

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0878320828](#)  
**Status:** **Active**  
**Overview:** milligrid  
**Description:** 2.00mm (.079") Pitch Milli-Grid™ Header, Surface Mount, Vertical, Shrouded, Lead-free, 8 Circuits, 0.38µm (15µ") Gold (Au) Plating, without PCB Locator, with Locking Window, Pick-and-Place Cap, Embossed Tape on Reel

**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 [87832](#)  
 Application Wire-to-Board  
 Comments With Cap|Contact Molex for application in automotive industry  
 Overview [milligrid](#)  
 Product Name Milli-Grid™

**Physical**

Breakaway No  
 Circuits (Loaded) 8  
 Circuits (maximum) 8  
 Color - Resin Black  
 First Mate / Last Break No  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Guide to Mating Part No  
 Keying to Mating Part Yes  
 Lock to Mating Part Yes  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin Nylon  
 Number of Rows 2  
 Orientation Vertical  
 PCB Locator No  
 PCB Retention None  
 Packaging Type Embossed Tape on Reel  
 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) 75  
 Plating min: Termination (µm) 1.88  
 Polarized to Mating Part Side Slots (2)  
 Polarized to PCB No  
 Shrouded Fully  
 Stackable No



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**Halogen-Free Status**

**China RoHS**



**Not Halogen-Free**  
**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto: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**

[87832Series](#)

**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

Temperature Range - Operating	-55°C to +105°C
Termination Interface: Style	Surface Mount

### **Electrical**

Current - Maximum per Contact	2A
Voltage - Maximum	125V

### **Solder Process Data**

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

### **Material Info**

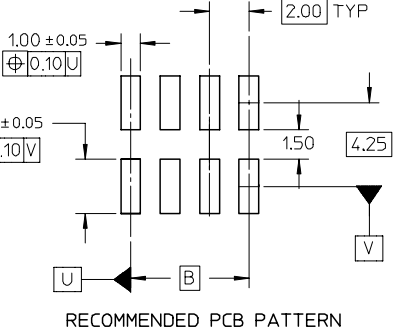
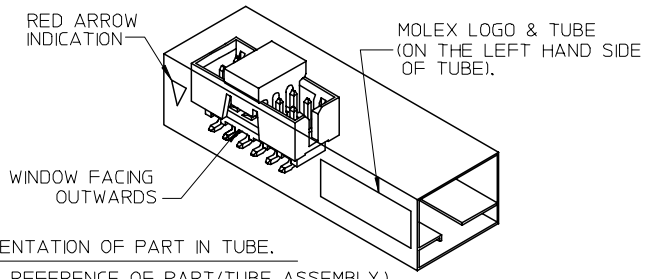
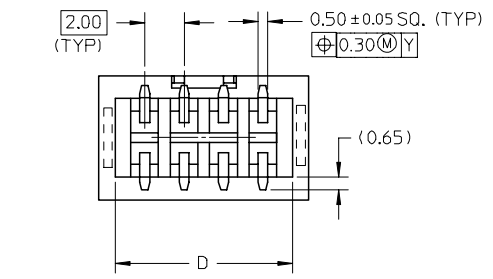
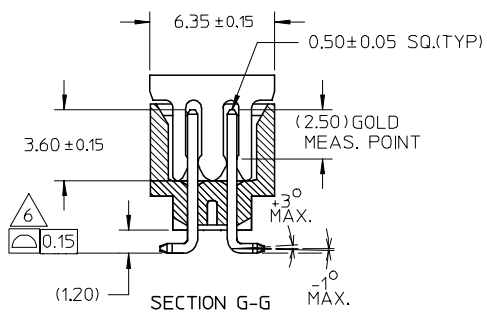
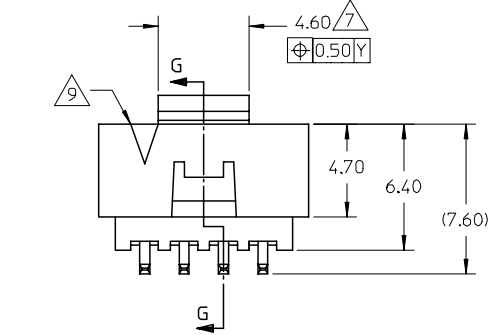
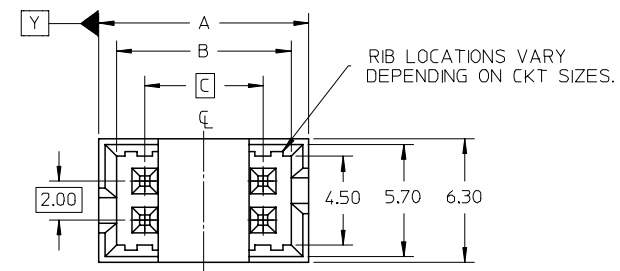
### **Reference - Drawing Numbers**

