

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0791091207](#)
Status: **Active**
Description: 2.00mm (.079") Pitch Milli-Grid™ Receptacle, Surface Mount, Vertical, Top/Bottom Entry, with Press-fit Plastic Pegs, without Cap, Tube, 0.38µm (15µ") Gold (Au) Selective, 16 Circuits, Leadfree

Documents:
[3D Model](#)
[Drawing \(PDF\)](#)

[Product Specification PS-79107 \(PDF\)](#)
[RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
UL E29179

General

Product Family PCB Receptacles
Series [79109](#)
Application Board-to-Board
Product Name Milli-Grid™

Physical

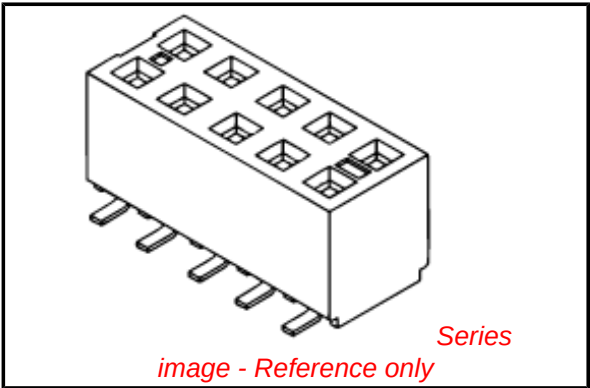
Circuits (Loaded) 16
Color - Resin Black
Durability (mating cycles max) 50
Flammability 94V-0
Glow-Wire Compliant No
Lock to Mating Part None
Material - Metal Phosphor Bronze
Material - Plating Mating Gold
Material - Plating Termination Tin
Material - Resin High Temperature Thermoplastic
Number of Rows 2
Orientation Vertical
PCB Locator Yes
PCB Retention Yes
Packaging Type Tube
Pitch - Mating Interface (in) 0.079 In
Pitch - Mating Interface (mm) 2.00 mm
Plating min: Mating (µin) 15
Plating min: Mating (µm) 0.375
Plating min: Termination (µin) 75
Plating min: Termination (µm) 1.875
Polarized to Mating Part No
Polarized to PCB No
Surface Mount Compatible (SMC) N/A
Temperature Range - Operating -55°C to +105°C
Termination Interface: Style Surface Mount

Electrical

Current - Maximum per Contact 1A
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



EU RoHS

**ELV and RoHS
Compliant**
REACH SVHC
Not Reviewed
**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
[79109Series](#)

Mates With
[87833](#) , [87832](#) , [87831](#) , [87758](#) , [87759](#) ,
[87760](#)

Material Info

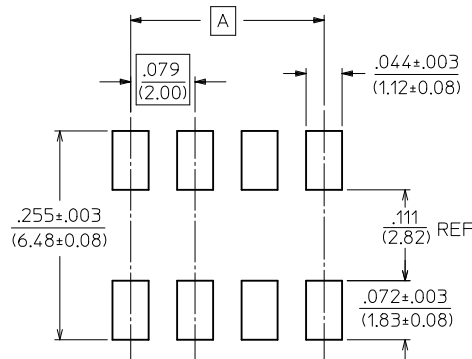
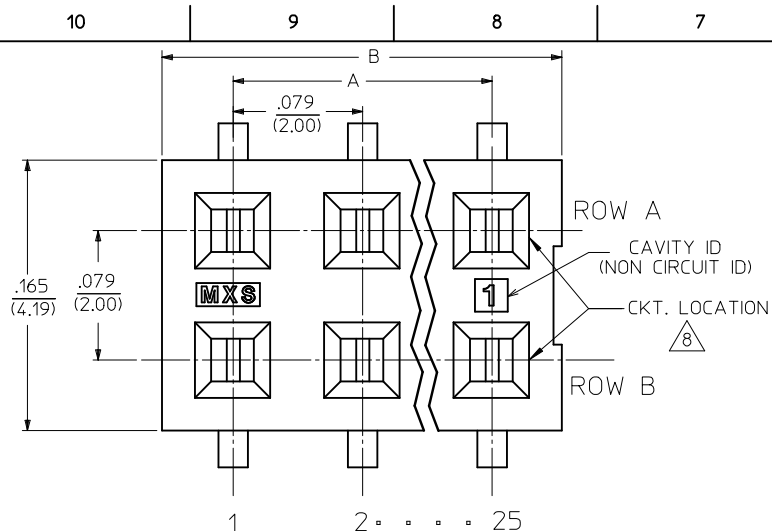
Reference - Drawing Numbers

