

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

**Part Number:** [0878320836](#)  
**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, with Central Locking Window, with Pick-and-Place Cap, with PCB Locator, Embossed Tape on Reel

**Documents:**

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

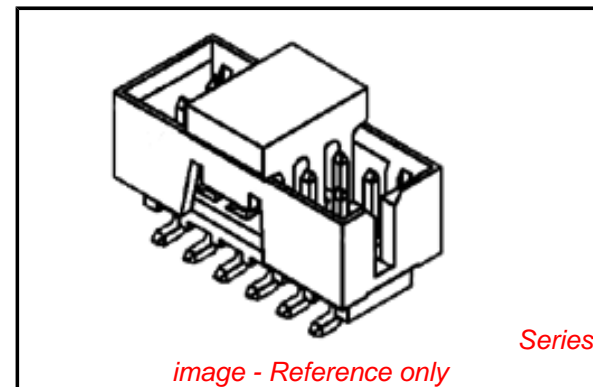


image - Reference only

**General**

Product Family	PCB Headers
Series	<a href="#">87832</a>
Application	Wire-to-Board
Comments	With Cap Contact Molex for application in automotive industry
Overview	<a href="#">milligrid</a>
Product Name	Milli-Grid™

**Physical**

Breakaway	No
Circuits (Loaded)	8
Circuits (maximum)	8
Color - Resin	Black
First Mate / Last Break	No
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	Yes
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)	30
Plating min: Mating (µm)	0.76
Plating min: Termination (µin)	75
Plating min: Termination (µm)	1.88
Polarized to Mating Part	Center Slot
Polarized to PCB	No
Robotic Placement	Pick and Place Cap
Shrouded	Fully
Stackable	No
Temperature Range - Operating	-55°C to +105°C
Termination Interface: Style	Surface Mount

**Electrical**

**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](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

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**

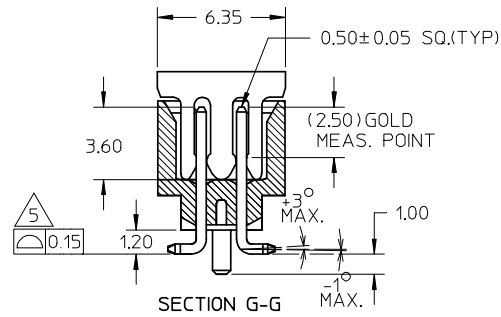
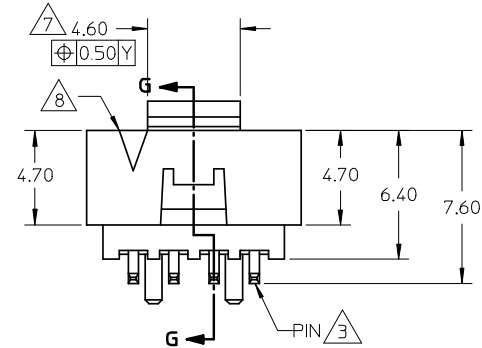
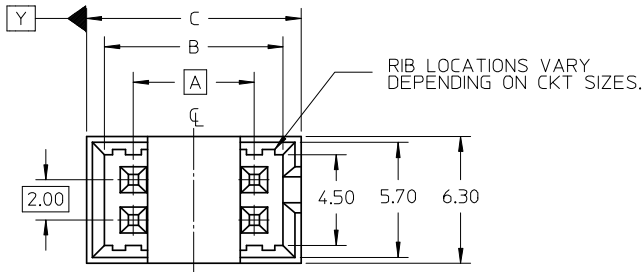
### **Reference - Drawing Numbers**

Product Specification	PS-87831-027
Sales Drawing	SD-87832-034

This document was generated on 05/25/2010

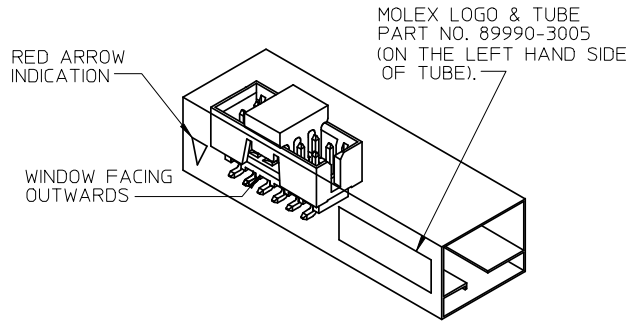
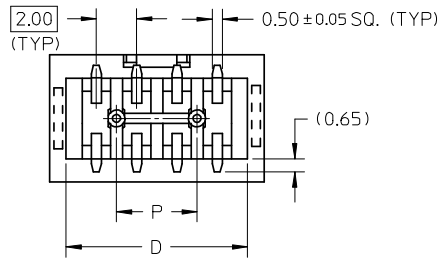
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PEG OPTION	P/N WITH CAP IN TAPE & REEL	P/N WITH CAP IN TUBE	P/N WITHOUT CAP IN TUBE	CKT SIZE	DIMENSION				
					A	B	C	D	P
YES	87832-0836	87832-0837	87832-0838	8	6.00	8.85	10.65	9.00	4.00

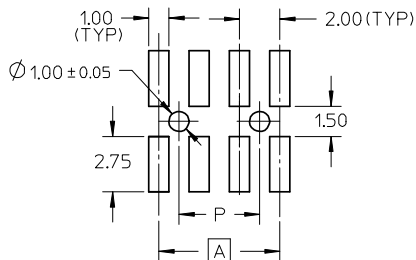


NOTES:

- 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.
- 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 MOISTURE BARRIER BAG WITH DESICCANT GEL.



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



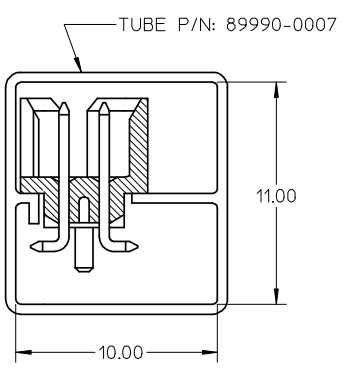
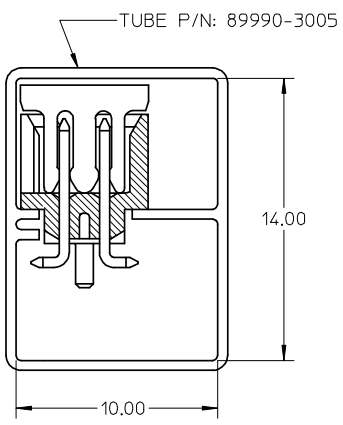
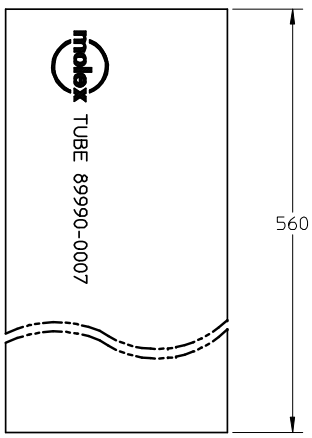
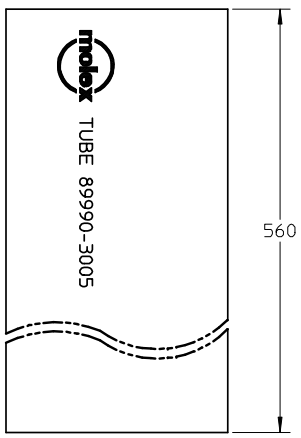
RECOMMENDED PCB PATTERN

PDR#S-001812-00-00 EC NO: S2008-1150 DRWN:SKANG 2008/06/25 CHKD:ATSEE 2008/06/27 APPR:MLONG 2008/06/27	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE			
		3 PLACES	± ---	± ---	CHECKED BY	DATE	MGRID, SHROUDED HEADER W/PEGS/CAP/LOCK FEATURE SINGLE SIDE SLOT, SMT			
		2 PLACES	± 0.2	± ---	APPROVED BY	DATE				
1 PLACE	± ---	± ---	ANGULAR ± 3 °		MLONG	2008/06/27	MOLEX INCORPORATED			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		MATERIAL NO.		DOCUMENT NO.		SHEET NO.		
				SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

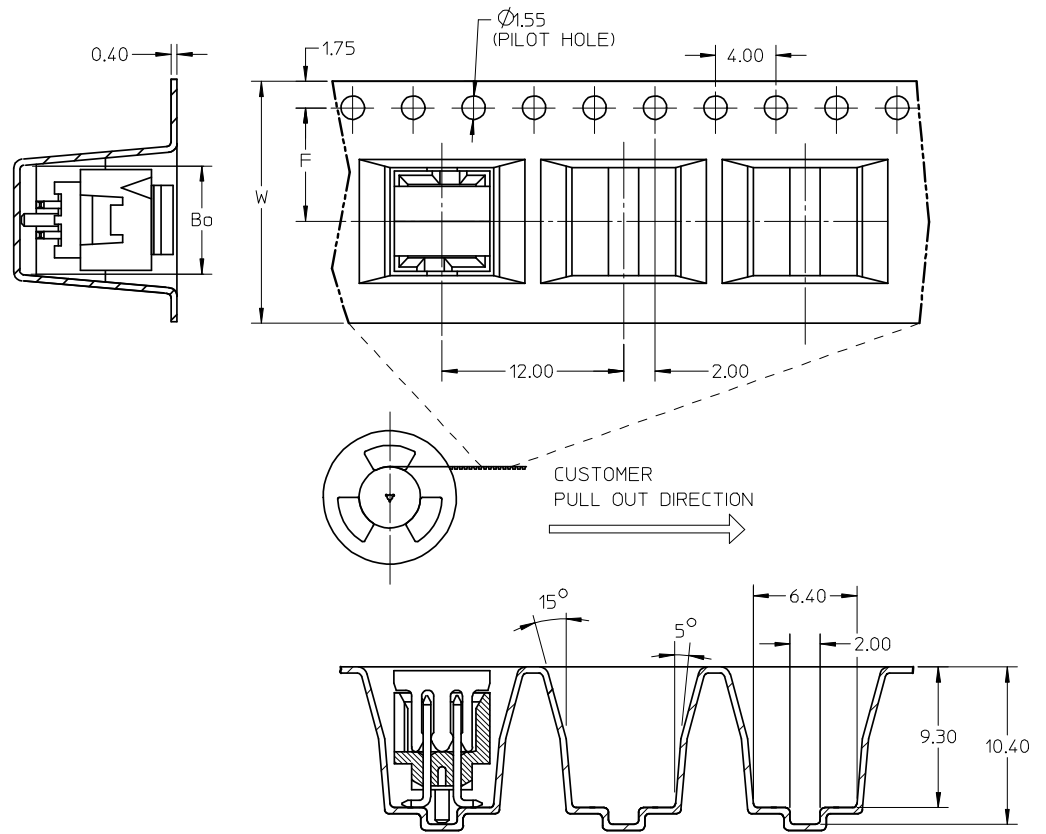
WITH CAP  
TUBE PACKAGING

WITHOUT CAP  
TUBE PACKAGING

P/N WITH CAP IN T&R	CKT SIZE	F	Bo	So	W
87832-0836	08	11.50	11.05	-	24.00

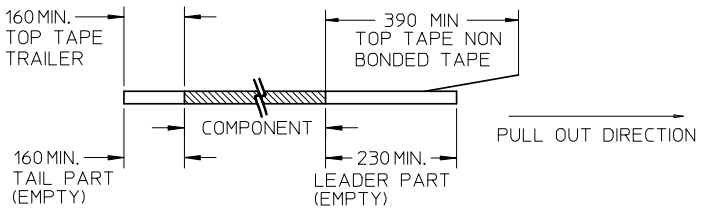


EMBOSSED CARRIER TAPE 'A'

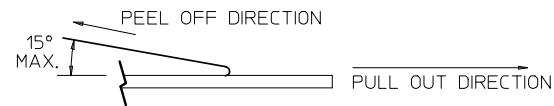


NOTES:

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.

PDR#S-001812-00-00 EC NO: S2008-1150 DRWN:SKANG 2008/06/25 CHKD:ATSEE 2008/06/27 APPR:MLONG 2008/06/27	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	▽=0 ∇=0	mm INCH	MM ONLY	NTS	METRIC		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± ---	DRAWN BY DATE SKANG 2008/06/05	TITLE			
		ANGULAR ± 3 °	CHECKED BY DATE ATSEE 2008/06/25	MGRID, SHROUDED HEADER W/PEGS/CAP/LOCK FEATURE SINGLE SIDE SLOT, SMT			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	APPROVED BY DATE MLONG 2008/06/27	MATERIAL NO. DOCUMENT NO.		SHEET NO.	
			SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

DRAWN BY DATE		TITLE	
SKANG	2008/06/05	MGRID, SHROUDED HEADER W/PEGS/CAP/LOCK FEATURE SINGLE SIDE SLOT, SMT	
CHECKED BY DATE		MATERIAL NO. DOCUMENT NO.	
ATSEE	2008/06/25	MLONG	SD-87832-034
APPROVED BY DATE		SHEET NO.	
MLONG	2008/06/27	2 OF 2	
MOLEX INCORPORATED			