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Jameco Part Number 884900



PRODUCT SPECIFICATION

1.0 SCOPE

This specification covers the performance requirements for Milli-Grid 2mm Dual Row Shrouded Headers.

2.0 PRODUCT DESCRIPTION

2.1 Product covered by this specification are for series number

Product Name	Part Number
MGrid Headers (Vertical)	87831 Series
MGrid Headers (SMT)	87832 Series
MGrid Headers (R/A)	87833 Series

These series mate with Molex :

1. Milli-Grid 2mm Grid Wire to Board Connector, Crimp Receptacle Housing, 51110 series and Crimp Terminal, 50394 series.
2. 2mm Milli-Grid Dual Row IDT, 87568 series.

2.2 For dimensions, materials & plating, refer to the appropriate product drawings.

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

The following documents are part of this specification to the extent specified herewith. In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and reference documents, this specification shall take the precedence.

MIL-STD-202 Test Methods for Electrical and Electronic Component Parts.

MIL-STD-1344 Test Methods of Electrical Connector

Reference Product Specifications

PS-51110-001 Milli-Grid 2mm Grid Wire to Board Connector

PS-87568-004 2mm Milli-Grid Dual Row IDT Receptacle

REVISION:	ECR/ECN INFORMATION:	TITLE:	SHEET No.
2	EC No: S2005-0213 DATE: 2004/09/02	MILLIGRID 2MM DUAL ROW SHROUDED HEADERS	1 of 3
DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
PS-87831-027	AI TING 2004/09/21	KC LING 2004/09/21	SK TOH 2004/09/21



PRODUCT SPECIFICATION

4.0 RATINGS

- 4.1 Voltage : 125
- 4.2 Current : 2.00 Amp MAXIMUM
- 4.3 Operating Temperature : -55°C to +105°C

5.0 PERFORMANCE

5.1 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Insulation Resistance	Apply 500 VDC for 1 minute per MIL-STD-1344A, METHOD 3003.1	1000 Megaohms minimum
2	Dielectric Strength	1000 Vrms for 1 minute between adjacent terminals.	No breakdown

5.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
3	Pin/ Terminal Retention Force (in Housing)	Apply an axial load on the terminal in the housing to dislodge the terminals from the connector at a rate of 0.50 inch per minute	Retention Force : 850 g Min per pin. (Before heat soldering)

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TEMPLATE FILENAME: PRODUCT_SPEC[SIZE_A4](V.1).DOC			



PRODUCT SPECIFICATION

5.3 ENVIROMENT REQUIREMENTS

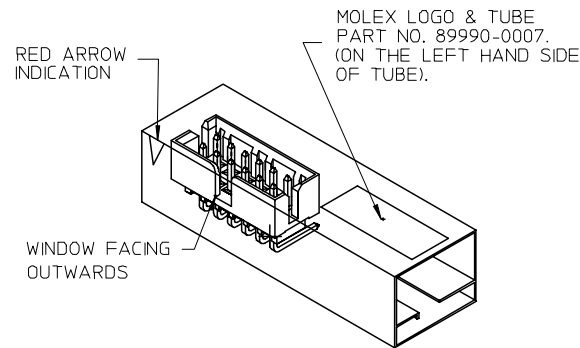
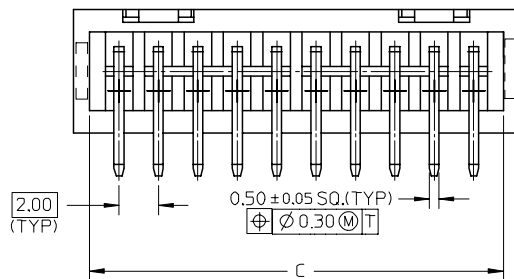
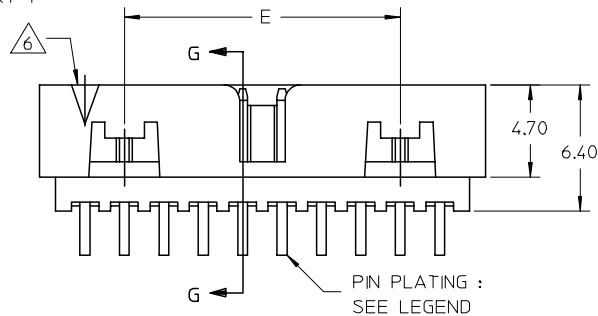
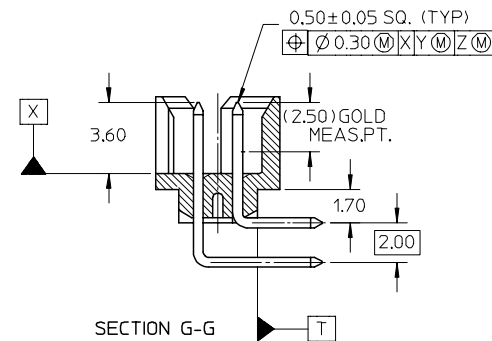
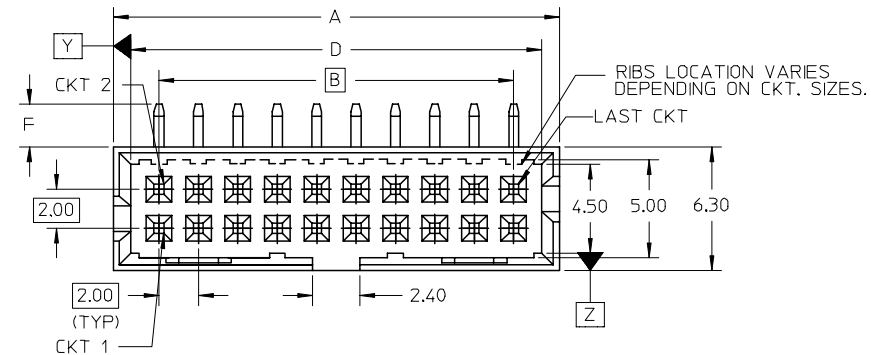
4.	Solderability	Solder Time: 5 +/-0.5 secs . Solder Temperature : 260+/- 5°C	95% of the immersed area must show no voids ,pin holes.
5.	Resistance to Soldering Heat (Through Hole)	Solder tail to be dipped in flux as per MIL-STD-202F method 210 condition B.	No damage in appearance of the connector
6.	Resistance to Infra-Red Heat (SMT)	Subject connector to the IR Reflow temp. of 260 +/-5 C for 12 +/-2 sec.	No damage in appearance of the connector

6.0 Packaging

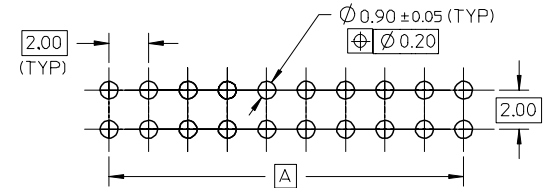
Product shall be packed in either Tube or Tape & Reel and protected against damage during handling, transportation and storage.

REVISION:	ECR/ECN INFORMATION:	TITLE:	SHEET No.
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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)



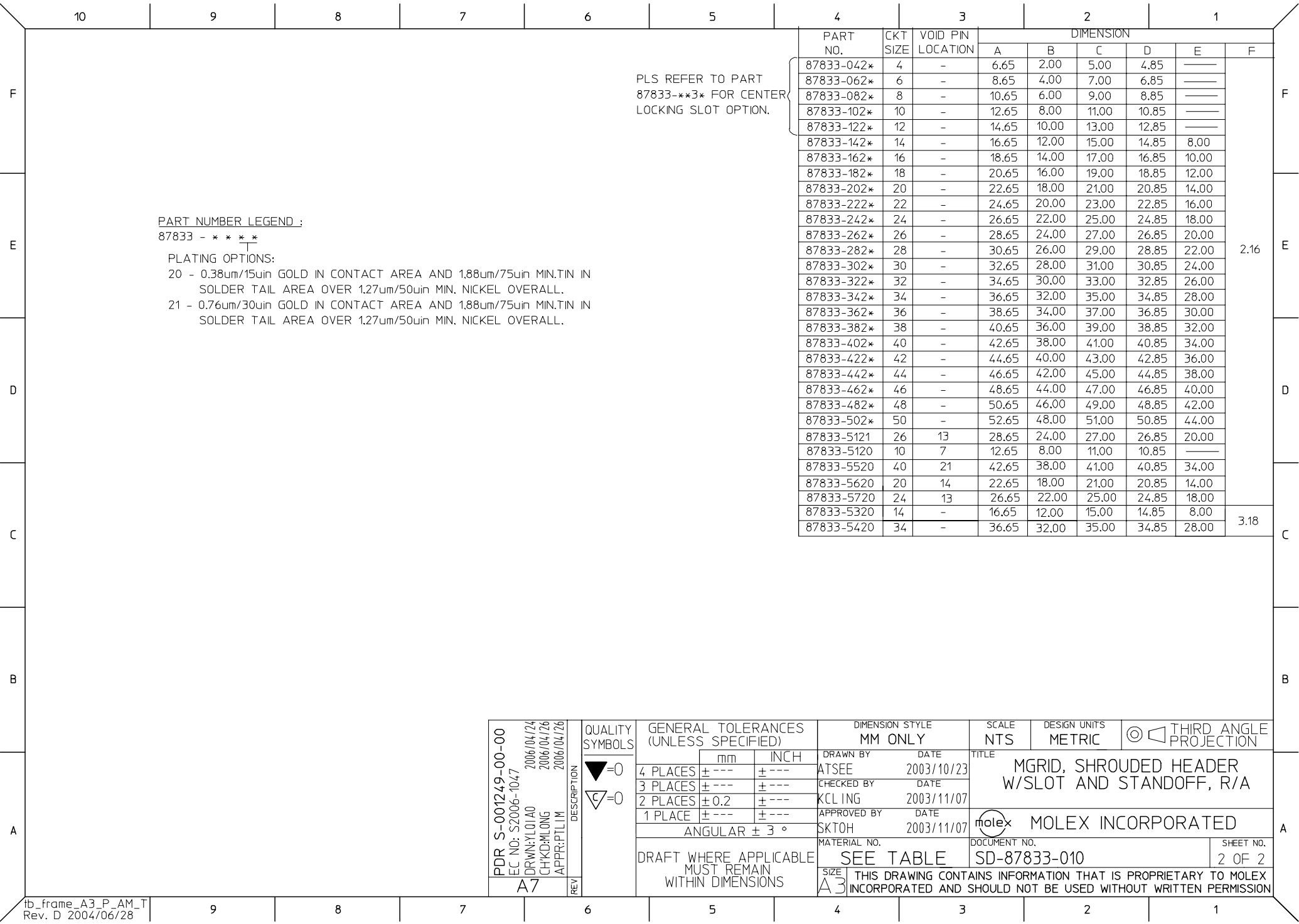
RECOMMENDED PCB PATTERN

NOTES:

- FOR ILLUSTRATION PURPOSES, 20 CIRCUIT SIZE WAFER IS SHOWN.
- MATERIAL :
HOUSING : NYLON 46, UL94V-0, COLOR BLACK.
PIN : 0.50MM SQ.PHOSPHOR BRONZE.
- PRODUCT SPECIFICATION PS-87831-027 APPLIES.
- NO CENTRE POLARIZATION SLOT FOR CKT SIZE 4 AND 6.
- NO SIDE LOCKING SLOT FROM 4 TO 12 CKT SIZE.
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.