Product Specification
Sales Drawing

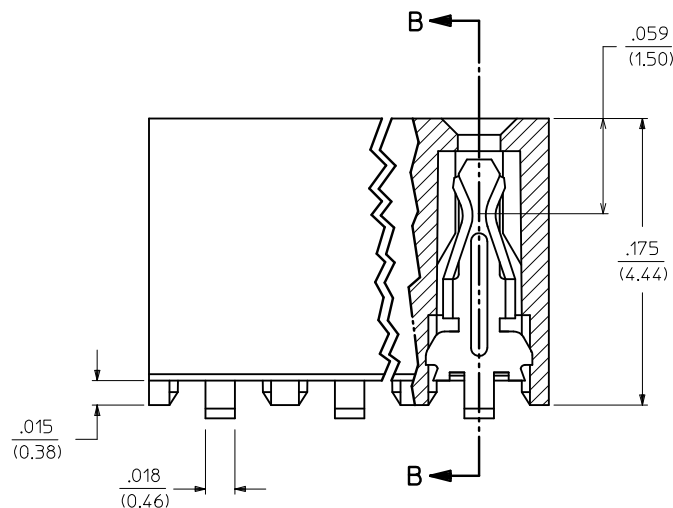
PS-79107
SDA-79109-****

This document was generated on 03/17/2010

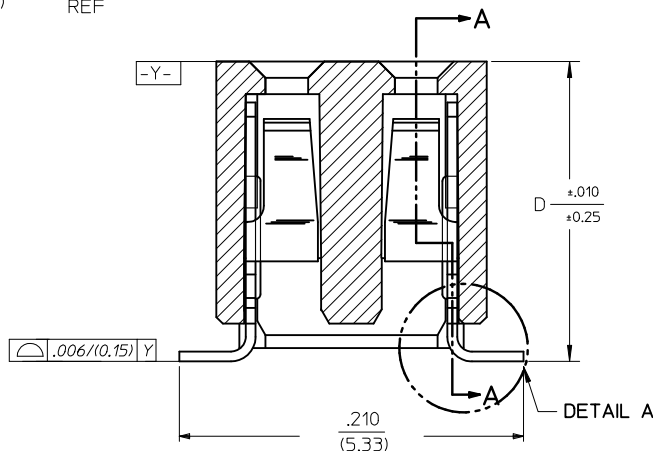
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION



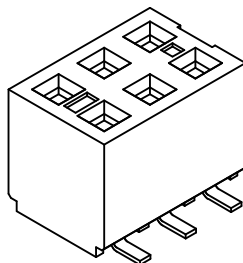
RECOMMENDED PCB PAD LAYOUT



SECTION A-A



SECTION B-B

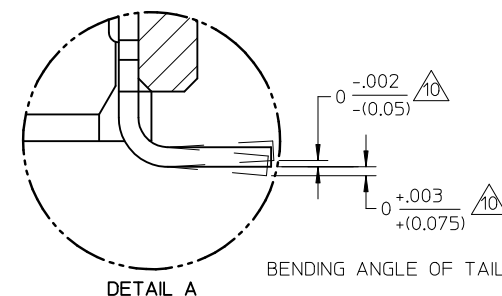


NOTES:

1. HOUSING MATERIAL:
LCP, GLASS FILLED, UL 94V-0
COLOUR BLACK.
2. TERMINAL MATERIAL:
PHOSPHOR BRONZE
3. SEE APPROPRIATE SHEET FOR CIRCUIT SIZE,
PART NUMBERS AND OVERALL DIMENSIONS.
4. FOR ILLUSTRATION, 6 CKT ASSY SHOWN.
5. REFER TO PRODUCT SPEC PS-79107.
6. TUBE PACKAGING PER PK-70873-0217 OR
TAPE PACKAGING PER PK-70873-0259
7. SEE SHT 3 FOR PEG OPTION ASSEMBLIES.
8. CKT LOCATIONS ARE NUMBERED FROM LEFT TO
RIGHT WHEN VIEWING ASSY FROM TOP WITH
THE GATE RECESS ON THE RIGHT AS SHOWN.
9. SEE SHT 5 & 6 FOR VOIDED CIRCUIT PART NUMBERS.
10. MEASUREMENT IS TAKEN BETWEEN THE TANGENT OF
THE TOE TO TIP OF THE TERMINAL.

PLATING OPTION:

4. 30u" (0.75um) MIN. GOLD PLATE IN SELECTED AREA AND
75u" (1.88um) MIN. TIN PLATE IN SELECTED AREA OVER
50u" (1.25um) MIN. NICKEL OVERALL.
5. 15u" (0.38um) MIN. GOLD PLATE IN SELECTED AREA AND
75u" (1.88um) MIN. TIN PLATE IN SELECTED AREA OVER
50u" (1.25um) MIN. NICKEL OVERALL.
6. 5u" (0.13um) MIN. GOLD PLATE IN SELECTED AREA AND
75u" (1.88um) MIN. TIN PLATE IN SELECTED AREA OVER
50u" (1.25um) MIN. NICKEL OVERALL.



DETAIL A

BENDING ANGLE OF TAIL

REVISED		QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION	
EC NO: S2010-0566		F _A =0		mm		IN/MM		NTS		INCH		PROJECTION	
2010/01/05		F _B =0		3 PLACES ± ---		DRAWN BY		DATE		TITLE		2MM DUAL ROW	
2010/02/03		F _P =0		2 PLACES ± 0.25		CHECKED BY		DATE		1989/05/15		VERTICAL RECEPTACLE, SMT	
2010/02/19		F _P =0		1 PLACE ± 0.38		APPROVED BY		DATE		1989/05/15		MOLEX INCORPORATED	
M6		ANGULAR ± 3 °		MATERIAL NO.		MLONG		2010/02/18		DOCUMENT NO.		SDA-79109-****	
REV		DRAFT WHERE APPLICABLE		SEE TABLE		SIZE		A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		SHEET NO.	
M6		MUST REMAIN WITHIN DIMENSIONS										1 OF 10	

ASSEMBLIES WITHOUT PEGS VOIDED CIRCUIT OPTION

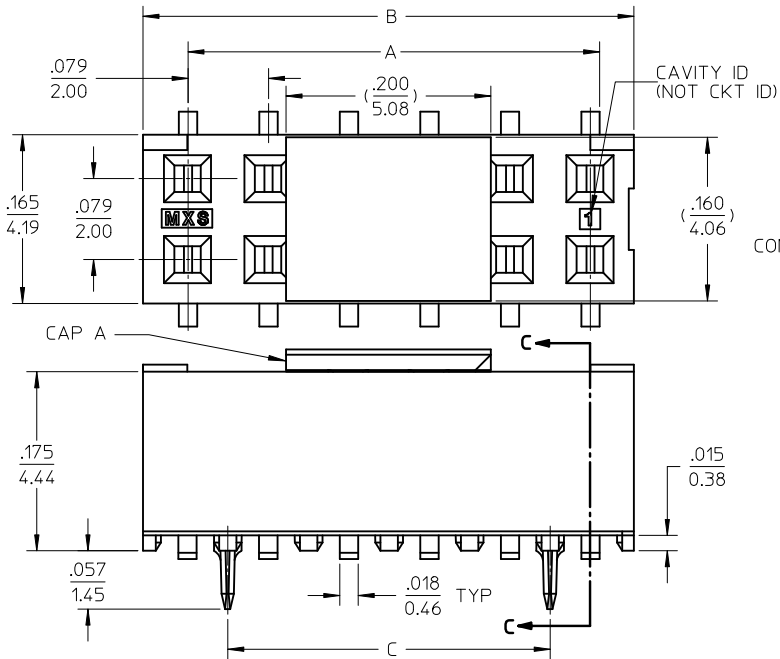
CKT. SIZE	ASSEMBLY (WITHOUT CAP IN TUBE)	VOID LOCATION(S) SEE SHEET 1 FOR CONVENTION		PLATING OPTION	DIM. "A"		DIM. "B"		DIM. "D"	
	PART NUMBER	ROW	CKT. NO.(s)		INCH	MM	INCH	MM	INCH	MM
22	79109-5011	A	2	4	.787	(20.00)	.874	(22.19)	.183	(4.65)
6	79109-5012	A	2	5	.157	(4.00)	.244	(6.19)	.183	(4.65)

