87833-2019	20	22.65	18.00	21.00	20.85
87833-2219	22	24.65	20.00	23.00	22.85
87833-2419	24	26.65	22.00	25.00	24.85
87833-2619	26	28.65	24.00	27.00	26.85
87833-2819	28	30.65	26.00	29.00	28.85
87833-3019	30	32.65	28.00	31.00	30.85
87833-3219	32	34.65	30.00	33.00	32.85
87833-3419	34	36.65	32.00	35.00	34.85
87833-3619	36	38.65	34.00	37.00	36.85
87833-3819	38	40.65	36.00	39.00	38.85
87833-4019	40	42.65	38.00	41.00	40.85
87833-4219	42	44.65	40.00	43.00	42.85
87833-4419	44	46.65	42.00	45.00	44.85
87833-4619	46	48.65	44.00	47.00	46.85
87833-4819	48	50.65	46.00	49.00	48.85
87833-5019	50	52.65	48.00	51.00	50.85

NOTES:

- MATERIAL :  
HOUSING : 30% G.F., NYLON 46, UL94V-0. COLOR BLACK.  
PIN : 0.50MM SQ. PHOSPHOR BRONZE.
- PLATING :  
(2 - 5)um/ (0.05 - 0.13)uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN. TIN IN SOLDER TAIL AREA OVER 1.25um/50uin MIN. NICKEL OVERALL.
- PRODUCT SPECIFICATION PS-87831-027 APPLIES.
- THIS HEADER MATES WITH MOLEX:  
a) CRIMP RECEPTACLE HOUSING, 51110 SERIES WITH CRIMP TERMINAL, 50394 SERIES.  
b) 2MM MILLIGRID DUAL ROW IDT, 87568 SERIES.
- PARTS TO BE PACKED IN TUBE WITH MOISTURE BARRIER BAG

REF: ORIENTATION OF PART IN TUBE.  
(FOR THE REFERENCE OF PART/TUBE ASSEMBLY.)



ADD MOIST BAG NOTE  
EC NO: S2007-0931  
DRWN:GIVENARLY  
CHKD:SKANG  
APPR:MLONG

REV	DESCRIPTION	QUALITY SYMBOLS
A5		▽=0 ▽C=0

GENERAL TOLERANCES (UNLESS SPECIFIED)	
mm	INCH
4 PLACES ± ---	± ---
3 PLACES ± ---	± ---
2 PLACES ± 0.2	± ---
1 PLACE ± ---	± ---
ANGULAR ± 3 °	

DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
ATSEE	2003/10/27
CHECKED BY	DATE
KCLING	2003/11/07
APPROVED BY	DATE
SKTOH	2003/11/07
MATERIAL NO.	
SEE TABLE	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
NTS	METRIC	⊙	□
TITLE			
MGRID, SHROUDED HEADER WITH SLOTS AND STANDOFF R/A			
MOLEX		MOLEX INCORPORATED	
DOCUMENT NO.		SHEET NO.	
SD-87833-013		1 OF 1	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			
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