PDR S-001249-00-00 EC NO: S2006-1047 DRWN: YUI/AO CHKD: M/LONG APPR: PTLIM A7	2006/04/24 2006/04/26 2006/04/26	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽C=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	mm	INCH	DRAWN BY ATSEE	DATE 2003/10/23	TITLE MGRID, SHROUDED HEADER W/SLOT AND STANDOFF, R/A				
					4 PLACES	± ---	± ---	CHECKED BY KCL ING					DATE 2003/11/07
					3 PLACES	± ---	± ---	APPROVED BY SKTOH					DATE 2003/11/07
					2 PLACES	± 0.2	± ---	MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-87833-010		SHEET NO. 1 OF 2	
					1 PLACE	± ---	± ---	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
				ANGULAR ± 3 °									

9 8 7 6 5 4 3 2 1



PART NUMBER LEGEND :

87833 - * * * * *

PLATING OPTIONS:

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.

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
87833-042*	4	-	6.65	2.00	5.00	4.85	-----	
87833-062*	6	-	8.65	4.00	7.00	6.85	-----	
87833-082*	8	-	10.65	6.00	9.00	8.85	-----	
87833-102*	10	-	12.65	8.00	11.00	10.85	-----	
87833-122*	12	-	14.65	10.00	13.00	12.85	-----	
87833-142*	14	-	16.65	12.00	15.00	14.85	8.00	
87833-162*	16	-	18.65	14.00	17.00	16.85	10.00	
87833-182*	18	-	20.65	16.00	19.00	18.85	12.00	
87833-202*	20	-	22.65	18.00	21.00	20.85	14.00	
87833-222*	22	-	24.65	20.00	23.00	22.85	16.00	
87833-242*	24	-	26.65	22.00	25.00	24.85	18.00	
87833-262*	26	-	28.65	24.00	27.00	26.85	20.00	
87833-282*	28	-	30.65	26.00	29.00	28.85	22.00	2.16
87833-302*	30	-	32.65	28.00	31.00	30.85	24.00	
87833-322*	32	-	34.65	30.00	33.00	32.85	26.00	
87833-342*	34	-	36.65	32.00	35.00	34.85	28.00	
87833-362*	36	-	38.65	34.00	37.00	36.85	30.00	
87833-382*	38	-	40.65	36.00	39.00	38.85	32.00	
87833-402*	40	-	42.65	38.00	41.00	40.85	34.00	
87833-422*	42	-	44.65	40.00	43.00	42.85	36.00	
87833-442*	44	-	46.65	42.00	45.00	44.85	38.00	
87833-462*	46	-	48.65	44.00	47.00	46.85	40.00	
87833-482*	48	-	50.65	46.00	49.00	48.85	42.00	
87833-502*	50	-	52.65	48.00	51.00	50.85	44.00	
87833-5121	26	13	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	
87833-5320	14	-	16.65	12.00	15.00	14.85	8.00	3.18
87833-5420	34	-	36.65	32.00	35.00	34.85	28.00	

PDR S-001249-00-00			QUALITY SYMBOLS ▽=0 ▽C=0	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
EC NO: S2006-1047					mm INCH		DRAWN BY DATE		TITLE				
2006/04/24					4 PLACES ± --- ± ---		ATSEE 2003/10/23		MGRID, SHROUDED HEADER W/SLOT AND STANDOFF, R/A				
DRWN:YLO/IAO					3 PLACES ± --- ± ---		CHECKED BY DATE						
2006/04/26					2 PLACES ± 0.2 ± ---		KCL ING 2003/11/07						
CHKD:M/LONG					1 PLACE ± --- ± ---		APPROVED BY DATE		MOLEX MOLEX INCORPORATED				
2006/04/26					ANGULAR ± 3 °		SKTOH 2003/11/07						
APPR:PTLIM			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-87833-010		SHEET NO. 2 OF 2				
A7			REV		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						