CKT SIZE	ASSEMBLY (WITH CAP A IN T&R)	VOID LOCATION(S) SEE SHEET 1 FOR CONVENTION		PLATING OPTION	DIM A		DIM B		DIM D	
	PART NUMBER	ROW	CKT NO.		INCH	MM	INCH	MM	INCH	MM
50	79109-8924	A	13, 23	5	1.890	(48.00)	1.976	(50.19)	.183	(4.65)
		B	23							

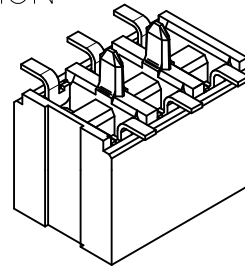
- NOTES:
- TERMINALS WILL BE PRESENT IN VOIDED LOCATIONS. HOWEVER, PIN WINDOWS WILL BE CLOSED.
 - VOIDS CAN ONLY BE PRESENT IN ONE ROW OF A CONNECTOR.

REVISED EC NO: S2010-0566 2010/01/05 DRWN:SKANG 2010/02/03 CHKD:ATSEE 2010/02/19 APPR:MLONG REV M6	DESCRIPTION QUALITY SYMBOLS F_A=0 F_G=0 F_P=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE NTS	DESIGN UNITS INCH	THIRD ANGLE PROJECTION			
			mm	INCH	DRAWN BY AAB	DATE 1989/05/15	TITLE 2MM DUAL ROW VERTICAL RECEPTACLE, SMT				
		4 PLACES	± ---	± ---	CHECKED BY MJM	DATE 1989/05/15					
		3 PLACES	± ---	± .010	APPROVED BY MLONG	DATE 2010/02/18					
		2 PLACES	± 0.25	± .015	MOLEX MOLEX INCORPORATED						
		1 PLACE	± 0.38	± ---							
		ANGULAR ± 3 °		MATERIAL NO. SEE TABLE							DOCUMENT NO. SDA-79109-****
		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				

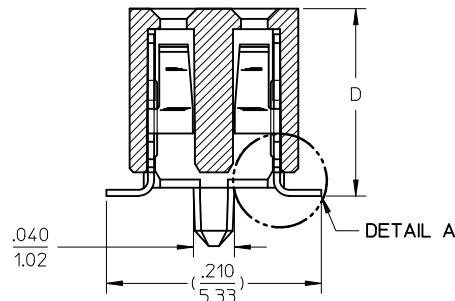
PEG OPTION



CONNECTOR WITH CAP



SECTION C-C



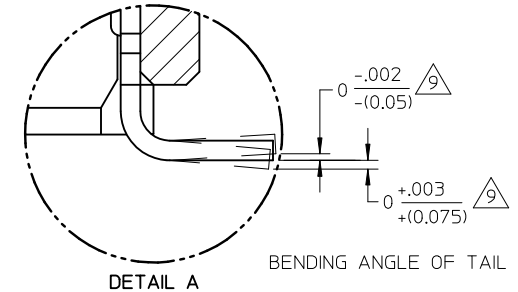
DETAIL A

PLATING OPTION:

- (4) 30uIn (.75um) MIN. GOLD PLATE IN SELECTED AREA AND 75uIn (1.88um) MIN. TIN IN SELECTED AREA OVER 50uIn (1.25um) MIN. NICKEL OVER-ALL.
- (5) 15uIn (.38um) MIN. GOLD PLATE IN SELECTED AREA AND 75uIn (1.88um) MIN. TIN IN SELECTED AREA OVER 50uIn (1.25um) MIN. NICKEL OVER-ALL.
- (6) 5uIn (.13um) MIN. GOLD PLATE IN SELECTED AREA AND 75uIn (1.88um) MIN. TIN IN SELECTED AREA OVER 50uIn (1.25um) MIN. NICKEL OVER-ALL.

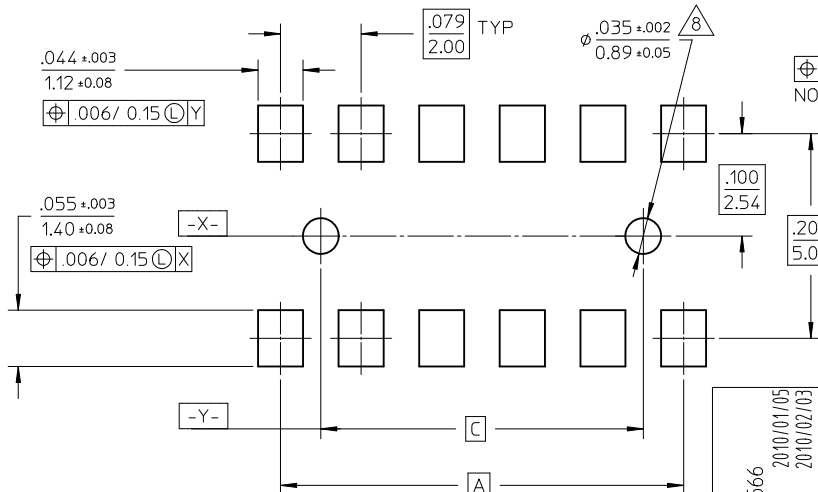
NOTES:

- 1 - HOUSING MATERIAL: GLASS FILLED HIGH TEMP. THERMOPLASTIC. COLOR: BLACK.
- 2 - TERMINAL MATERIAL: PHOSPHOR BRONZE
- 3 - SEE APPROPRIATE SHEET FOR CIRCUIT SIZE, PART NUMBERS AND OVER-ALL DIMENSIONS.
- 4 - FOR ILLUSTRATION, 6&12 CIRCUIT ASSEMBLY SHOWN.
- 5 - REFER TO PRODUCT SPECIFICATION PS-79107.
- 6 - TUBE PACKAGING PER PK-70873-0217 OR TAPE PACKAGING PER PK-70873-0259.
- 7 - SEE PSX-79107 FOR SUGGESTED BOTTOM ENTRY PIN LENGTHS.
- 8 - .035 DIA. FOR PRESS FIT ONLY. USE .039 ± .002 FOR ALIGNMENT PURPOSES ON PICK AND PLACE.
- 9 - MEASUREMENT IS TAKEN BETWEEN THE TANGENT OF THE TOE TO TIP OF THE TERMINAL.

