

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0878320408](#)
Status: **Active**
Overview: milligrid
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Surface Mount, Vertical, Shrouded, Lead-free, 4 Circuits, 0.38µm (15µ") Gold (Au) Plating, with Locking Window, Pick-and-Place Cap, without PCB Locator, Tube

Documents:

[3D Model](#) [Product Specification PS-87831-027 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

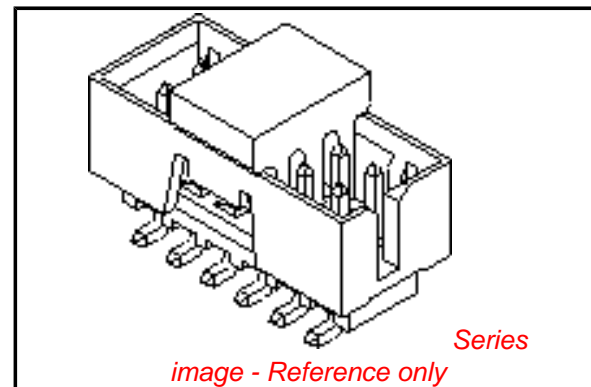
CSA LR19980
 UL E29179

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) 4
 Circuits (maximum) 4
 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 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) 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
 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

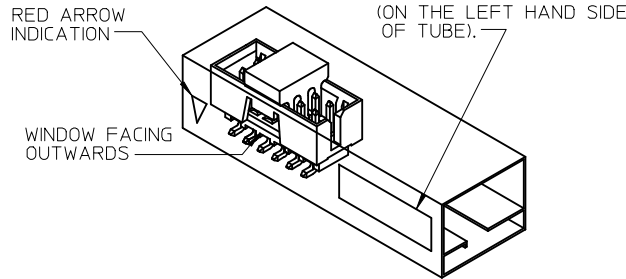
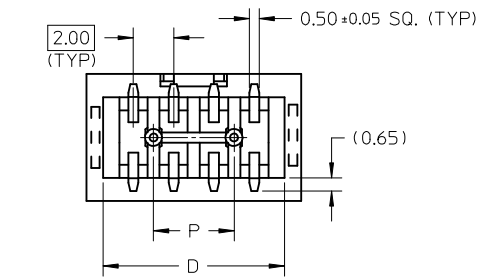
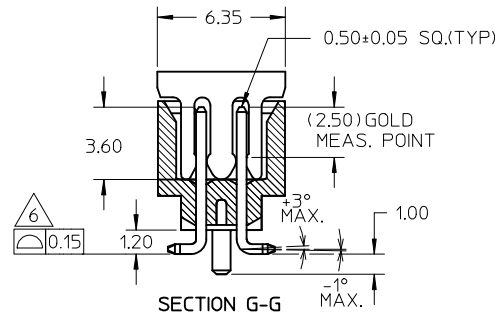
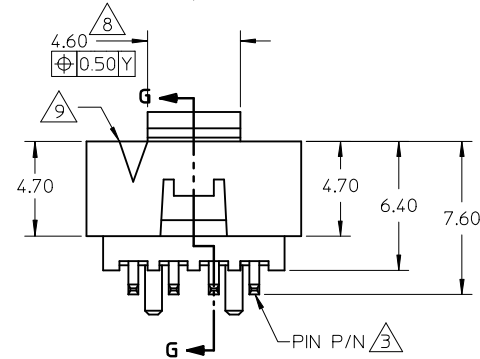
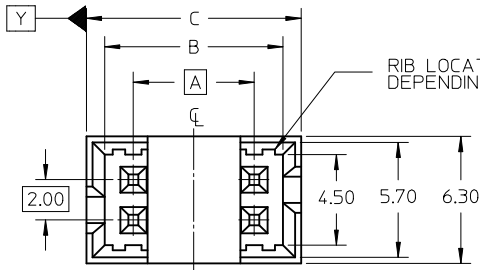
Reference - Drawing Numbers

