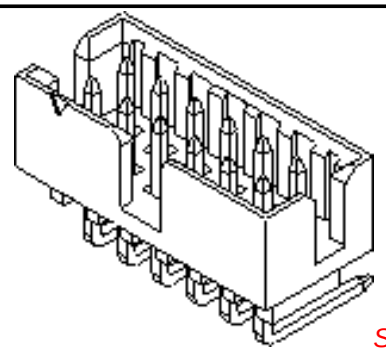
This document was generated on 06/08/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: 0878331020
Status: Active
Overview: milligrid
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Right Angle, Shrouded, Lead-free, 10 Circuits, 0.38µm (15µ") Gold (Au) Plating, without PCB Locator, without Locking Window, 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
MolexKits	Yes
Overview	milligrid
Product Name	Milli-Grid™

Physical

Breakaway	No
Circuits (Loaded)	10
Circuits (maximum)	10
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	None
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)	15
Plating min: Mating (µm)	0.38
Plating min: Termination (µin)	75

EU RoHS
ELV and RoHS Compliant
REACH SVHC
Contains SVHC: No
Halogen-Free Status
Not Halogen-Free

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

Plating min: Termination (µm)	1.88
Polarized to Mating Part	Center Slot
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

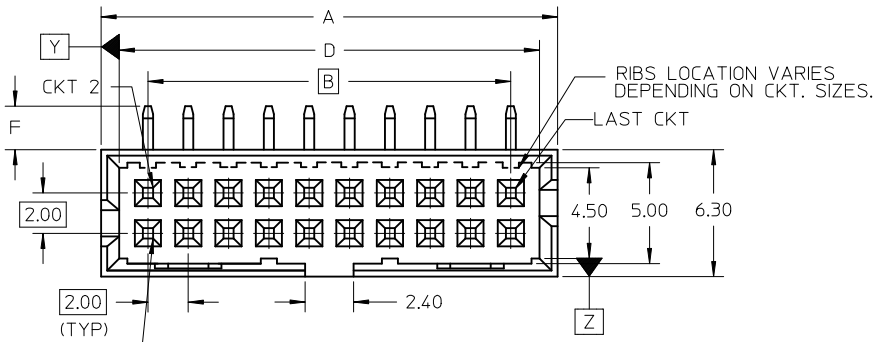
Solder Process Data

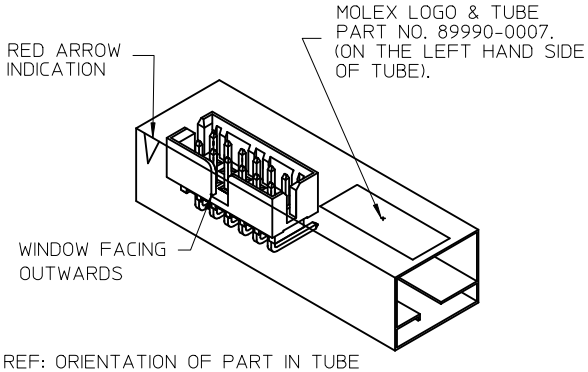
Duration at Max. Process Temperature (seconds)	11
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	265

Material Info

Reference - Drawing Numbers

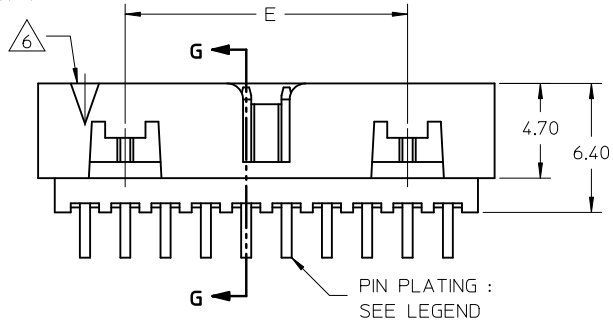
Product Specification	PS-87831-027
Sales Drawing	SD-87833-010

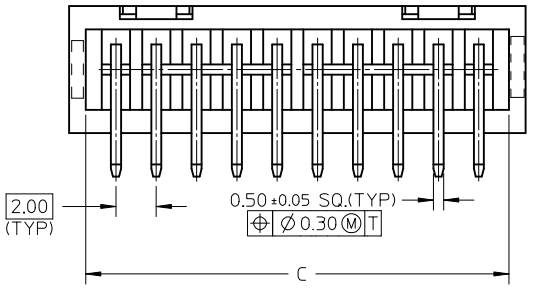


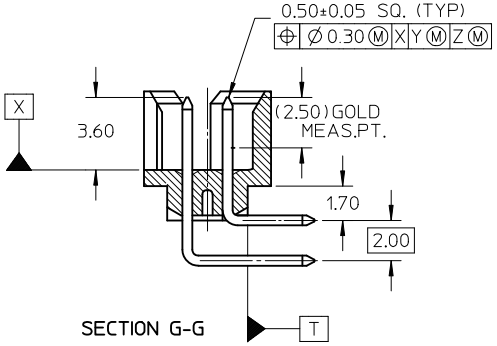


REF: ORIENTATION OF PART IN TUBE

(FOR THE REFERENCE OF PART/TUBE ASSEMBLY)

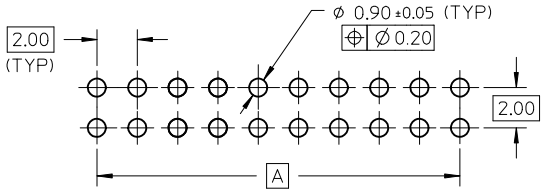






NOTES:

