

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0878314431

Status:

Active

Overview:

milligrid

Description:

2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Shrouded, Lead-free, 44 Circuits, 0.38µm (15µ") Gold (Au) Plating, Center Polarization Slot, with Locking Windows, without PCB Locator, with Open End Wall, Tube

Documents:

3D Model

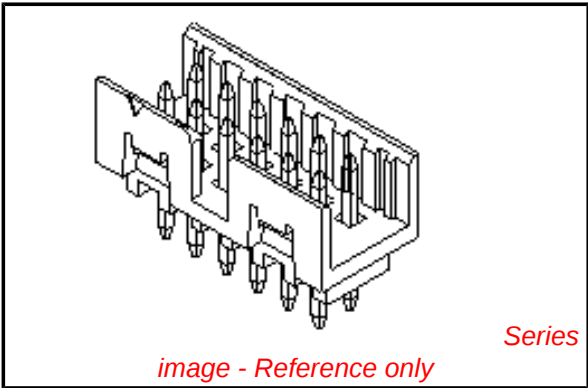
Drawing (PDF)

Product Specification PS-87831-027 (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)	44
Circuits (maximum)	44
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	Yes
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



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

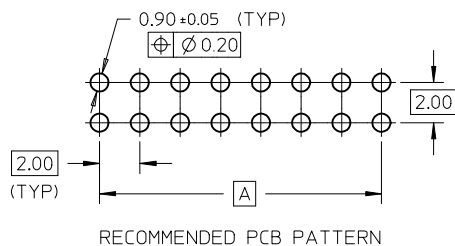
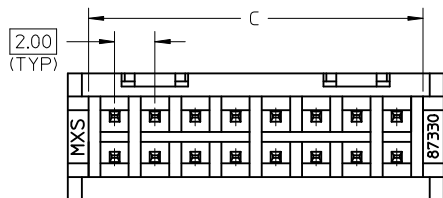
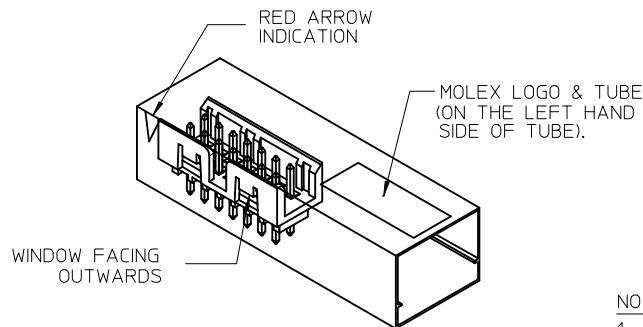
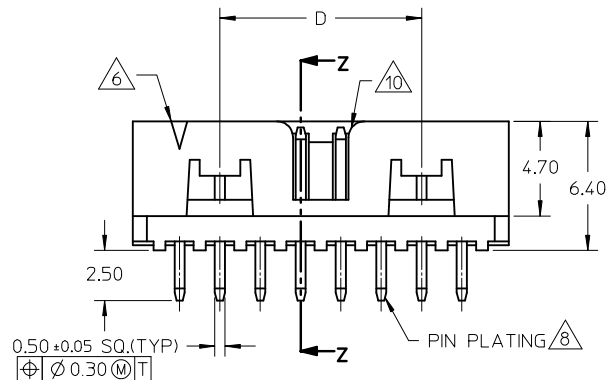
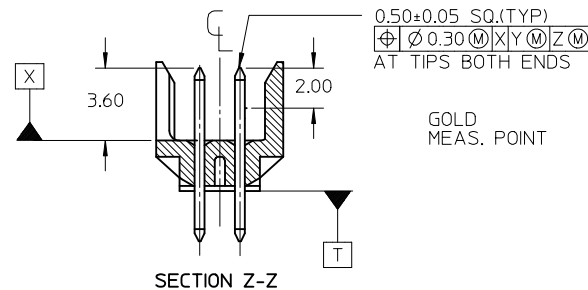
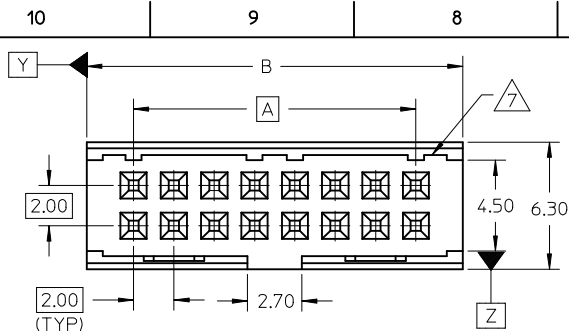
Mates With

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 05/25/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION



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.

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

REMOVE TUBE P/N EC NO: S2009-0749 DRWN:YCHONG CHKD:ATSEE APPR:MLONG A5	DESCRIPTION	QUALITY SYMBOLS ▽=0 C=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY ATSEE	DATE 2003/10/06	TITLE MGRID, SHROUDED HEADER VERTICAL W/OPEN END WALL MOLEX INCORPORATED				
			4 PLACES	± ---	± ---	CHECKED BY KCLING		DATE 2003/11/07			
			3 PLACES	± ---	± ---	APPROVED BY SKTOH		DATE 2003/11/07			
			2 PLACES	± 0.2	± ---	DOCUMENT NO. SD-87831-014					
	REV			1 PLACE		± ---	± ---	MOLEX		SHEET NO. 1 OF 1	
				ANGULAR		± 3 °		MATERIAL NO.			
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-87831-014			
						SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				