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Part Number: [0878311231](#)
Status: **Active**
Overview: [milligrid](#)
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Shrouded, Lead-free, 12 Circuits, 0.38µm (15µ") Gold (Au) Plating, Center Polarization Slot, without Locking Window, without PCB Locator, with Open End Wall, Tube

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

Agency Certification

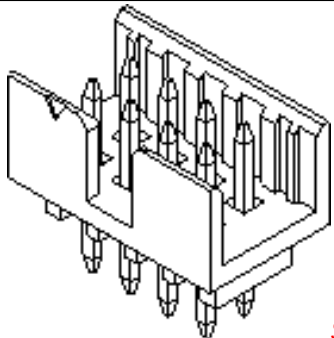
CSA LR19980
UL E29179

General

Product Family PCB Headers
Series [87831](#)
Application Wire-to-Board
Comments Contact Molex for application in automotive industry
Overview [milligrid](#)
Product Name Milli-Grid™

Physical

Breakaway No
Circuits (Loaded) 12
Circuits (maximum) 12
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
Material - Metal Brass
Material - Plating Mating Gold
Material - Plating Termination Tin
Material - Resin Nylon
Number of Rows 2
Orientation Vertical
PC Tail Length (in) 0.098 In
PC Tail Length (mm) 2.50 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) 15
Plating min: Mating (µm) 0.38
Plating min: Termination (µin) 76
Plating min: Termination (µm) 1.88
Polarized to Mating Part Center Slot



Series
image - Reference only

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
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
[87831Series](#)

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 PCB	No
Shrouded	Open Ends
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

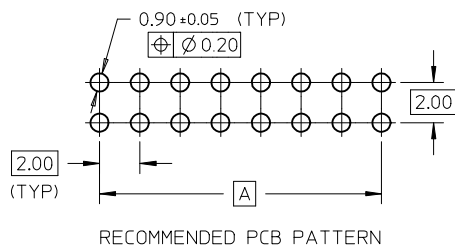
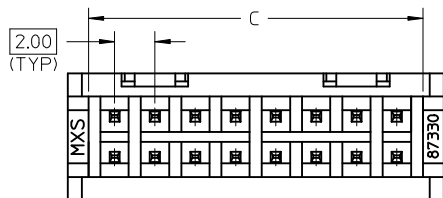
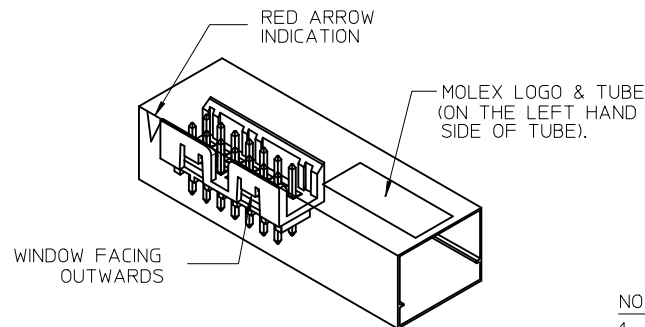
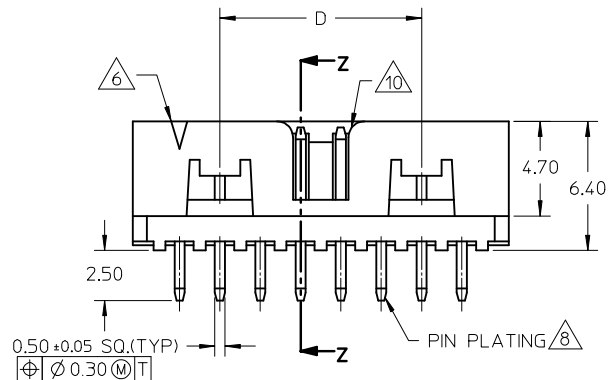
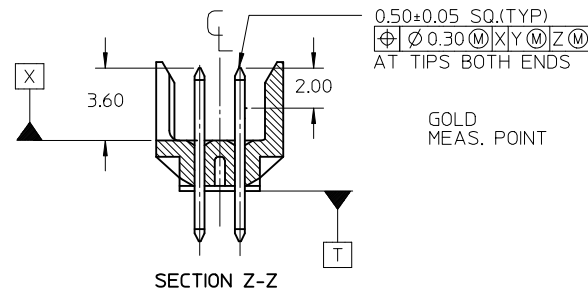
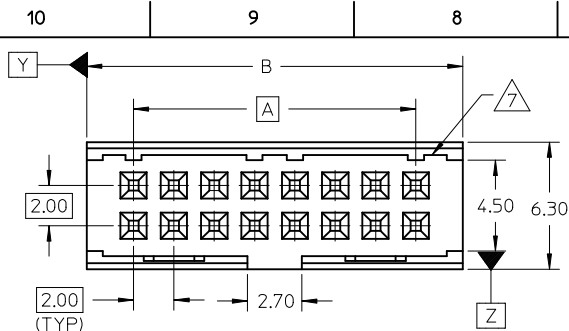
Material Info