1. FOR ILLUSTRATION PURPOSES, 20 CIRCUIT SIZE WAFER IS SHOWN.
2. MATERIAL :
   HOUSING : NYLON 46, UL94V-0, COLOR BLACK.
   PIN : 0.50MM SQ.PHOSPHOR BRONZE.
3. PRODUCT SPECIFICATION PS-87831-027 APPLIES.
4. NO CENTRE POLARIZATION SLOT FOR CKT SIZE 4 AND 6.
5. NO SIDE LOCKING SLOT FROM 4 TO 12 CKT SIZE.
6. CKT 4 & 6 HAS NO IDENTIFICATION TAG.
7. THIS HEADER MATES WITH MOLEX:
   a) CRIMP RECEPTACLE HOUSING, 51110 SERIES
      WITH CRIMP TERMINAL, 50394 SERIES.
   b) 2MM MILLIGRID DUAL ROW IDT, 87568 SERIES.
8. PARTS TO BE PACKED IN TUBE WITH MOISTURE BARRIER BAG.
9. PLATING SPECIFICATION REFERRED TO SHEET 2.



RECOMMENDED PCB PATTERN

ADD P/N 87833-64/6520
EC NO: S2010-0510 2009/12/17
DRWN:SKANG 2010/01/04
CH'KD:ATSEE 2010/01/05
APPR:MLONG
DESCRIPTION
B3
REV

QUALITY SYMBOLS
FA=0
FC=0
FP=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: MLONG DATE: 2010/01/05

TITLE: MGRID, SHROUDED HEADER W/SLOT AND STANDOFF, R/A

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87833-010
SHEET NO.: 1 OF 2

SIZE: A3

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PLS REFER TO PART 87833-**3* FOR CENTER LOCKING SLOT OPTION.

PART NO.	CKT SIZE	VOID PIN LOCATION	DIMENSION A	B	C	D	E	F	9 PLATING OPTION
87833-04**	4	-	6.65	2.00	5.00	4.85	———		19,20 OR 21
87833-06**	6	-	8.65	4.00	7.00	6.85	———		
87833-08**	8	-	10.65	6.00	9.00	8.85	———		
87833-10**	10	-	12.65	8.00	11.00	10.85	———		
87833-12**	12	-	14.65	10.00	13.00	12.85	———		
87833-14**	14	-	16.65	12.00	15.00	14.85	8.00		18,19,20 OR 21
87833-16**	16	-	18.65	14.00	17.00	16.85	10.00		
87833-18**	18	-	20.65	16.00	19.00	18.85	12.00		19,20 OR 21
87833-20**	20	-	22.65	18.00	21.00	20.85	14.00		
87833-22**	22	-	24.65	20.00	23.00	22.85	16.00		
87833-24**	24	-	26.65	22.00	25.00	24.85	18.00		
87833-26**	26	-	28.65	24.00	27.00	26.85	20.00		
87833-28**	28	-	30.65	26.00	29.00	28.85	22.00		
87833-30**	30	-	32.65	28.00	31.00	30.85	24.00		
87833-32**	32	-	34.65	30.00	33.00	32.85	26.00		
87833-34**	34	-	36.65	32.00	35.00	34.85	28.00	2.16	
87833-36**	36	-	38.65	34.00	37.00	36.85	30.00		
87833-38**	38	-	40.65	36.00	39.00	38.85	32.00		
87833-40**	40	-	42.65	38.00	41.00	40.85	34.00		
87833-42**	42	-	44.65	40.00	43.00	42.85	36.00		
87833-44**	44	-	46.65	42.00	45.00	44.85	38.00		
87833-46**	46	-	48.65	44.00	47.00	46.85	40.00		
87833-48**	48	-	50.65	46.00	49.00	48.85	42.00		
87833-50**	50	-	52.65	48.00	51.00	50.85	44.00		
87833-7000	34	21	36.65	32.00	35.00	34.85	28.00		00
87833-5121	26	14	28.65	24.00	27.00	26.85	20.00		21
87833-5120	10	7	12.65	8.00	11.00	10.85	———		20
87833-5520	40	21	42.65	38.00	41.00	40.85	34.00		
87833-5620	20	14	22.65	18.00	21.00	20.85	14.00		
87833-5720	24	13	26.65	22.00	25.00	24.85	18.00		
87833-5820	14	1	16.65	12.00	15.00	14.85	8.00		
87833-63**	8	-	10.65	6.00	9.00	8.85	———		20 OR 21
87833-53**	14	-	16.65	12.00	15.00	14.85	8.00		
87833-5420	34	-	36.65	32.00	35.00	34.85	28.00		20
87833-5920	4	-	6.65	2.00	5.00	4.85	———		
87833-6020	12	-	14.65	10.00	13.00	12.85	———	3.18	
87833-6120	16	-	18.65	14.00	17.00	16.85	10.00		
87833-6220	18	-	20.65	16.00	19.00	18.85	12.00		
87833-6420	6	-	8.65	4.00	7.00	6.85	-		
87833-6520	20	-	22.65	18.00	21.00	20.85	14.00		

PART NUMBER LEGEND :
87833 - * * * *

9 PLATING OPTIONS:

18 - 0.38um/15uin PdNi WITH GOLD FLASH IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.

19 - 0.05 - 0.13um/2 - 5uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.

00/ 20 - 0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.

21 - 0.76um/30uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.

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DRWN:SKANG CH'KD:ATSEE APPR:MLONG 2010/01/05
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ANGULAR ± 3 °

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DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

		DATE
DRAWN BY	ATSEE	2003/10/23
CHECKED BY	KCLING	2003/11/07
APPROVED BY	MLONG	2010/01/05

TITLE: MGRID, SHROUDED HEADER W/SLOT AND STANDOFF, R/A

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87833-010
SHEET NO.: 2 OF 2
SIZE: A3

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