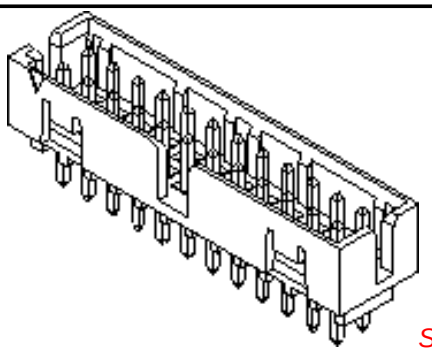
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This document was generated on 05/25/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: 0878314435
Status: Active
Overview: milligrid
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Vertical, Through Hole, Shrouded, Lead-free, 44 Circuits, 0.76µm (15µ") Gold (Au) Plating, PCB Locator, Center Polarization Slot, with Locking Windows, 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)	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	Yes
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)	30
Plating min: Mating (µm)	0.76
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	Yes
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

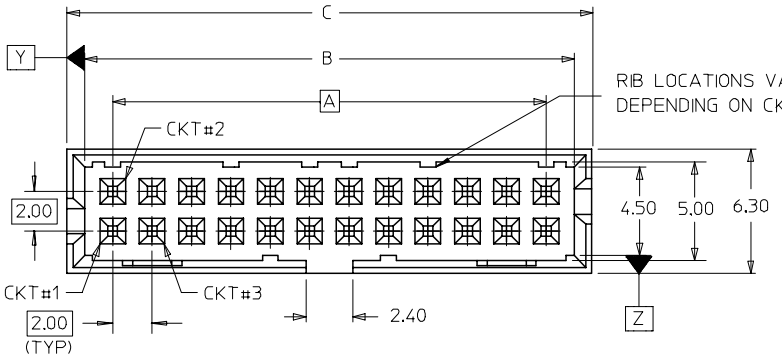
Solder Process Data

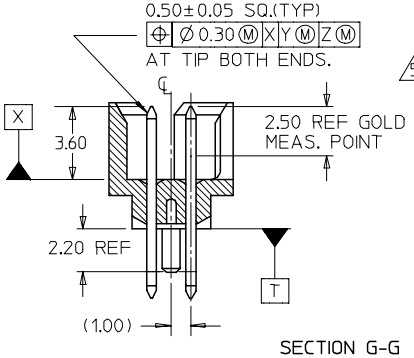
Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

Material Info

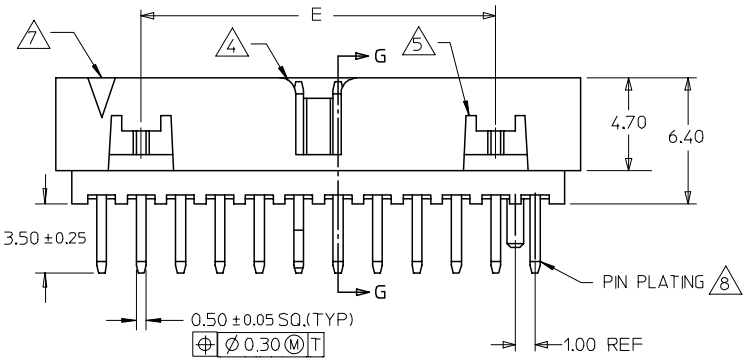
Reference - Drawing Numbers

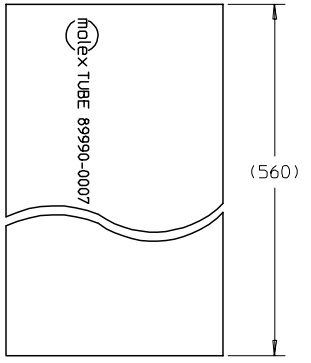
Product Specification	PS-87831-027
Sales Drawing	SD-87831-016