Product Specification	PS-87831-027
Sales Drawing	SD-87832-010

This document was generated on 05/25/2010

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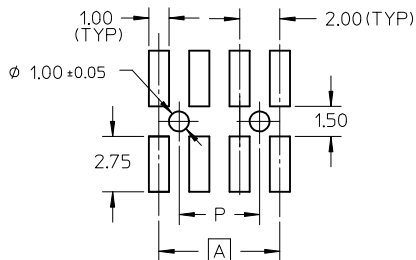
PEG OPTION	P/N WITH CAP IN TAPE & REEL	P/N WITH CAP IN TUBE	P/N WITHOUT CAP IN TUBE	CKT SIZE	DIMENSION				
					A	B	C	D	P
NO	87832-0406	87832-0408	87832-0410	4	2.00	4.85	6.65	5.00	-
YES	87832-0606	87832-0608	87832-0610	6	4.00	6.85	8.65	7.00	2.00
YES	87832-0806	87832-0808	87832-0810	8	6.00	8.85	10.65	9.00	4.00
YES	87832-1006	87832-1008	87832-1010	10	8.00	10.85	12.65	11.00	6.00
YES	87832-1206	87832-1208	87832-1210	12	10.00	12.85	14.65	13.00	8.00



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

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.
- NO CENTRE POLARIZATION SLOT FOR CKT SIZE 4 & 6.



RECOMMENDED PCB PATTERN

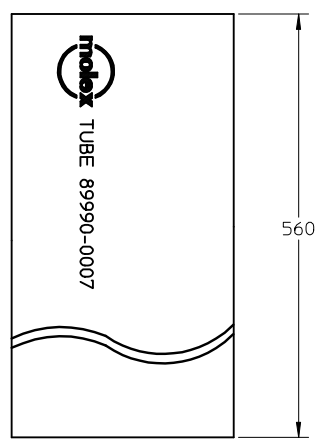
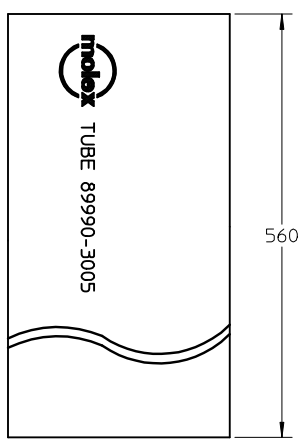
ADD IN NOTES NO.12 EC NO: S2009-0943 DRWN:YMCCHONG CHKD:SKANG APPR:MLONG	2009/07/01 2009/07/08 2009/07/16	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION			
					MM ONLY	NTS	METRIC				
					DRAWN BY	DATE	TITLE				
					CHECKED BY	DATE	MGRID, SHROUDED HEADER W/PEGS/CAP/LOCK FEATURE SMT, IN TUBE AND T&R				
				APPROVED BY	DATE	MOLEX INCORPORATED					
				ANGULAR ± 3 °		SKTOH	DATE	MOLEX INCORPORATED			
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		DOCUMENT NO.		SHEET NO.	
						SEE TABLE		SD-87832-010		1 OF 2	
				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

10 9 8 7 6 5 4 3 2 1

WITH CAP
TUBE PACKAGING

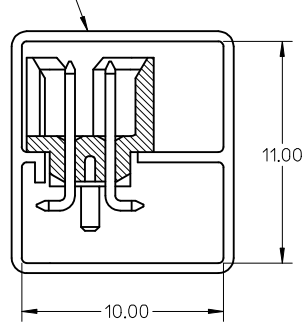
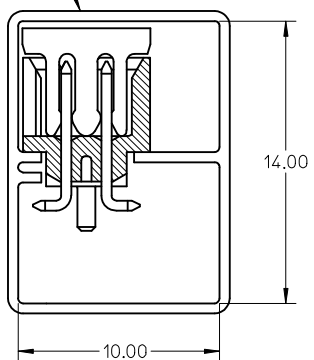
WITHOUT CAP
TUBE PACKAGING

P/N WITH CAP IN T&R	CKT SIZE	F	Bo	So	W
87832-0406	04	7.50	7.15	-	16.00
87832-0606	06	11.50	9.15	-	24.00
87832-0806	08	11.50	11.05	-	24.00
87832-1006	10	11.50	13.05	-	24.00
87832-1206	12	14.20	15.15	28.40	32.00

