

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0878332052](#)
Status: **Active**
Overview: milligrd
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Right Angle, Shrouded, Lead-free, 20 Circuits, 0.05µm (2µ") Gold (Au) Plating, without PCB Locator, with Locking Windows, Center Polarization Slot, Tube

Documents:

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)
[Product Specification PS-87831-027 \(PDF\)](#)

Agency Certification

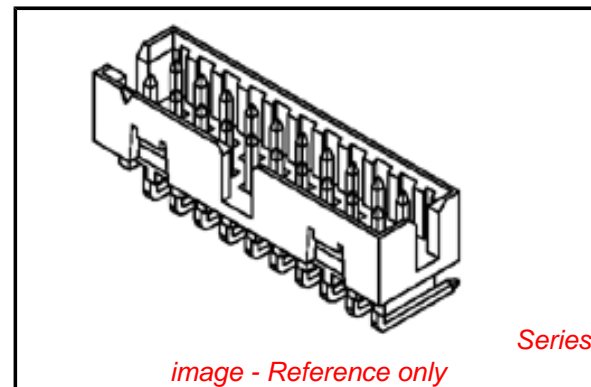
CSA LR19980
 UL E29179

General

Product Family PCB Headers
 Series [87833](#)
 Application Wire-to-Board
 Comments Contact Molex for application in automotive industry
 Overview [milligrd](#)
 Product Name Milli-Grid™

Physical

Breakaway No
 Circuits (Loaded) 20
 Circuits (maximum) 20
 Color - Resin Black
 Durability (mating cycles max) 100
 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 None
 Material - Metal Phosphor Bronze
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin Nylon
 Number of Rows 2
 Orientation Right Angle
 PC Tail Length (in) 0.118 In
 PC Tail Length (mm) 3.00 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) 2
 Plating min: Mating (µm) 0.05
 Plating min: Termination (µin) 75
 Plating min: Termination (µm) 1.88



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

[87833Series](#)

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 Mating Part	Side Slots (2)
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)	11
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	265

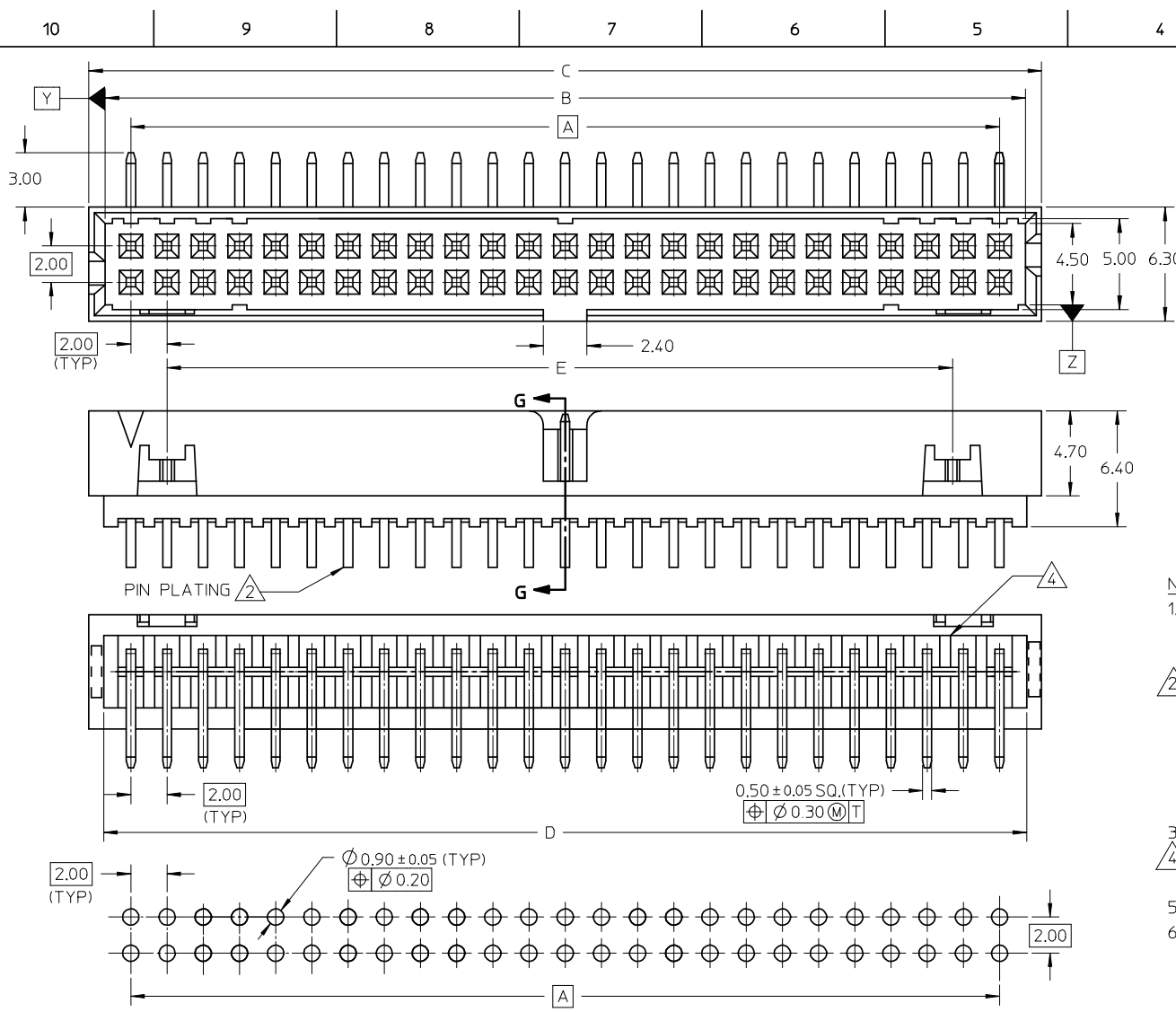
Material Info

Reference - Drawing Numbers

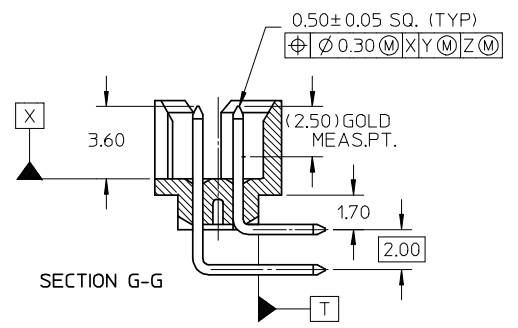
Product Specification	PS-87831-027
Sales Drawing	SD-87833-015

This document was generated on 06/01/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION



PART NO.	CKT SIZE	DIMENSION					PLATING OPTION Δ
		A	B	C	D	E	
87833-2052	20	18.00	20.85	22.65	21.00	14.00	2
87833-5050	50	48.00	50.85	52.65	51.00	44.00	1
87833-5052	50	48.00	50.85	52.65	51.00	44.00	2



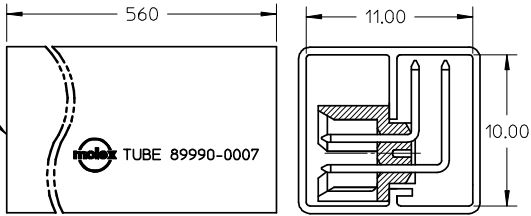
NOTES:

- MATERIAL :
HOUSING : 30% G.F., NYLON 46, UL94V-0, COLOR BLACK.
PIN : 0.50MM SQ.PHOSPHOR BRONZE.
- PLATING :
1. 0.38um GOLD IN CONTACT AREA AND 1.88um MIN. TIN IN SOLDER TAIL AREA OVER 1.27um MIN. NICKEL OVERALL.
2. 0.05um MIN. TO 0.13um MAX. GOLD IN CONTACT AREA AND 1.88um MIN. TIN IN SOLDER TAIL AREA OVER 1.27um MIN. NICKEL OVERALL.
- PRODUCT SPECIFICATION PS-87831-027 APPLIES.
- LINKWAYS VARIES FROM PART TO PART BECAUSE OF DIFFERENT MOLD.
- PARTS TO BE PACKED IN TUBE.
- 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.

RECOMMENDED PCB PATTERN

PDR#S-001811-00-00 EC NO: S2008-1107 DRWNS:KANG CHKD:ATSEE APPR:MLONG 2008/06/10 2008/06/10 2008/06/11	QUALITY SYMBOLS $\nabla=0$ $\nabla C=0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY ATSEE	DATE 2003/10/27	TITLE MGRID, SHROUDED HDR, R/A W/SLOTS/STANDOFF & LONG SOLDER TAIL 3.00MM			
		4 PLACES	± ---	± ---	CHECKED BY KCLING	DATE 2003/11/07	MOLEX INCORPORATED			
		3 PLACES	± ---	± ---	APPROVED BY SKTOH	DATE 2003/11/07	DOCUMENT NO. SD-87833-015			
2 PLACES	± 0.2	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		SHEET NO. 1 OF 2			
1 PLACE	± ---	± ---	ANGULAR ± 3 °		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

TUBE P/N :
89990-0007



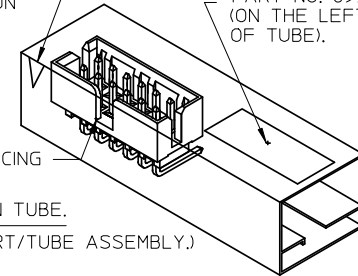
REF: ORIENTATION OF PART IN TUBE.

RED ARROW
INDICATION

MOLEX LOGO & TUBE
PART NO. 89990-0007.
(ON THE LEFT HAND SIDE
OF TUBE).

WINDOW FACING
OUTWARDS

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



PDR#S-001811-00-00 EC NO: S2008-1107 DRWN:SKANG 2008/06/10 CHKD:ATSEE 2008/06/10 APPR:MLONG 2008/06/11	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY ATSEE	DATE 2003/10/27	TITLE MGRID, SHROUDED HDR, R/A W/SLOTS/STANDOFF & LONG SOLDER TAIL 3.00MM			
		4 PLACES	± ---	± ---	CHECKED BY KCL ING	DATE 2003/11/07	MOLEX INCORPORATED			
		3 PLACES	± ---	± ---	APPROVED BY SKTOH	DATE 2003/11/07	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87833-015	SHEET NO. 2 OF 2	
2 PLACES	± 0.2	± ---	ANGULAR ± 3 °		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
1 PLACE	± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS							