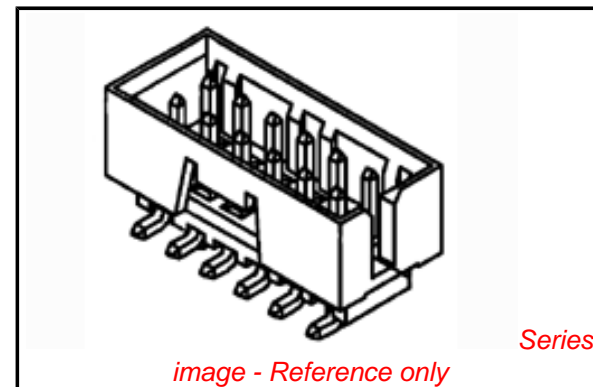


**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** **0878320838**  
**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, without Pick-and-Place Cap, with PCB Locator, Tube

**Documents:**

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



**General**

Product Family	PCB Headers
Series	<a href="#">87832</a>
Application	Wire-to-Board
Comments	Without 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	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)	75
Plating min: Termination (µm)	1.88
Polarized to Mating Part	Center Slot
Polarized to PCB	No
Shrouded	Fully
Stackable	No
Temperature Range - Operating	-55°C to +105°C
Termination Interface: Style	Surface Mount

**Electrical**

Current - Maximum per Contact	2A
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**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

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**

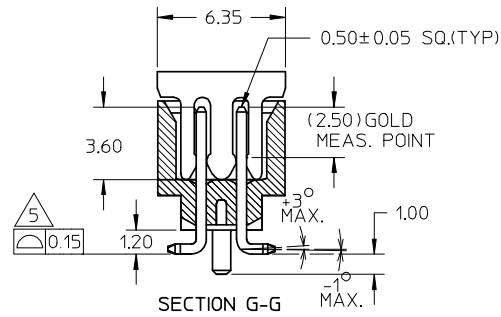
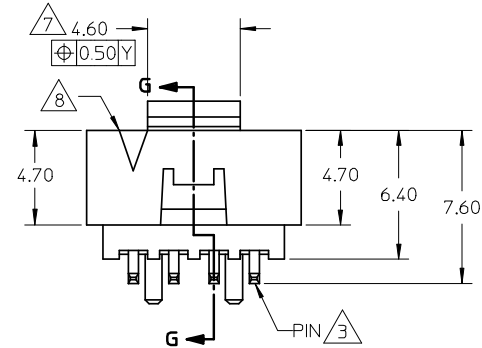
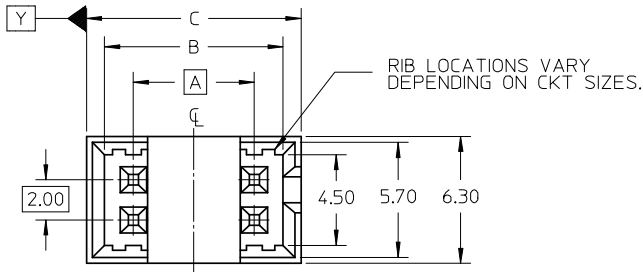
### **Reference - Drawing Numbers**

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

This document was generated on 05/25/2010

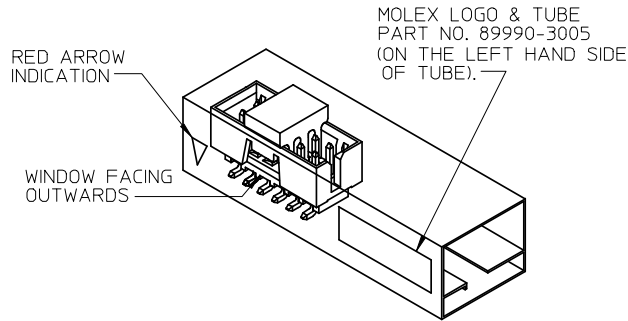
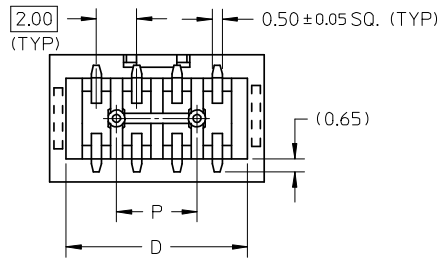
**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**

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

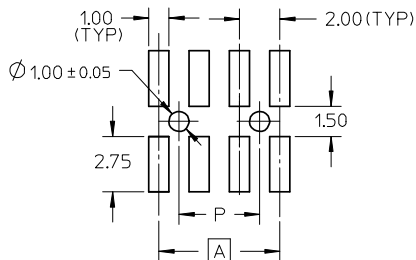


NOTES:

- 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.)