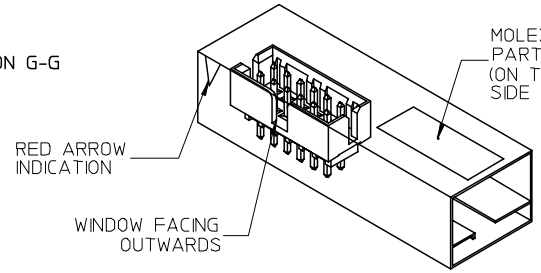


P/N IN TUBE	CKT SIZE	DIMENSION				
		A	B	C	D	E
87831-1035	10	8.00	10.85	12.65	11.00	———
87831-1435	14	12.00	14.85	16.65	15.00	8.00
87831-1635	16	14.00	16.85	18.65	17.00	10.00
87831-2035	20	18.00	20.85	22.65	21.00	14.00
87831-2435	24	22.00	24.85	26.65	25.00	18.00
87831-3035	30	28.00	30.85	32.65	31.00	24.00
87831-3435	34	32.00	34.85	36.65	35.00	28..00
87831-4435	44	42.00	44.85	46.65	45.00	38.00
87831-5035	50	48.00	50.85	52.65	51.00	44.00

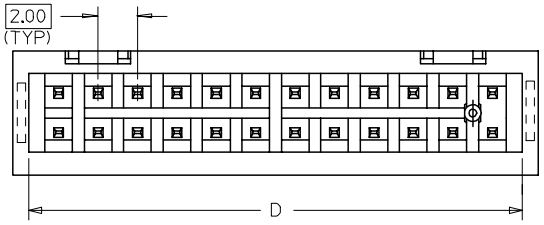


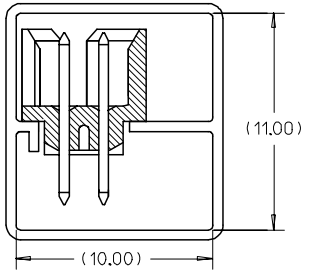


SECTION G-G



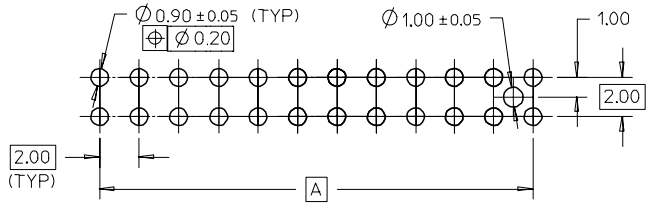
REF : ORIENTATION OF PART IN TUBE
(FOR THE REFERENCE OF PART/TUBE ASSEMBLY)





REF : ORIENTATION OF PART IN TUBE

NOTES:
1. FOR ILLUSTRATION PURPOSES, 24 CKT SIZE WAFER IS SHOWN.
2. MATERIAL :
   HOUSING : 30% G.F., NYLON 46, UL94V-0, COLOR BLACK.
   PIN : 0.50MM SQ.PHOSPHOR BRONZE.
3. PRODUCT SPECIFICATION PS-87831-027 APPLIES.
4. NO CENTRE POLARIZATION SLOT FOR CKT SIZE 4 AND 6.
5. NO SIDE LOCKING SLOT FOR CKT SIZE 10.
6. FOR RIB LOCATION SEE DWG. NO. EC-87330-**04.
7. CKT 6 HAS NO IDENTIFICATION TAG.
8. PLATING OPTION :
   0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
9. THIS HEADER MATES WITH MOLEX :
   a) CRIMP RECEPTACLE HOUSING, 51110 SERIES WITH CRIMP TERMINAL, 50394 SERIES.
   b) 2MM MILLIGRID DUAL ROW IDT, 87568 SERIES.
10. PARTS TO BE PACKED IN TUBE WITH MOISTURE BARRIER BAG.



RECOMMENDED PCB PATTERN
(FOR BOARD THK OF 2.95±0.10)

ADD MOIST BAG NOTE
EC NO: S2007-0892 2007/05/04 DESCRIPTION
DRWN:GMENARLY 2007/05/04
CHKD:SKANG
APPR:MLONG 2007/05/07
A5 REV

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

DRAWN BY: ATSEE DATE: 2003/10/06
CHECKED BY: KCLING DATE: 2003/11/07
APPROVED BY: SKTOH DATE: 2003/11/07
MATERIAL NO.: SEE TABLE

TITLE: MGRID, SHROUDED HEADER VERTICAL, W/PEG

molex MOLEX INCORPORATED

DOCUMENT NO.: SD-87831-016
SHEET NO.: 1 OF 1

SIZE A3

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