Reference - Drawing Numbers

Product Specification	PS-87831-027
Sales Drawing	SD-87831-014

This document was generated on 05/26/2010

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

P/N IN TUBE	CKT SIZE	DIMENSION			
		A	B	C	D
87831-0431	04	2.00	6.65	4.60	-
87831-0631	06	4.00	8.65	6.60	-
87831-0831	08	6.00	10.65	8.60	-
87831-1031	10	8.00	12.65	10.60	-
87831-1231	12	10.00	14.65	12.60	-
87831-1431	14	12.00	16.65	14.60	8.00
87831-1631	16	14.00	18.65	16.60	10.00
87831-1831	18	16.00	20.65	18.60	12.00
87831-2031	20	18.00	22.65	20.60	14.00
87831-2231	22	20.00	24.65	22.60	16.00
87831-2431	24	22.00	26.65	24.60	18.00
87831-2631	26	24.00	28.65	26.60	20.00
87831-2831	28	26.00	30.65	28.60	22.00
87831-3031	30	28.00	32.65	30.60	24.00
87831-3231	32	30.00	34.65	32.60	26.00
87831-3431	34	32.00	36.65	34.60	28.00
87831-3631	36	34.00	38.65	36.60	30.00
87831-3831	38	36.00	40.65	38.60	32.00
87831-4031	40	38.00	42.65	40.60	34.00
87831-4231	42	40.00	44.65	42.60	36.00
87831-4431	44	42.00	46.65	44.60	38.00
87831-4631	46	44.00	48.65	46.60	40.00
87831-4831	48	46.00	50.65	48.60	42.00
87831-5031	50	48.00	52.65	50.60	44.00

NOTES:

- FOR ILLUSTRATION PURPOSES, 16 CIRCUIT SIZE WAFER IS SHOWN.
- MATERIAL : HOUSING : 30% G.F., NYLON 46, UL94V-0, COLOR BLACK.
PIN : 0.50MM SQ.PHOSPHOR BRONZE.
- PIN PUSHOUT FORCE : 0.91 KG MIN. IN EITHER DIRECTION.
- PRODUCT SPECIFICATION PS-87831-027 APPLIES.
- NO SIDE LOCKING SLOT FROM 4 TO 12 CKT SIZE.
- CKT 4 & 6 HAS NO IDENTIFICATION TAG.
- RIBS LOCATION VARIES DEPENDING ON CKT SIZES.
- PLATING : 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- THIS HEADER MATES WITH MOLEX :
a) CRIMP RECEPTACLE HOUSING, 51110 SERIES WITH CRIMP TERMINAL, 50394 SERIES.
b) 2MM MILLIGRID DUAL ROW IDT, 87568 SERIES.
- NO CENTRE POLARIZATION SLOT FOR CKT SIZE 4 & 6.
- PARTS TO BE PACKED IN TUBE WITH MOISUTRE BARRIER BAG.

REMOVE TUBE P/N EC NO: S2009-0749 DRWN:YMCHONG CHKD:ATSEE APPR:MLONG			DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ◇=0	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
A5	mm				INCH		DRAWN BY ATSEE		DATE 2003/10/06		TITLE MGRID, SHROUDED HEADER VERTICAL W/OPEN END WALL			
	4 PLACES ± ---				± ---		CHECKED BY		DATE					
	3 PLACES ± ---				± ---		KCLING		2003/11/07		MOLEX MOLEX INCORPORATED			
	2 PLACES ± 0.2				± ---		APPROVED BY		DATE					
	1 PLACE ± ---				± ---		SKTOH		2003/11/07					
	ANGULAR ± 3 °				MATERIAL NO.		DOCUMENT NO.		SHEET NO.					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				SEE TABLE		SD-87831-014		1 OF 1						
				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										