Jameco Part Number 1303185

MOLEX INCORPORATED
LISLE, ILL. 60532 U.S.A.

PS-79107
PRODUCT SPECIFICATION
2mm DUAL ROW VERTICAL RECEPTACLE ASSEMBLIES

TABLE OF CONTENTS

DRWG. NO. PS-79107

REV.	B1	A1	A1	A1	A1	A1	A1	A1	B1	A1	A1	A1	A1	A1	A1	A1	A1
SHT.	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17
REV.	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1						
SHT.	18	19	20	21	22	23	24	25	26	27	28						

FILE NAME PS79107.S01 | REVISE ONLY ON CAD SYSTEM | REV. B1

SHT. 1

DRWG. NO. PS-79107

PS-79107
PRODUCT SPECIFICATION
2mm DUAL ROW VERTICAL RECEPTACLE ASSEMBLIES

1.0 SCOPE

1.1 SUBJECT:

This specification details the mechanical, electrical and environmental performance of the .079" X .079" (2mm X 2mm) grid dual row vertical receptacle connector series numbers 79107, 79108, & 79109. This connector series is designed for through hole, flat flex cable, and surface mount applications respectively as described in Para 2.1. Mating connectors shall have .020"(.51mm) square or round posts whose axes are perpendicular to the plane of the PCB to which the 2mm series receptacles are soldered.

2.0 PRODUCT DESCRIPTION

2.1 The types covered in this specification are as follows:

2.1.1 A-79107-**** Vertical Receptacle with .118"(3.00mm) and .075"(1.91mm) long PC tails.

2.1.2 A-79108-**** Vertical Receptacle with .050"(1.27mm) long PC tails for FFC or FPC application.

2.1.3 A-79109-**** Vertical Receptacle with gull wing surface mount tails and optional hold down pegs.

Note: "****" Indicates the presence of a 4 digit code used to identify plating, mounting, and circuit size options.

2.2 The dual row vertical receptacle series is designed to connect; (1) PC board to PC board in parallel, (2) PC board to PC board perpendicular.

DRWG. NO. PS-79107

2.3 The connector utilizes a dual beam female terminal designed to provide east-west mating and early entry mating when mated from the top.

2.4 The A-79107-**** series has PC tails for solder termination to either a .063"(1.57mm) or .031"(0.79mm) nominal thick PC board with .025"(0.64mm) minimum diameter holes (See Figure 1). The PC tails have a tapered lead-in for ease of insertion into the PC board.

2.5 The A-79109-**** surface mount version with pegs is also designed to accommodate bottom entry mating through a PC board. See Figure 2 for suggested PC board layout. Performance of bottom entry is expected to be similar to top entry, however data is not currently available.

2.6 This connector series is available in a range of circuit sizes from 4 circuit (2 X 2) through 50 circuit (2 X 25) in 2 circuit increments.

3.0 APPLICABLE DOCUMENTS

3.1 All documents referenced shall be of the latest revision.

3.2 The order of precedence detailing requirements of this specification shall be as follows:

1. Product Drawings
2. This Specification
3. Reference Documents

3.3 Reference Documents

3.3.1 MIL-STD-202: Test methods for electronics and electrical component parts.

3.3.2 MIL-STD-1344: Test methods for electrical connectors.

DRWG. NO. PS-79107

3.3.3 ASTM-B103: Alloy 521.

3.3.4 QQ-N-290: Nickel plating.

3.3.5 MIL-G-45204: Gold plating.

3.3.6 MIL-T-10727: Tin plating.

3.3.7 MIL-M-24519: Molding plastics.

3.3.8 UL-94: Tests for flammability of plastic materials.

3.3.9 ES-88: Molex Finish Specification.

4.0 AMBIENT CONDITIONS

4.1 Ambient operating conditions for qualification shall be:

Temperature: 25° +/- 5° C
Relative Humidity: 50% +/- 20%
ATM Pressure: 650 - 800 mm Hg

5.0 GENERAL REQUIREMENTS

5.1 Design construction and physical dimensions shall be as specified on the A-79107, A-79108, and A-79109 product drawings.