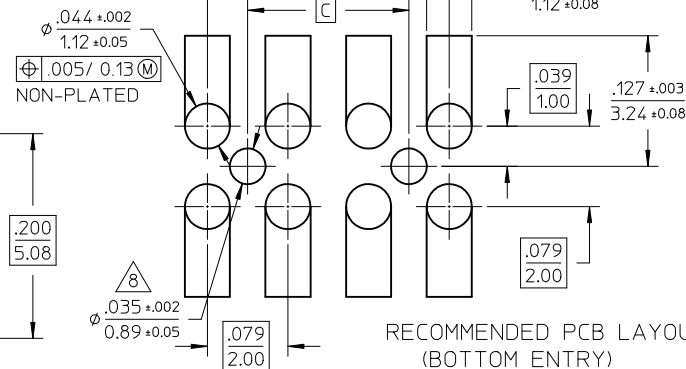


DETAIL A

BENDING ANGLE OF TAIL



RECOMMENDED PCB LAYOUT



RECOMMENDED PCB LAYOUT (BOTTOM ENTRY)

REVISED		QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION	
EC NO:	DATE	DRWN:	CHKD:	APPR:	REV	mm	INCH	DRAWN BY	DATE	NTS	INCH	DATE	TITLE
S2010-0566	2010/01/05	DRWN:SKANG	CHKD:ATSEE	APPR:MLONG		± ---	± ---	AAB	1989/05/15				2MM DUAL ROW VERTICAL RECEPTACLE, SMT
	2010/02/03					± ---	± .010						
	2010/02/19					± 0.25	± .015	MJM	1989/05/15				
						± 0.38	± ---						
						ANGULAR ± 3 °		APPROVED BY	DATE				
								MLONG	2010/02/18				
								MATERIAL NO.					
								SEE TABLE					
								SIZE					
								A3					
								THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

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PEG OPTION

CKT. SIZE	DIM. "A"		DIM. "B"		DIM. "C"		DIM. "D"		PLATING OPTION 5		PLATING OPTION 4		PLATING OPTION 6	
	INCH	MM	INCH	MM	INCH	MM	INCH	MM	ITEM NO. TUBE PACKED (WITHOUT CAP)	ITEM NO. TAPE PACKED (WITH CAP A)	ITEM NO. TUBE PACKED (WITHOUT CAP)	ITEM NO. TAPE PACKED (WITH CAP A)	ITEM NO. TUBE PACKED (WITHOUT CAP)	ITEM NO. TAPE PACKED (WITH CAP A)
04	.079	(2.00)	.165	(4.19)	-	-	.183	(4.65)	79109-1201	79109-8601	79109-1251	79109-8651	X 79109-1301	-
06	.157	(4.00)	.244	(6.19)	.079	(2.00)	.183	(4.65)	79109-1202	79109-8602	79109-1252	79109-8652	X 79109-1302	-
08	.236	(6.00)	.322	(8.19)	.157	(4.00)	.183	(4.65)	79109-1203	79109-8603	79109-1253	79109-8653	X 79109-1303	-
10	.315	(8.00)	.401	(10.19)	.236	(6.00)	.183	(4.65)	79109-1204	79109-8604	79109-1254	79109-8654	X 79109-1304	-
12	.394	(10.00)	.480	(12.19)	.315	(8.00)	.183	(4.65)	79109-1205	79109-8605	79109-1255	79109-8655	X 79109-1305	-
14	.472	(12.00)	.559	(14.19)	.394	(10.00)	.183	(4.65)	79109-1206	79109-8606	79109-1256	79109-8656	X 79109-1306	-
16	.551	(14.00)	.637	(16.19)	.472	(12.00)	.183	(4.65)	79109-1207	79109-8607	79109-1257	79109-8657	X 79109-1307	-
18	.630	(16.00)	.716	(18.19)	.551	(14.00)	.183	(4.65)	79109-1208	79109-8608	79109-1258	79109-8658	X 79109-1308	-
20	.709	(18.00)	.795	(20.19)	.630	(16.00)	.183	(4.65)	79109-1209	79109-8609	79109-1259	79109-8659	X 79109-1309	-
22	.787	(20.00)	.874	(22.19)	.709	(18.00)	.183	(4.65)	79109-1210	79109-8610	79109-1260	79109-8660	X 79109-1310	-
24	.866	(22.00)	.952	(24.19)	.787	(20.00)	.183	(4.65)	79109-1211	79109-8611	79109-1261	79109-8661	X 79109-1311	-
26	.945	(24.00)	1.031	(26.19)	.866	(22.00)	.183	(4.65)	79109-1212	79109-8612	79109-1262	79109-8662	X 79109-1312	-
28	1.024	(26.00)	1.110	(28.19)	.945	(24.00)	.183	(4.65)	79109-1213	79109-8613	79109-1263	79109-8663	X 79109-1313	-
30	1.102	(28.00)	1.188	(30.19)	1.024	(26.00)	.183	(4.65)	79109-1214	79109-8614	79109-1264	79109-8664	X 79109-1314	-
32	1.181	(30.00)	1.267	(32.19)	1.102	(28.00)	.183	(4.65)	79109-1215	79109-8615	79109-1265	79109-8665	X 79109-1315	-
34	1.260	(32.00)	1.346	(34.19)	1.181	(30.00)	.183	(4.65)	79109-1216	79109-8616	79109-1266	79109-8666	X 79109-1316	-
36	1.338	(34.00)	1.425	(36.19)	1.260	(32.00)	.183	(4.65)	79109-1217	79109-8617	79109-1267	79109-8667	X 79109-1317	-
38	1.417	(36.00)	1.504	(38.19)	1.338	(34.00)	.183	(4.65)	79109-1218	79109-8618	79109-1268	79109-8668	X 79109-1318	-
40	1.496	(38.00)	1.582	(40.19)	1.417	(36.00)	.183	(4.65)	79109-1219	79109-8619	79109-1269	79109-8669	X 79109-1319	-
42	1.575	(40.00)	1.661	(42.19)	1.496	(38.00)	.183	(4.65)	79109-1220	79109-8620	79109-1270	79109-8670	X 79109-1320	-
44	1.654	(42.00)	1.740	(44.19)	1.575	(40.00)	.183	(4.65)	79109-1221	79109-8621	79109-1271	79109-8671	X 79109-1321	-
46	1.732	(44.00)	1.818	(46.19)	1.654	(42.00)	.183	(4.65)	79109-1222	79109-8622	79109-1272	79109-8672	X 79109-1322	-
48	1.811	(46.00)	1.897	(48.19)	1.732	(44.00)	.183	(4.65)	79109-1223	79109-8623	79109-1273	79109-8673	X 79109-1323	-
50	1.890	(48.00)	1.976	(50.19)	1.811	(46.00)	.183	(4.65)	79109-1224	79109-8624	79109-1274	79109-8674	X 79109-1324	-

