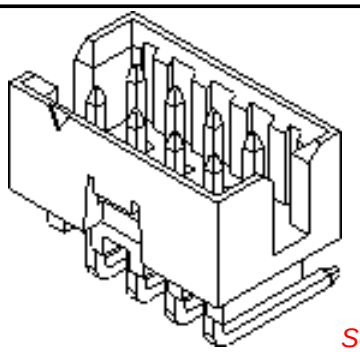
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This document was generated on 05/26/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: 0878331232
Status: Active
Overview: milligrid
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Right Angle, Shrouded, Lead-free, 12 Circuits, 0.76µm (30µ") Gold (Au) Plating, without PCB Locator, with Locking Window, without Center Polarization Slot, Tube



Series image - Reference only

Documents:

- 3D Model
- Drawing (PDF)
- Product Specification PS-87831-027 (PDF)
- RoHS Certificate of Compliance (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	milligrid
Product Name	Milli-Grid™

Physical

Breakaway	No
Circuits (Loaded)	12
Circuits (maximum)	12
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	Yes
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)	0.085 In
PC Tail Length (mm)	2.16 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)	30
Plating min: Mating (µm)	0.76
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

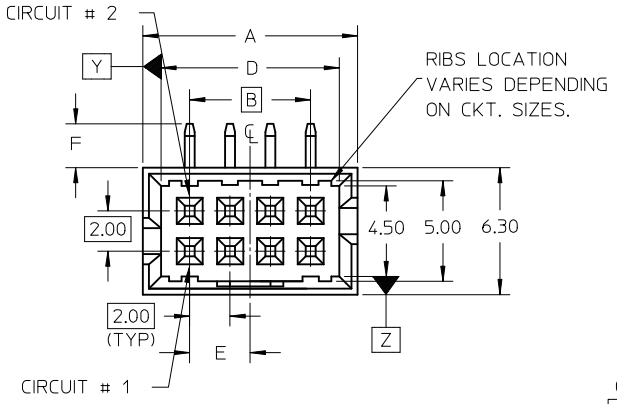
Solder Process Data

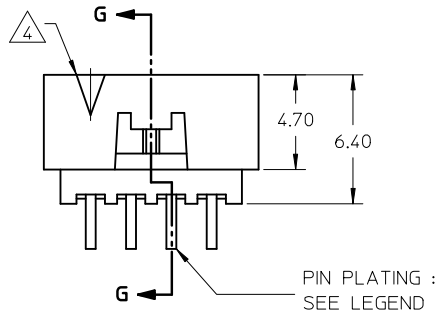
Duration at Max. Process Temperature (seconds)	11
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	265

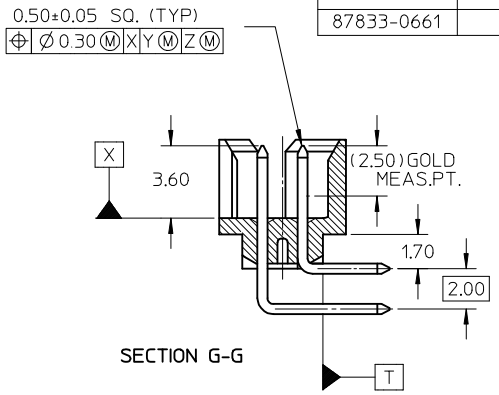
Material Info

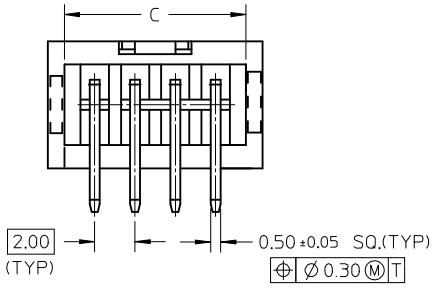
Reference - Drawing Numbers

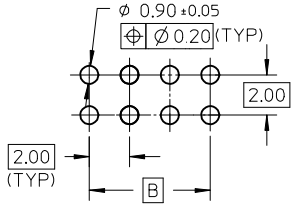
Product Specification	PS-87831-027
Sales Drawing	SD-87833-011