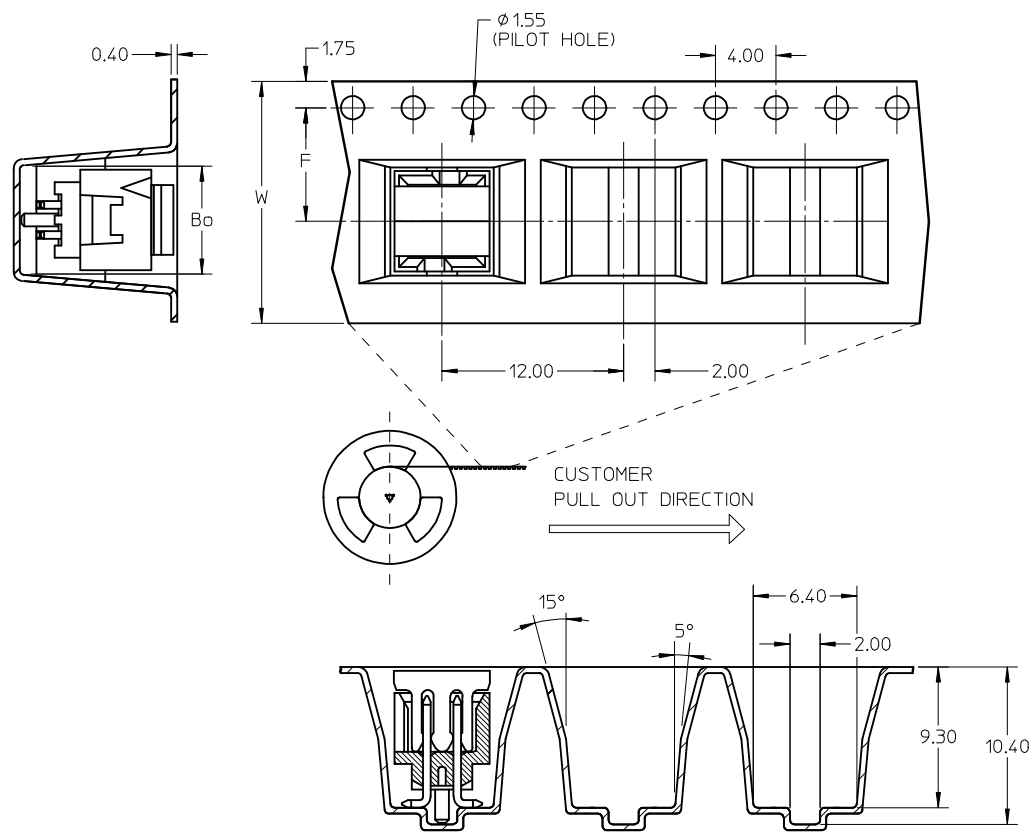


TUBE P/N: 89990-3005

TUBE P/N: 89990-0007

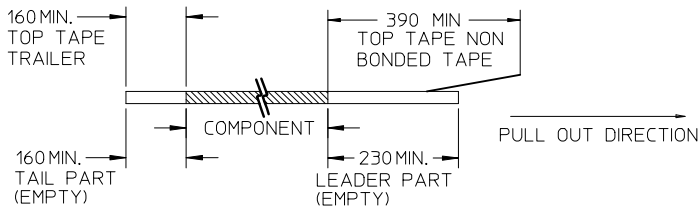


EMBOSSED CARRIER TAPE 'A'

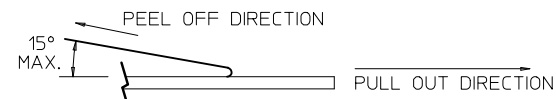


NOTES:

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.

ADD IN NOTES NO.12	EC NO: S2009-0943	2009/07/01	QUALITY SYMBOLS
	DRWN:YMC HONG	2009/07/08	
	CHKD:SKANG	2009/07/16	
	APPR:MLONG	2009/07/16	
A5	REV	DESCRIPTION	<p>▽=0</p> <p>⊕=0</p>

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	
DRAWN BY	DATE
ATSEE	2003/10/15
CHECKED BY	DATE
KCL ING	2003/11/07
APPROVED BY	DATE
SKTOH	2003/11/07
MATERIAL NO.	
SEE TABLE	
SIZE	A3

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	⊕ □
TITLE		
MGRID, SHROUDED HEADER W/PEGS/CAP/LOCK FEATURE SMT, IN TUBE AND T&R		
MOLEX INCORPORATED		
DOCUMENT NO.	SHEET NO.	
SD-87832-010	2 OF 2	
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9 8 7 6 5 4 3 2 1