X INDICATES TOOLING NOT AVAILABLE

REVISED EC NO: S2010-0566 2010/01/05 DRWN:SKANG CHKD:ATSEE 2010/02/03 APPR:MLONG 2010/02/19	QUALITY SYMBOLS 	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE NTS	DESIGN UNITS INCH		THIRD ANGLE PROJECTION	
				mm	INCH	DRAWN BY AAB	DATE 1989/05/15	TITLE 2MM DUAL ROW VERTICAL RECEPTACLE, SMT			
			4 PLACES	± ---	± ---	CHECKED BY MJM	DATE 1989/05/15				
			3 PLACES	± ---	± .010						
			2 PLACES	± 0.25	± .015						
			1 PLACE	± 0.38	± ---						
			ANGULAR ± 3 °		APPROVED BY MLONG	DATE 2010/02/18			MOLEX INCORPORATED		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		DOCUMENT NO. SDA-79109-****		SHEET NO. 5 OF 10		
M6	REV				SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

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PEG OPTION

SPECIAL PACKAGING (TAPE PACKED WITHOUT CAP)

CKT. SIZE	DIM. "A"		DIM. "B"		DIM. "C"		DIM. "D"		ITEM NO.	PLATING OPTION SEE SHEET 1
	INCH	MM	INCH	MM	INCH	MM	INCH	MM		
50	1.890	(48.00)	1.976	(50.19)	1.811	(46.00)	.183	(4.65)	79109-9103	5

