

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0878310441

Status:

Active

Overview:

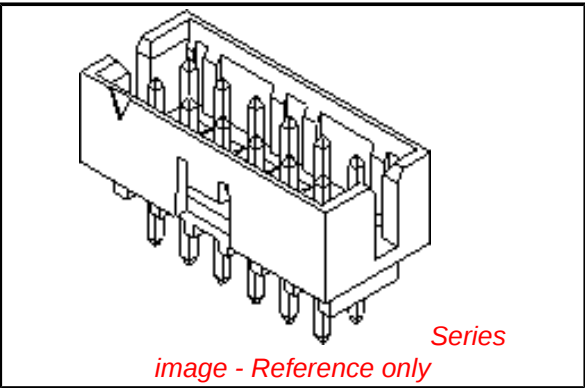
milligrid

Description:

2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, Shrouded, Lead-free, 4 Circuits, 0.38µm (15µ") Gold (Au) Plating, with Locking Window, without PCB Locator, without 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	87831
Application	Wire-to-Board
Comments	Contact Molex for application in automotive industry
Overview	milligrid
Product Name	Milli-Grid™
Physical	
Breakaway	No
Circuits (Loaded)	4
Circuits (maximum)	4
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	Side Slots (2)



EU RoHS

ELV and RoHS

Compliant

REACH SVHC

Contains SVHC: No

Halogen-Free

Status

Not Halogen-Free

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.

China RoHS

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	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

Solder Process Data

Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

Material Info

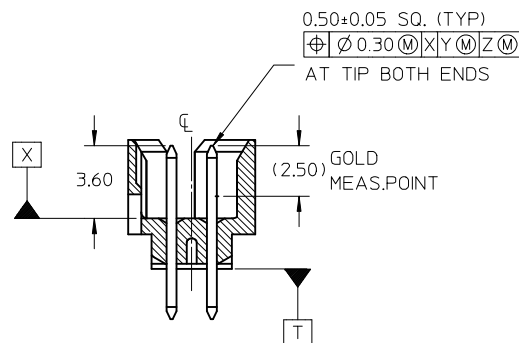
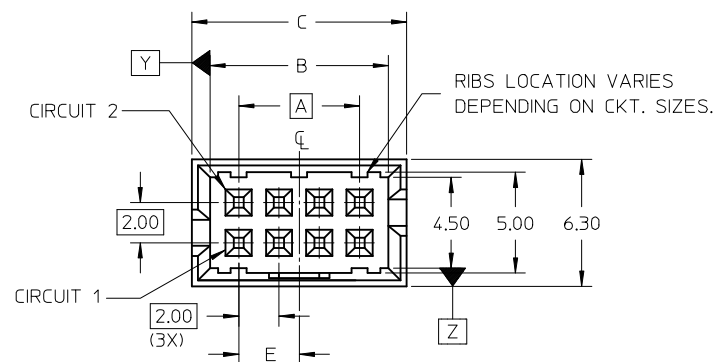
Reference - Drawing Numbers

Product Specification	PS-87831-027
Sales Drawing	SD-87831-012

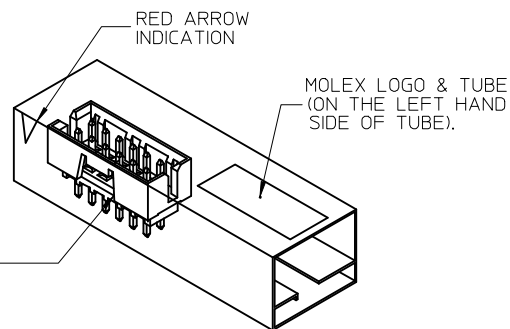
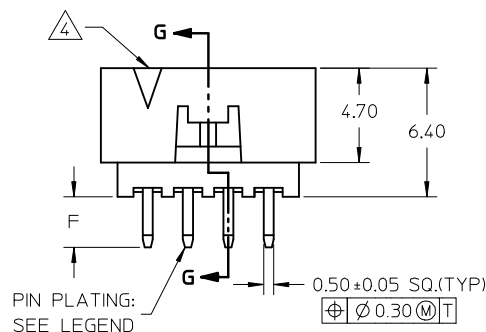
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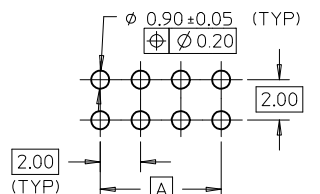
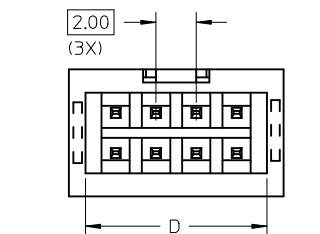
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SECTION G-G



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



RECOMMENDED PCB PATTERN

P/N IN TUBE	CKT SIZE	VOID PIN	DIMENSION					
			A	B	C	D	E	F
87831-04**	4	-	2.00	4.85	6.65	5.00	1.00	2.50
87831-06**	6	-	4.00	6.85	8.65	7.00	2.00	2.50
87831-08**	8	-	6.00	8.85	10.65	9.00	3.00	2.50
87831-10**	10	-	8.00	10.85	12.65	11.00	4.00	2.50
87831-12**	12	-	10.00	12.85	14.65	13.00	5.00	2.50
87831-51**	4	-	2.00	4.85	6.65	5.00	1.00	3.50
87831-52**	6	-	4.00	6.85	8.65	7.00	2.00	3.50
87831-53**	12	1	10.00	12.85	14.65	13.00	5.00	2.50
87831-54**	8	-	6.00	8.85	10.65	9.00	3.00	3.50
87831-55**	8	-	6.00	8.85	10.65	9.00	3.00	2.80
87831-56**	12	10	10.00	12.85	14.65	13.00	5.00	2.50
87831-61**	4	-	2.00	4.85	6.65	5.00	1.00	2.80
87831-62**	6	-	4.00	6.85	8.65	7.00	2.00	2.80

PART NUMBER LEGEND :

87831 - * * * *

CIRCUIT SIZE
(SEE TABLE)

PLATING OPTIONS

- 41 - 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- 42 - 0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.

NOTES:

- FOR ILLUSTRATION PURPOSES, 8 CIRCUIT SIZE WAFER IS SHOWN.
- MATERIAL :
HOUSING : GLASS FILLED, NYLON 46, UL94V-0, COLOR BLACK.
PIN : 0.50MM SQ. PHOSPHOR BRONZE.
- PRODUCT SPECIFICATION PS-87831-027 APPLIES.
- CKT 4 & 6 HAS NO IDENTIFICATION TAG.
- 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.
- NO CENTRE POLARIZATION SLOT FOR CKT SIZE 4 AND 6

F

E

D

C

B

A

ADD NOTE NO. 7 EC NO: S2009-0952 DRAWN: YCHONG CHKD: SXANG APPR: MLONG	2009/07/01 2009/07/08 2009/07/16	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		TITLE MGRID, SHROUDED HEADER VERTICAL, W/LOCK FEATURE	
					mm	INCH	DRAWN BY ATSEE	DATE 2003/10/03					
				4 PLACES	± ---	± ---	CHECKED BY	DATE					
				3 PLACES	± ---	± ---	KCL ING	2003/11/07					
				2 PLACES	± 0.2	± ---	APPROVED BY	DATE					
				1 PLACE	± ---	± ---	SKTOH	2003/11/07	molex MOLEX INCORPORATED				
				ANGULAR ± 3 °		MATERIAL NO.		DOCUMENT NO.		SHEET NO.			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				SEE TABLE		SD-87831-012		1 OF 1					
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION													