

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0878310442

Status:

Active

Overview:

milligrid

Description:

2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, Shrouded, Lead-free, 4 Circuits, 0.76µm (30µ") Gold (Au) Plating, with Locking Window, without PCB Locator, without Center Polarization Slot, Tube

Documents:

3D Model

Drawing (PDF)

Product Specification PS-87831-027 (PDF)

RoHS Certificate of Compliance (PDF)

Agency Certification

CSA

UL

LR19980

E29179

General

Product Family

Series

Application

Comments

Overview

Product Name

PCB Headers

87831

Wire-to-Board

Contact Molex for application in automotive industry

milligrid

Milli-Grid™

Physical

Breakaway

Circuits (Loaded)

Circuits (maximum)

Color - Resin

First Mate / Last Break

Flammability

Glow-Wire Compliant

Guide to Mating Part

Keying to Mating Part

Lock to Mating Part

Material - Metal

Material - Plating Mating

Material - Plating Termination

Material - Resin

Number of Rows

Orientation

PC Tail Length (in)

PC Tail Length (mm)

PCB Locator

PCB Retention

PCB Thickness Recommended (in)

PCB Thickness Recommended (mm)

Packaging Type

Pitch - Mating Interface (in)

Pitch - Mating Interface (mm)

Pitch - Term. Interface (in)

Pitch - Term. Interface (mm)

Plating min: Mating (µin)

Plating min: Mating (µm)

Plating min: Termination (µin)

Plating min: Termination (µm)

Polarized to Mating Part

No

4

4

Black

No

94V-0

No

No

None

Yes

Brass

Gold

Tin

Nylon

2

Vertical

0.098 In

2.50 mm

No

None

0.062 In

1.60 mm

Tube

0.079 In

2.00 mm

0.079 In

2.00 mm

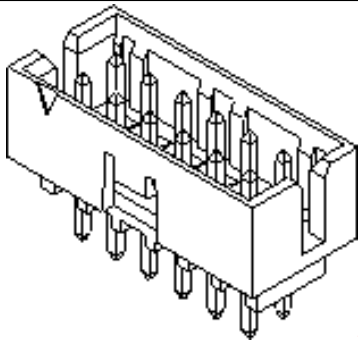
30

0.76

76

1.88

Side Slots (2)



Series
image - Reference only

EU RoHS

ELV and RoHS

Compliant

REACH SVHC

Contains SVHC: No

Halogen-Free

Status

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	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

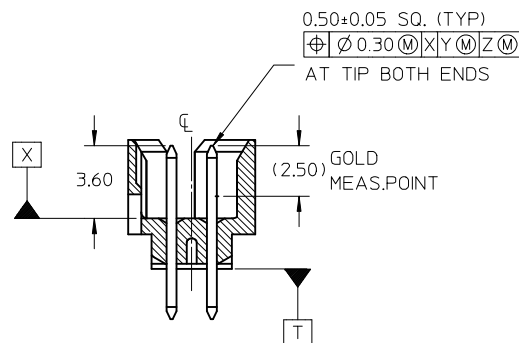
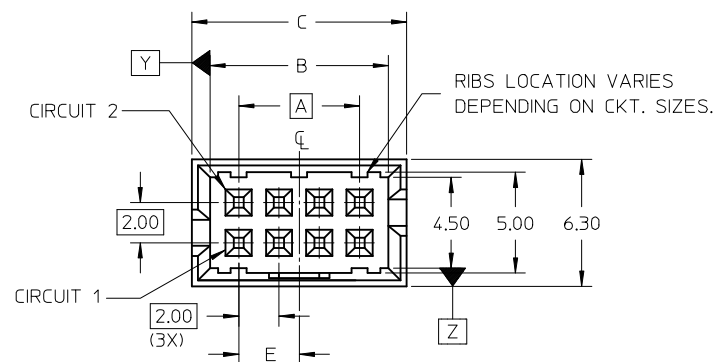
Reference - Drawing Numbers

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

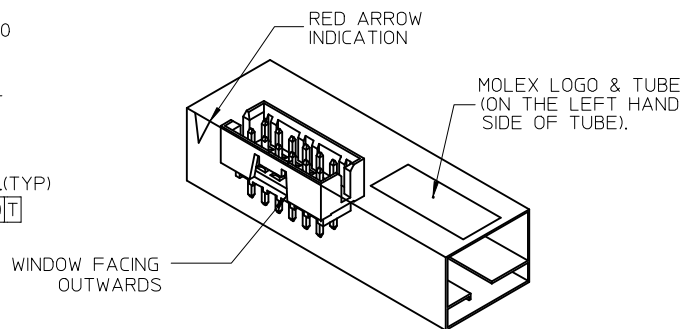
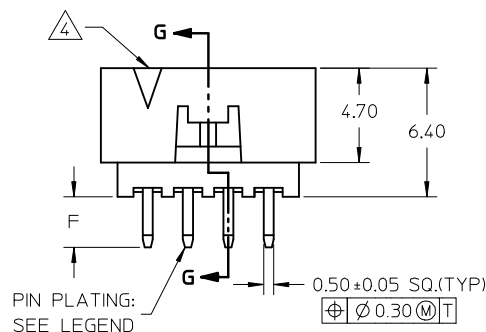
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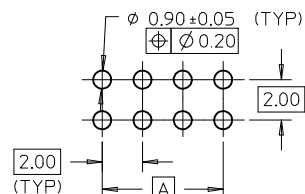
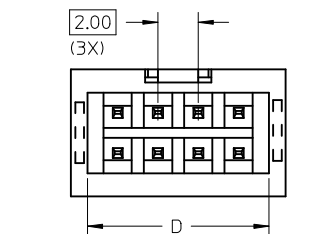
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SECTION G-G



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.
4. 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
						DRAWN BY DATE						
				4 PLACES	± ---	± ---	ATSEE	2003/10/03				
				3 PLACES	± ---	± ---	CHECKED BY	DATE				
				2 PLACES	± 0.2	± ---	KCL ING	2003/11/07				
				1 PLACE	± ---	± ---	APPROVED BY	DATE				
		ANGULAR ± 3 °		SKTOH		2003/11/07	molex MOLEX INCORPORATED					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				MATERIAL NO.		DOCUMENT NO.		SD-87831-012		SHEET NO. 1 OF 1		
A12		REV					SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			