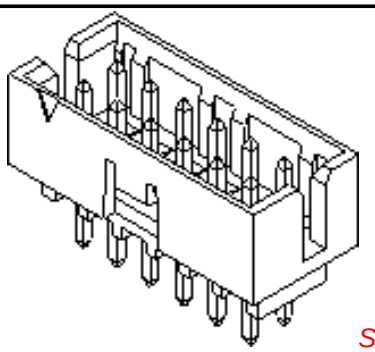
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Part Number: 0878311041
Status: Active
Overview: milligrid
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, Shrouded, Lead-free, 10 Circuits, 0.38µm (15µ") Gold (Au) Plating, with Locking Window, without PCB Locator, without Center Polarization Slot, Tube



Series image - Reference only

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)	10
Circuits (maximum)	10
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

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

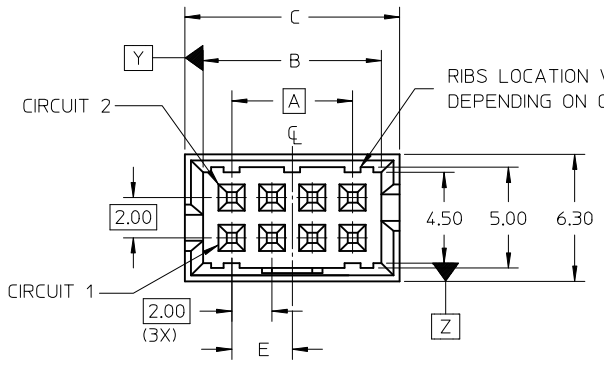
Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

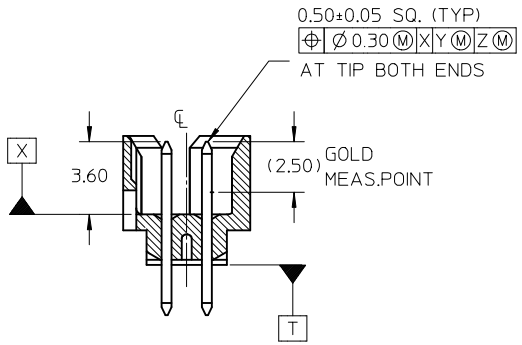
Material Info

Reference - Drawing Numbers

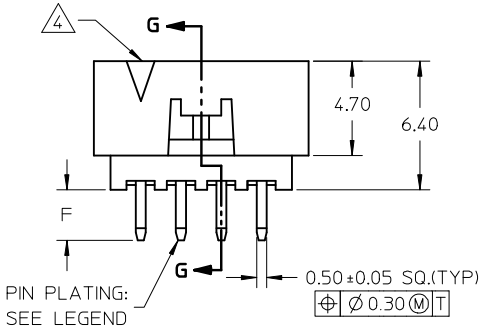
Product Specification	PS-87831-027
Sales Drawing	SD-87831-012

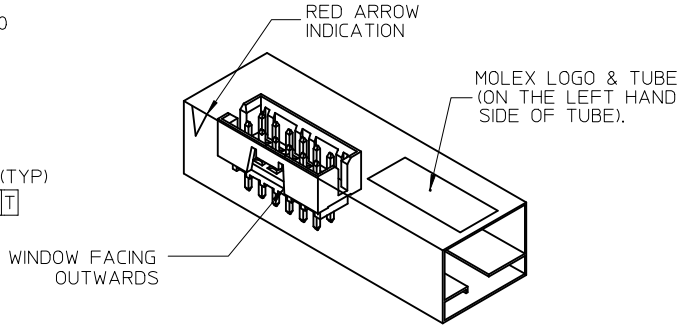
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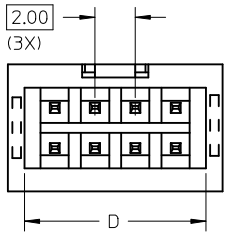
SECTION G-G

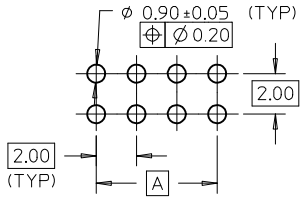




REF : ORIENTATION OF PART IN TUBE

(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:

1. FOR ILLUSTRATION PURPOSES, 8 CIRCUIT SIZE WAFER IS SHOWN.
2. MATERIAL :
   HOUSING : GLASS FILLED, NYLON 46, UL94V-0, COLOR BLACK.
   PIN : 0.50MM SQ. PHOSPHOR BRONZE.
3. PRODUCT SPECIFICATION PS-87831-027 APPLIES.
4. CKT 4 & 6 HAS NO IDENTIFICATION TAG.
5. THIS HEADER MATES WITH MOLEX :
   a) CRIMP RECEPTACLE HOUSING, 51110 SERIES WITH CRIMP TERMINAL, 50394 SERIES.
   b) 2MM MILLIGRID DUAL ROW IDT, 87568 SERIES.
6. PARTS TO BE PACKED IN TUBE WITH MOISTURE BARRIER BAG.
7. NO CENTRE POLARIZATION SLOT FOR CKT SIZE 4 AND 6

ADD NOTE NO. 7
EC NO: S2009-0952 2009/07/01
DRWN:YMCHONG 2009/07/08
CH'KD:SKANG
APPR:MLONG 2009/07/16
DESCRIPTION
REV
A12

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.2	± ---
1 PLACE	± ---	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

		DATE
DRAWN BY	ATSEE	2003/10/03
CHECKED BY	KCLING	2003/11/07
APPROVED BY	SKTOH	2003/11/07

TITLE: MGRID, SHROUDED HEADER VERTICAL, W/LOCK FEATURE

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87831-012
SHEET NO.: 1 OF 1
SIZE: A3

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