Product Specification	PS-87831-027
Sales Drawing	SD-87832-030

This document was generated on 05/25/2010

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10 9 8 7 6 5 4 3 2 1



P/N WITHOUT CAP IN TUBE	P/N WITH CAP IN TUBE	P/N WITH CAP IN TAPE/REEL	CKT SIZE	DIMENSION			
				A	B	C	D
87832-0624	87832-0626	87832-0628	6	8.65	6.85	4.00	7.00
87832-0824	87832-0826	87832-0828	8	10.65	8.85	6.00	9.00
87832-1024	87832-1026	87832-1028	10	12.65	10.85	8.00	11.00
87832-1224	87832-1226	87832-1228	12	14.65	12.85	10.00	13.00

- NOTES:
- FOR ILLUSTRATION PURPOSES, 8 CIRCUIT SIZE WAFER IS SHOWN.
  - MATERIAL :  
HOUSING & CAP : 30% G.F., NYLON 46, UL94V-0, COLOR BLACK.  
PIN : 0.50MM SQ.PHOSPHOR BRONZE.
  - PLATING :  
0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
  - PIN PUSHOUT FORCE : 0.91 KG MIN. IN EITHER DIRECTION.
  - PRODUCT SPECIFICATION PS-87831-027 APPLIES.
  - COPLANARITY IS TO BE MEASURED BY RESTING THE SOLDER TAIL ON A GAUGE SURFACE.
  - BEND DEPRESSION ON SMT TAIL IS ACCEPTABLE SO LONG AS IT DOES NOT AFFECT THE OVERALL COPLANARITY OF THE TAIL.
  - CAP TO BE POSITION IN THE CENTER OF HEADER FOR PICK AND PLACE.
  - CKT 4 & 6 HAS NO IDENTIFICATION TAG.
  - FOR 4 CKT OPTION, REFER TO 87832-0406.
  - THIS HEADER MATES WITH MOLEX:
    - CRIMP RECEPTACLE HOUSING, 51110 SERIES WITH CRIMP TERMINAL, 50394 SERIES.
    - 2MM MILLIGRID DUAL ROW IDT, 87568 SERIES.
  - PARTS SHALL BE PACKED WITH MOISTURE BARRIER BAG WITH DESICCANT GEL.

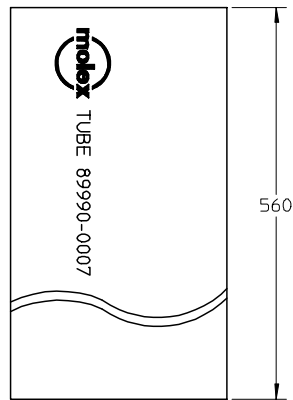
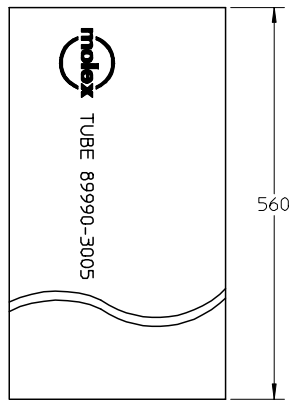
REVISED EC NO: S2008-0049 DRWNS:KANG CHKD:ATSEE APPR:MLONG 2007/10/31 2007/10/31 2007/11/01	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION			
				MM ONLY		NTS	METRIC				
				mm	INCH	DRAWN BY DATE		TITLE			
						KSEE 2004/03/11		MGRID, 2MM, SHROUDED HDR SMT, IN TUBE AND T&R			
				4 PLACES ± --- ± ---		CHECKED BY DATE		PTL IM 2004/03/30			
				3 PLACES ± --- ± ---		APPROVED BY DATE		SCLOW 2004/04/01			
				2 PLACES ± 0.2 ± ---		MATERIAL NO.		DOCUMENT NO.			
				1 PLACE ± --- ± ---		SEE TABLE		SD-87832-030			
				ANGULAR ± 3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SHEET NO. 1 OF 2			
						SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

9 8 7 6 5 4 3 2 1

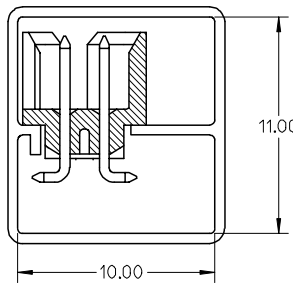
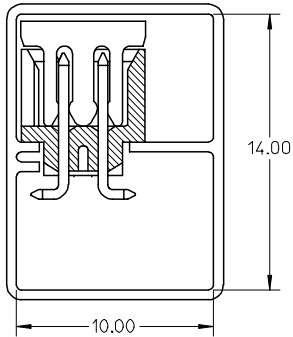
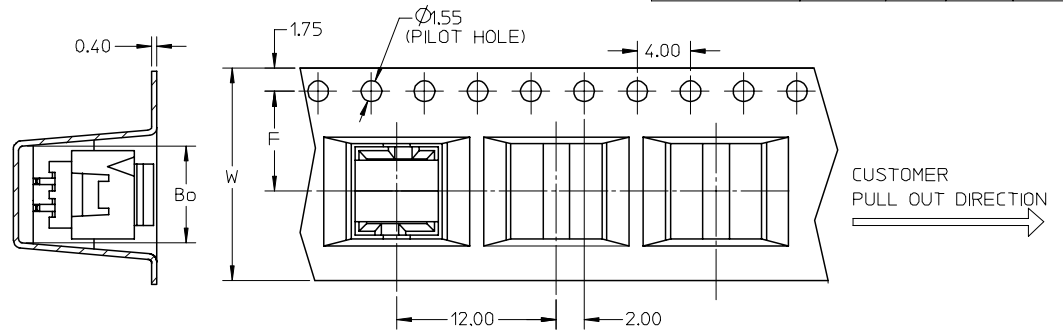
10 WITH CAP  
TUBE PACKAGING

8 WITHOUT CAP  
TUBE PACKAGING

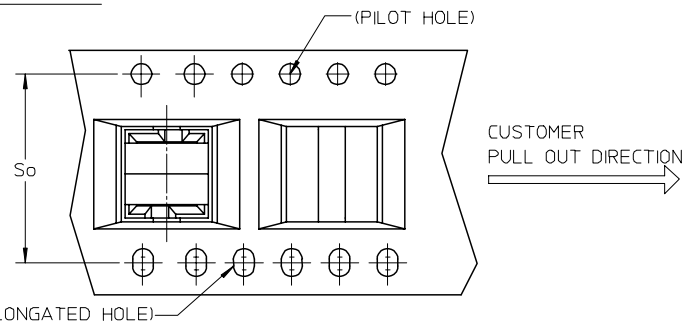
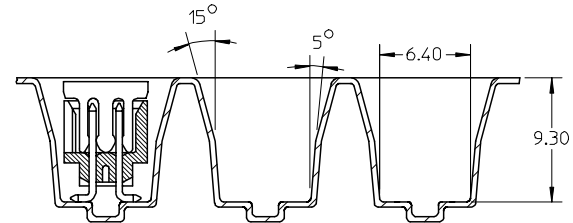
P/N WITH CAP IN T&R	CKT SIZE	F	Bo	So	W
87832-0628	06	11.50	9.15	-	24.00
87832-0828	08	11.50	11.05	-	24.00
87832-1028	10	11.50	13.05	-	24.00
87832-1228	12	14.20	15.15	28.40	32.00



EMBOSSED CARRIER TAPE 'A'

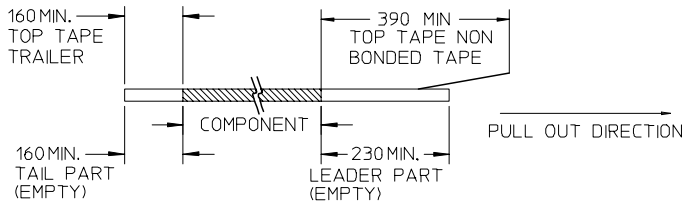


EMBOSSED CARRIER TAPE 'B'

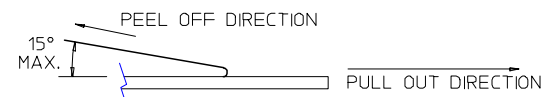


NOTES:

1. LEADER AND TRAILER TAPE



2. PEELING OFF FORCE OF THE TOP TAPE: 20-80gf.  
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)



3. PACKAGING STANDARD IS AS PER EIA-481.

REVISED EC NO: S2008-0049 DRWN:SKANG CHKD:ATSEE APPR:MLONG 2007/10/31 2007/10/31 2007/11/01	DESCRIPTION QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION																												
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