ASSEMBLIES WITH PEGS
VOIDED CIRCUIT OPTION

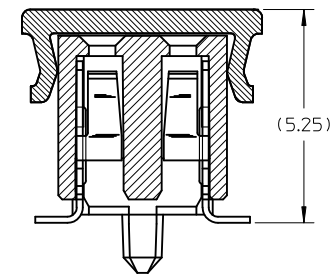
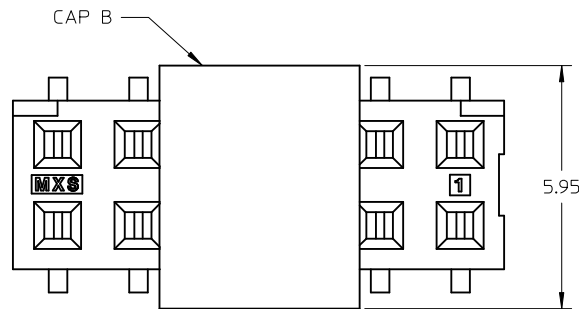
CKT. SIZE	ASSEMBLY (WITHOUT CAP IN TUBE)	VOID LOCATION(S) SEE SHEET 1 FOR CONVENTION		PLATING OPTION	DIM. "A"		DIM. "B"		DIM. "C"		DIM. "D"	
	ITEM NO.	ROW	CKT. NO.(s)		INCH	MM	INCH	MM	INCH	MM	INCH	MM
48	79109-6011	ROW A	1, 24	5	1.811	(46.00)	1.897	(48.19)	1.732	(44.00)	.183	(4.65)
44	79109-6012	ROW B	10	5	1.654	(42.00)	1.740	(44.19)	1.575	(42.00)	.183	(4.65)

NOTES:
1. TERMINALS WILL BE PRESENT IN VOIDED LOCATIONS. HOWEVER, PIN WINDOWS WILL BE CLOSED.
2. VOIDS CAN ONLY BE PRESENT IN ONE ROW OF A CONNECTOR.

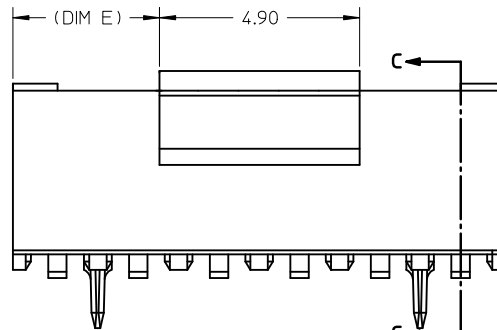
SPECIAL - ASSEMBLIES WITH CAP B (TAPE PACKED WITH CAP)

PEG OPTION

CKT. SIZE	DIM. "A"		DIM. "B"		DIM. "C"		DIM. "D"		DIM. "E"		ITEM NO.	PLATING OPTION SEE SHEET 1
	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM		
8	.236	(6.00)	.322	(8.19)	.157	(4.00)	.183	(4.65)	.065	(1.65)	79109-9108	4
18	.630	(16.00)	.716	(18.19)	.551	(14.00)	.183	(4.65)	.262	(6.65)	79109-9118	4



SECTION C-C



REVISED EC NO: S2010-0566 DRWN:SKANG CHKD:ATSEE APPR:MLONG M6	DESCRIPTION	QUALITY SYMBOLS F_A=0 F_C=0 F_P=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE NTS	DESIGN UNITS INCH	THIRD ANGLE PROJECTION			
				mm	INCH	DRAWN BY AAB	DATE 1989/05/15	TITLE 2MM DUAL ROW VERTICAL RECEPTACLE, SMT				
			4 PLACES	± ---	± ---	CHECKED BY MJM	DATE 1989/05/15					
			3 PLACES	± ---	± .010	MOLEX MOLEX INCORPORATED						
			2 PLACES	± 0.25	± .015						APPROVED BY MLONG	DATE 2010/02/18
	1 PLACE	± 0.38	± ---	DOCUMENT NO.		SHEET NO.						
	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		SDA-79109-****		10 OF 10				
			SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									