5.2 Materials

5.2.1 Housing: 94V-0 glass filled Liquid Crystal Polymer. Oxygen index greater than 28.
Color: Black.

5.2.2 Terminal: Phosphor bronze, per ASTM-B103.

DRWG. NO. PS-79107

5.3 Plating

5.3.1 All tin finishes to be per MIL-T-10727B and MIL-P-81728A. All gold finishes to be per MIL-G-45204B, Type II, Grade C, Class I. All nickel finishes to be per QQ-N-290, Class II. Also see Molex Plating Standard ES-88.

5.3.2 Plating Code 574 (Per Molex ES-88): .000030" (0.00076mm) min. gold plate in contact area with .000075" (0.00190mm) min. tin/lead (90/10) plate in tail area over .000050" (0.00127mm) min. nickel plate overall.

5.3.3 Plating Code 571 (Per Molex ES-88): .000015" (0.00038mm) min. gold plate in contact area with .000075" (0.00190mm) min. tin/lead (90/10) plate in tail area over .000050" (0.00127mm) min. nickel plate overall.

5.4 Recommended Printed Circuit Board Specification

5.4.1 PCB thickness: .062" +/- .007" (1.57mm +/- 0.18) and .031 +/- .005 (0.79mm +/- 0.13).

5.4.2 Recommended PCB Hole/SMT Land Pattern: See Figure 2 .

5.5 Recommended mating pin lengths:

5.5.1 For top entry mating, the recommended mating pin length is .120" to .170" (3.05mm to 4.30mm).

5.5.2 For bottom entry mating, the recommended mating pin lengths are .240" to .255" (6.10mm to 6.50mm) for a .047" PCB and

.255" to .270" (6.50mm to 6.85mm) for a .062" PCB. This dimension is measured from the bottom of the bottom entry PC board, not from the insulator on the mating header.

5.6 Sides of square pins must be parallel with the axis of the row within 5 (+/-) degrees.

6.0 AGENCY APPROVALS

6.1 U.L. Recognition: File E29179.

6.2 C.S.A. Recognition: File LR19980, Page 8, dated 8-21-91.

7.0 ELECTRICAL REQUIREMENTS

7.1 Insulation Resistance

7.1.1 Insulation resistance when tested per MIL-STD-202, Method 302, Condition B at ambient shall be as follows:
1. 5000 mega ohms minimum intially.
2. 1000 mega ohms minimum following humidity.

7.2 Dielectric Withstanding Voltage

7.2.1 Dielectric withstanding voltage shall be 500 VAC minimum at sea level. There shall be no breakdown or flash-over between adjacent contacts and leakage current shall not exceed 5.0 milliamps when unmated connectors are tested per MIL-STD-202, Method 301.

7.3 Contact Resistance (Low Level)

7.3.1 Defined as the normal bulk resistance plus constriction resistance. The maximum value shall not exceed 15 milli-ohms total with a maximum change of 10 milliohms from initial following all stress tests. The method of measurement shall be per MIL-STD-1344A, Method 3002.1.

7.4 Current Rating

7.4.1 1.9 Amps DC or AC RMS per contact with no more than 30° C temperature rise above ambient. All contacts wired in series.

7.4.2 1.0 Amps DC or AC RMS per contact at 70° C with 30° C maximum temperature rise. All contacts wired in series.

7.5 Current Cycling

7.5.1 Subject the mated connectors to 75% of the current necessary to yield a 30° C temperature rise (as found in para. 7.4) in cycles of 45 minutes on and 15 minutes off for 240 hours after which the conditions of para 7.3 are met.

8.0 MECHANICAL REQUIREMENTS

8.1 Mating Force - Entire Connector

8.1.1 The maximum force to mate a connector pair shall be 10 oz. multiplied by the number of positions, excluding hardware, when cycled per MIL-STD-1344, Method 2013 for the following conditions:

DRWG. NO. PS-79107

1. Ambient conditions.
2. Nonrigid fixturing of connector pairs.
3. 10 inches/minute max. cycling rate.
4. 50 mate/unmate cycles.