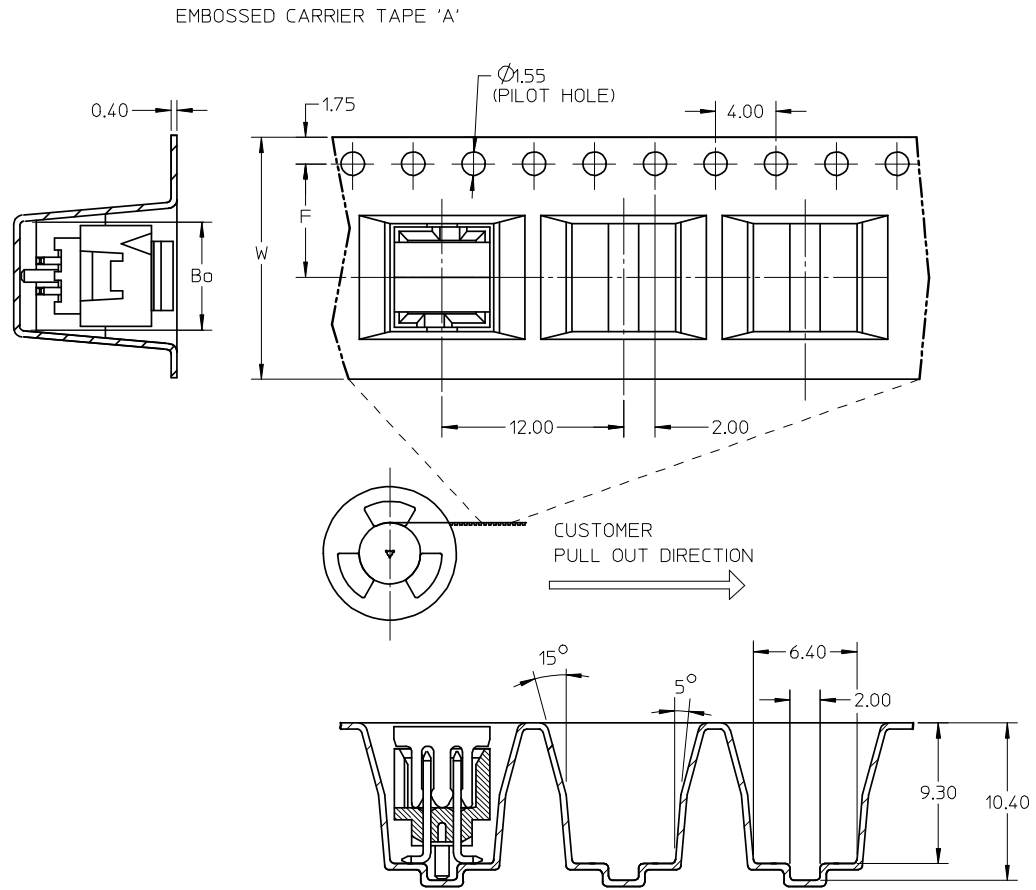
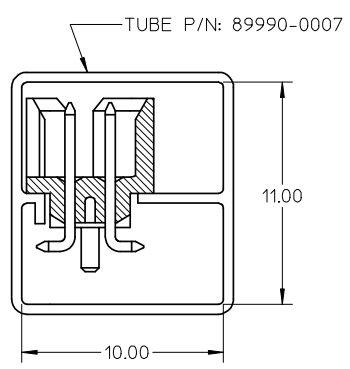
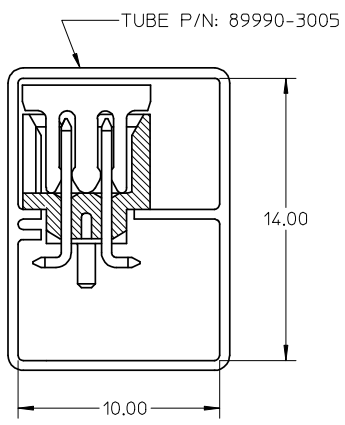
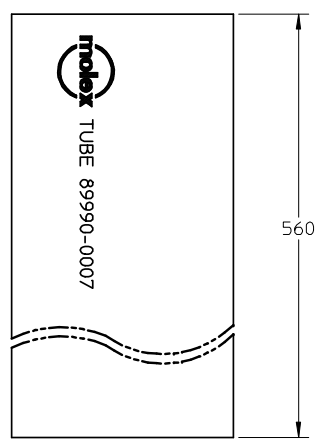
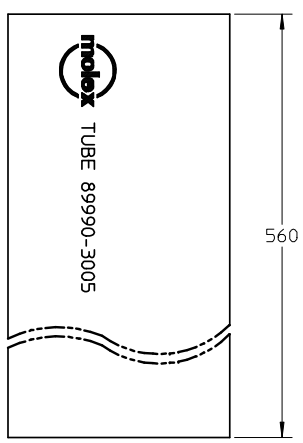
RECOMMENDED PCB PATTERN

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		
			mm	INCH	DRAWN BY	DATE	TITLE			
		4 PLACES	± ---	± ---	SKANG	2008/06/05	MGRID, SHROUDED HEADER W/PEGS/CAP/LOCK FEATURE SINGLE SIDE SLOT, SMT			
		3 PLACES	± ---	± ---	CHECKED BY	DATE				
2 PLACES	± 0.2	± ---	ATSEE	2008/06/25	MOLEX INCORPORATED					
1 PLACE	± ---	± ---	APPROVED BY	DATE						
ANGULAR ± 3 °		MATERIAL NO.		MLONG 2008/06/27		DOCUMENT NO.		SHEET NO.		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-87832-034		1 OF 2		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

WITH CAP  
TUBE PACKAGING

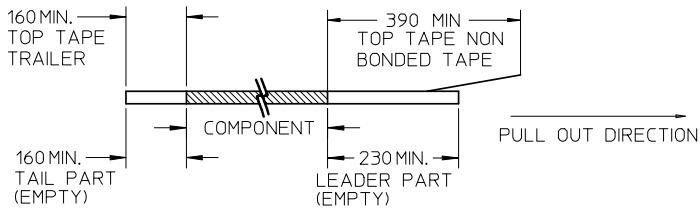
WITHOUT CAP  
TUBE PACKAGING

P/N WITH CAP IN T&R	CKT SIZE	F	Bo	So	W
87832-0836	08	11,50	11,05	-	24,00

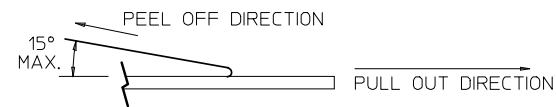


NOTES:

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	MOLEX INCORPORATED			
			MATERIAL NO.	DOCUMENT NO.	SHEET NO.		
			SEE TABLE	SD-87832-034	2 OF 2		
			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			