RECOMMENDED PCB PATTERN

ASSEMBLY P/N PACKED IN TUBE (W/O KAPTON)	ASSEMBLY P/N PACKED IN TUBE (WITH KAPTON)	ASSEMBLY P/N PACKED IN T&R (WITH KAPTON)	CKT SIZE	VOID PIN LOCATION	DIMENSION						PLATING OPTION
					A	B	C	D	E	F	
87833-0431	87833-0441	87833-0451	4	-	6.65	2.00	5.00	4.85	1.00	2.16	1
87833-0631	87833-0641	87833-0651	6	-	8.65	4.00	7.00	6.85	2.00	2.16	1
87833-0831	87833-0841	87833-0851	8	-	10.65	6.00	9.00	8.85	3.00	2.16	1
87833-1031	-	-	10	-	12.65	8.00	11.00	10.85	4.00	2.16	1
87833-1231	-	-	12	-	14.65	10.00	13.00	12.85	5.00	2.16	1
87833-5230	-	-		1							
87833-0432	-	-	4	-	6.65	2.00	5.00	4.85	1.00	2.16	2
87833-0632	-	-	6	-	8.65	4.00	7.00	6.85	2.00	2.16	2
87833-0832	-	-	8	-	10.65	6.00	9.00	8.85	3.00	2.16	2
87833-1032	-	-	10	-	12.65	8.00	11.00	10.85	4.00	2.16	2
87833-1232	-	-	12	-	14.65	10.00	13.00	12.85	5.00	2.16	2
87833-5220	-	-	10	10	12.65	8.00	11.00	10.85	4.00	2.16	1
-	87833-1041	87833-1051	10	-	12.65	8.00	11.00	10.85	4.00	1.70	1
87833-0661	-	-	6	-	8.65	4.00	7.00	6.85	2.00	3.18	1

PLATING OPTIONS:

1 - 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.

2 - 0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.

NOTES:

1. FOR ILLUSTRATION PURPOSES, 8 CIRCUIT SIZE WAFER IS SHOWN.
2. MATERIAL :
   HOUSING : NYLON 46, GLASS FILLED, UL94V-0, COLOR BLACK.
   PIN : 0.50MM SQ.PHOSPHOR BRONZE.
   KAPTON TAPE : POLYMIDE 4mm X 30m X 0.055mm COLOR: AMBER
3. PRODUCT SPECIFICATION PS-87831-027 APPLIES.
4. CKT 4 & 6 HAS NO IDENTIFICATION TAG.
5. THIS HEADER MATES WITH MOLEX:
   a) CRIMP RECEPTACLE HOUSING, 51110 SERIES
      WITH CRIMP TERMINAL, 50394 SERIES.
   b) 2MM MILLIGRID DUAL ROW IDT, 87568 SERIES.
6. PARTS TO BE PACKED WITH MOISTURE BARRIER BAG.
7. NO CENTRE POLARIZATION SLOT FOR CKT SIZE 4 AND 6

ADD IN NOTE NO. 7
EC NO: S2009-0964 2009/07/01
DRWN:YMCHONG 2009/07/08
CH'KD:SKANG 2009/07/15
APPR:MLONG
DESCRIPTION
REV
A13

QUALITY SYMBOLS
▼=0
Ⓒ=0

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
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: ATSEE DATE: 2003/10/23
CHECKED BY: KCLING DATE: 2003/11/07
APPROVED BY: SKTOH DATE: 2003/11/07
MATERIAL NO.: SEE TABLE

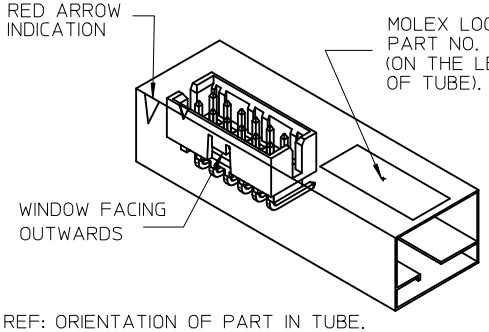
TITLE: MGRID, SHROUDED HEADER W/LOCKING FEATURE, R/A

MOLEX INCORPORATED

DOCUMENT NO.: SD-87833-011
SHEET NO.: 1 OF 2

SIZE A3

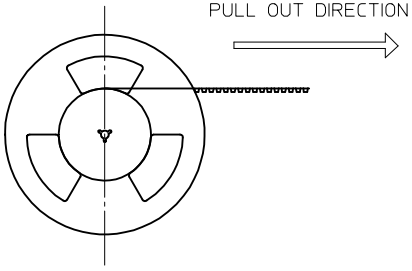
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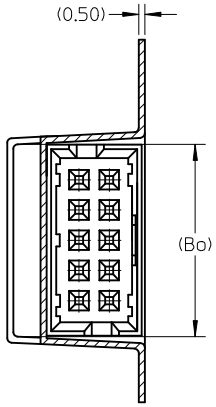


REF: ORIENTATION OF PART IN TUBE.

