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Part Number: [0878335321](#)
Status: **Active**
Overview: [milligrid](#)
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Right Angle, Shrouded, Lead-free, 14 Circuits, 0.76µm (30µ") Gold (Au) Plating, without PCB Locator, with Locking Windows, Center Polarization Slot, Tube

Documents:
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

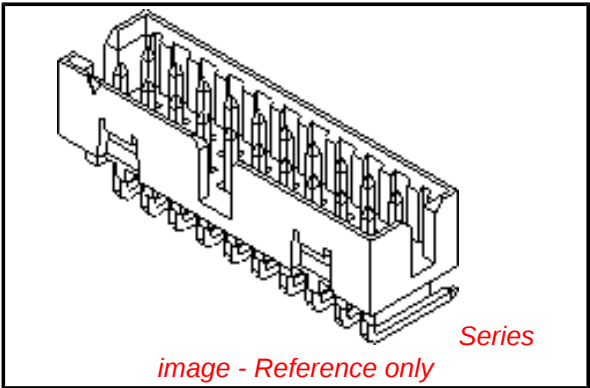
CSA LR19980
UL E29179

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) 14
Circuits (maximum) 14
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) 0.125 In
PC Tail Length (mm) 3.18 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
Polarized to Mating Part Side Slots (2)



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](#)

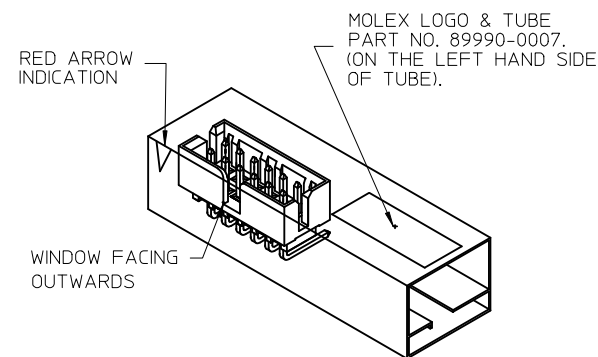
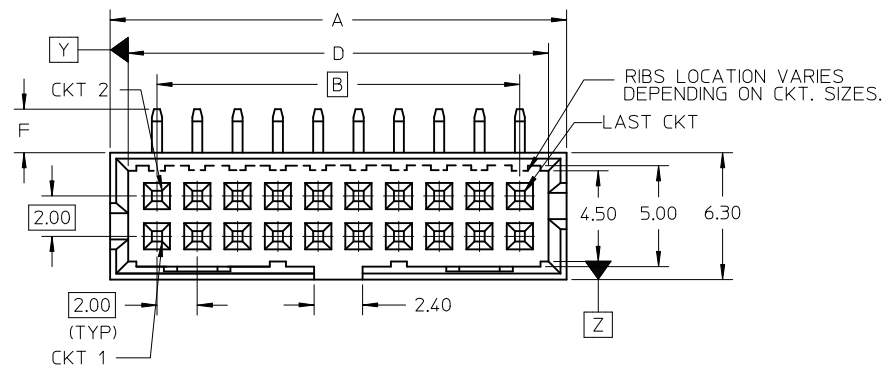
Mates With
[50394](#) Wire-to-Board Terminals, [51110](#) Wire-to-Board Crimp Housing, [87568](#) Wire-to-Board IDT Housings, [79107](#) Board-to-Board Top Entry Through Hole Receptacle, [79108](#) Board-to-Board FFC/FPC Top Entry Through Hole Receptacle, [79109](#) Board

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	
Sales Drawing	SD-87833-010

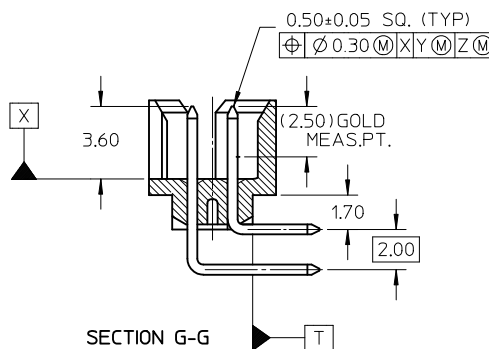
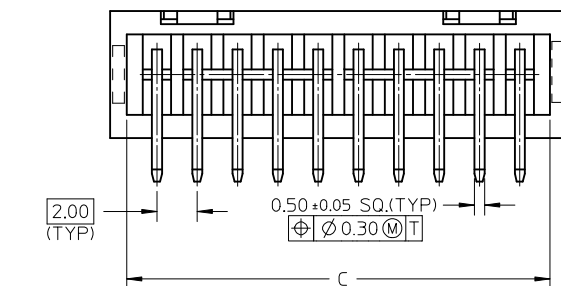
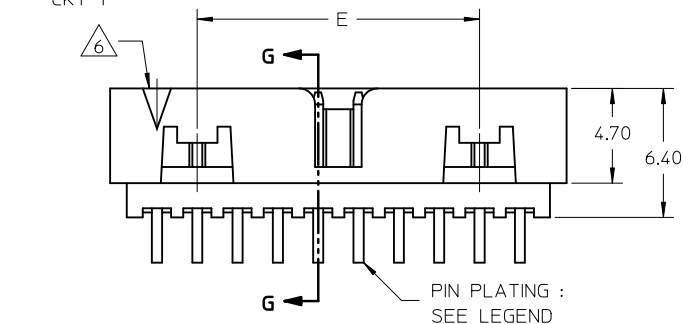
This document was generated on 06/01/2010

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10 9 8 7 6 5 4 3 2 1

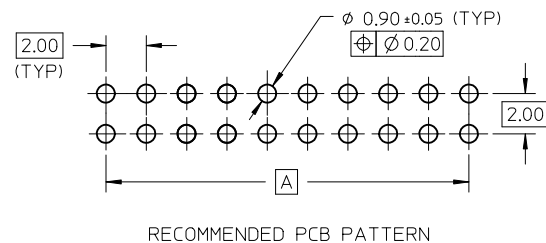


REF: ORIENTATION OF PART IN TUBE
(FOR THE REFERENCE OF PART/TUBE ASSEMBLY)



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.



ADD P/N 87833-6321 EC NO: S2010-0388 DRWN:SKANG CHKD:ATSEE APPR:MLONG	DESCRIPTION 2009/11/02 2009/12/03 2009/12/04	QUALITY SYMBOLS F=0 F=0 F=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
			4 PLACES 3 PLACES 2 PLACES 1 PLACE	mm	INCH	DRAWN BY ATSEE	DATE 2003/10/23	TITLE MGRID, SHROUDED HEADER W/SLOT AND STANDOFF, R/A				
						CHECKED BY KCLING	DATE 2003/11/07					
						APPROVED BY MLONG	DATE 2009/12/03					
				ANGULAR ± 3 °		MATERIAL NO.		DOCUMENT NO.		MOLEX INCORPORATED		SHEET NO.
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3		SEE TABLE		SD-87833-010		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											
F	PART NUMBER LEGEND : 87833 - * * * * *										PART NO.		CKT SIZE	VOID PIN LOCATION	DIMENSION						PLATING OPTION								
											A		B	C	D	E	F	9 PLATING OPTION											
											87833-04**		4	-	6.65	2.00	5.00	4.85	-----	2.16	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										
											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										
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																					
E	PART NUMBER LEGEND : 87833 - * * * * *										87833-24**		24	-	26.65	22.00	25.00	24.85	18.00	2.16	19,20 OR 21								
											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										
											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										
D	PART NUMBER LEGEND : 87833 - * * * * *										87833-44**		44	-	46.65	42.00	45.00	44.85	38.00	2.16	19,20 OR 21								
											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										
											87833-5121		26	14	28.65	24.00	27.00	26.85	20.00										
											87833-5120		10	7	12.65	8.00	11.00	10.85	-----										
											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										
C	PART NUMBER LEGEND : 87833 - * * * * *										87833-5820		14	1	16.65	12.00	15.00	14.85	8.00	2.16	19,20 OR 21								
											87833-6321		8	-	10.65	6.00	9.00	8.85	-----										
											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										
											87833-5920		4	-	6.65	2.00	5.00	4.85	-----										
											87833-6020		12	-	14.65	10.00	13.00	12.85	-----										
											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										
											87833-5120		10	7	12.65	8.00	11.00	10.85	-----										
											87833-5520		40	21	42.65	38.00	41.00	40.85	34.00										
B	PART NUMBER LEGEND : 87833 - * * * * *										87833-5620		20	14	22.65	18.00	21.00	20.85	14.00	2.16	19,20 OR 21								
											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										
											87833-6321		8	-	10.65	6.00	9.00	8.85	-----										
											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										
											87833-5920		4	-	6.65	2.00	5.00	4.85	-----										
											87833-6020		12	-	14.65	10.00	13.00	12.85	-----										
											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										
A	PART NUMBER LEGEND : 87833 - * * * * *										87833-5120		10	7	12.65	8.00	11.00	10.85	-----	2.16	19,20 OR 21								
											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										
											87833-6321		8	-	10.65	6.00	9.00	8.85	-----										
											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										
											87833-5920		4	-	6.65	2.00	5.00	4.85	-----										
											87833-6020		12	-	14.65	10.00	13.00	12.85	-----										
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																					
ADD P/N 87833-6321 EC NO: S2010-0388 DRWN:SKANG CHKD:ATSEE APPR:MLONG												QUALITY SYMBOLS F=0 F=0 F=0		GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 °		DIMENSION STYLE MM ONLY DRAWN BY DATE ATSEE 2003/10/23 CHECKED BY DATE KCLING 2003/11/07 APPROVED BY DATE MLONG 2009/12/03		SCALE NTS		DESIGN UNITS METRIC		THIRD ANGLE PROJECTION		MGRID, SHROUDED HEADER W/SLOT AND STANDOFF, R/A					
B2												DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		molex MOLEX INCORPORATED		SD-87833-010		SHEET NO. 2 OF 2							
tb_frame_A3_P_AM_T Rev. F 2009/06/18												9		8		7		6		5		4		3		2		1	