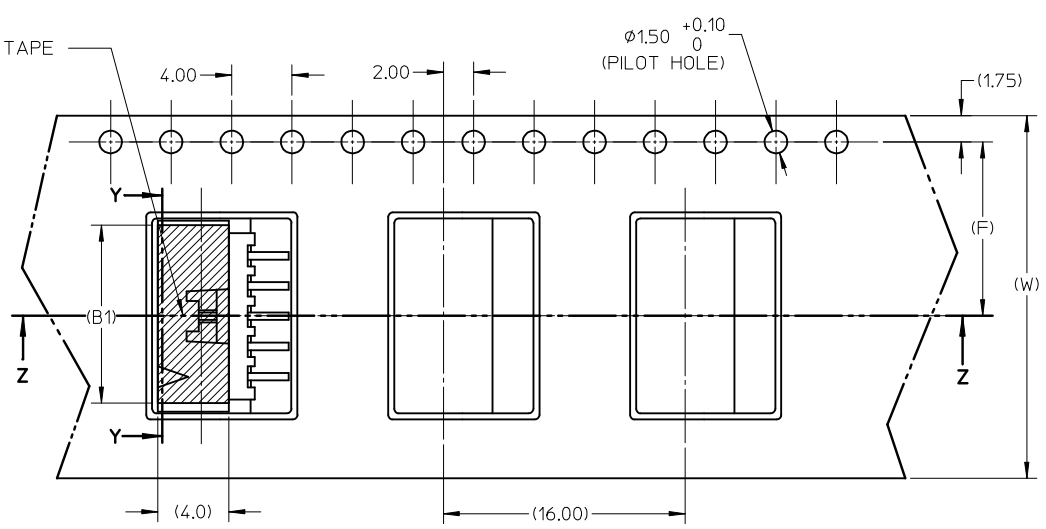
(FOR THE REFERENCE OF PART/TUBE ASSEMBLY.)

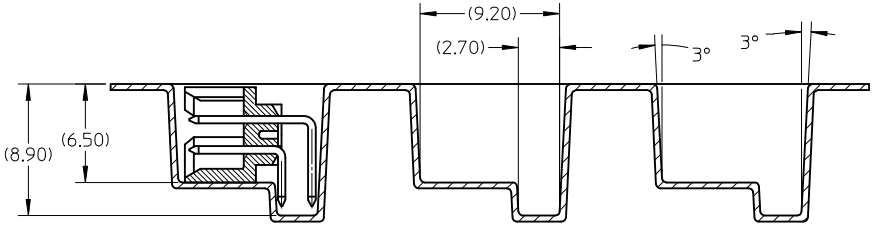
ASSEMBLY P/N PACKED IN T&R (WITH KAPTON)	CKT SIZE	(F)	(Bo)	(B1)	(W)
87833-0451	04	7.50	7.00	6.00	16.00
87833-0651	06	11.50	9.00		24.00
87833-0851	08	11.50	11.00	10.00	24.00
87833-1051	10	11.50	13.00	12.00	24.00





SECTION Y-Y

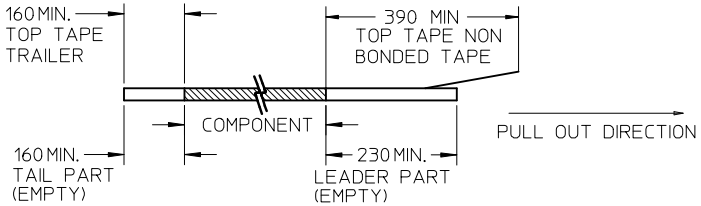




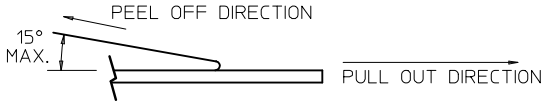
SECTION Z-Z

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.

4 KAPTON TAPE SHOULD BE LOCATED AS CENTRAL OF PART AS POSSIBLE AND MUST COVER THE WINDOWS.

5. TAPE & REEL QUANTITY : 500 PCS/REEL

ADD IN NOTE NO. 7 — EC NO: S2009-0964 — DRWN:YMCHONG 2009/07/01 — CH'KD:SKANG 2009/07/08 — APPR:MLONG 2009/07/15 — DESCRIPTION — REV A13

QUALITY SYMBOLS: ▼=0, Ⓒ=0

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 | SCALE: NTS | DESIGN UNITS: METRIC | THIRD ANGLE PROJECTION

DRAWN BY: ATSEE DATE: 2003/10/23
CHECKED BY: KCLING DATE: 2003/11/07
APPROVED BY: SKTOH DATE: 2003/11/07

TITLE: MGRID, SHROUDED HEADER W/LOCKING FEATURE, R/A

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE

DOCUMENT NO.: SD-87833-011

SHEET NO.: 2 OF 2

SIZE: A3

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