8.2 Individual Insertion/Withdrawal Forces

8.2.1 The force to insert and withdraw a steel gauge pin shall be 8 ounces maximum and 1.5 ounces minimum respectively, excluding hardware, when tested per MIL-STD-1344, Method 2014 for the following conditions:

1. Polished steel gauge pins per Fig 3.
2. Insertion depth to be .060" from the point at which gauge makes contact with the terminal beams.
3. Nonrigid fixturing shall be used.
4. 3 cycles.

8.3 Normal Force

8.3.1 The minimum normal "force" shall be 100 grams following thermal aging per para. 9.4.1 and 50 mating/unmating cycles per para. 8.4.1 when tested at minimum deflection as caused by an .020" +/- .001" square pin. Measurement shall be taken in a manner simulating actual use.

8.4 Durability

8.4.1 For the 15 microinch gold over 50 microinch nickel plating option, the connector shall meet the requirements of paras. 7.3 and 8.3 after the following sequential conditioning:

1. 50 mate/unmate cycles.
2. Seventeen hours of Flowers of Sulfur per Molex test procedure.

DRWG. NO. PS-79107

8.5 Terminal Strength

8.5.1 Solder tails shall withstand two hand bending cycles per MIL-STD-202, Method 211A, Condition "B" with no evidence of breaking or cracking of the base metal at 20X magnification.

8.6 Solderability

8.6.1 All terminals shall have 95% coverage per the requirements of MIL-STD-202, Method 208 with conditions as follows:
1. Solder Composition: 60/40 tin-lead per QQ-S-571 Type S.
2. Solder Temperature: 230° C +/- 5° C
3. Flux Type: Mildly activated, type RMA per MIL-F-14256.
4. Depth of Immersion: .080" (3.0mm)

8.7 Housing Retention

8.7.1 A tensile force is applied at a rate of 1 inch per minute to the housing perpendicular to the test board. The force at which the housing separates from the terminals is divided by the circuit size and recorded. This force to be 8 ounces minimum per terminal.

8.8 Individual Tensile (Surface Mount Only)

8.8.1 A tensile force perpendicular to the test board is applied at a rate of 1 inch per minute to individual surface mount terminals without housings. The force at which the terminal separates from the board is to be greater than 3 lbs.

8.9 Full Connector Tensile (Surface Mount Only)

8.9.1 A tensile force perpendicular to the board is applied at a rate of 1 inch per minute to the entire connector. The force at which the housing separates from the terminals should be greater than 1 lb. per terminal pair.

8.10 Shear Test (Surface Mount Only)

8.10.1 A shear force parallel to the board and perpendicular to the lay of the connector is applied at a rate of 1 inch per minute. The force at which the connector distorts or shears off the board should be greater than 2 lbs. per terminal pair. See Fig 4.

8.11 Solder Joint Fatigue (Surface Mount Only)

8.11.1 There shall be no evidence of physical damage and contact resistance shall meet the conditions of para. 7.3 and there shall be no loss of electrical continuity greater than 1 microsecond after the following tests:

1. Tension: Subject the test board, as shown in Fig. 5, to .060" deflection perpendicular to the lay of the connector for 200 cycles. Repeat the above on a new sample except deflect parallel to the lay of the connector as shown in Fig. 6.
2. Compression: Subject the test board as shown in Fig. 7 to .060" deflection perpendicular to the lay of the connector for 200 cycles. Repeat the above on a new sample except deflect parallel to the lay of the connector as shown in Fig. 8.

9.0 ENVIRONMENTAL REQUIREMENTS

9.1 Resistance to Cleaning Solvents

9.1.1 Any markings shall remain legible and no damage or deterioration of the connector shall occur when tested per MIL-STD-202, Method 215. The following solvents shall be used:
1. 1-1-1 Trichloroethane
2. Freon TMS and TMC

9.2 Temperatures

9.2.1 The product is designed to operate at -55° C to 105° C continuous and withstand +219° C during vapor soldering without any deterioration of performance or physical damage.

9.3 Thermal Shock

9.3.1 There shall be no evidence of any physical damage. Connectors shall meet the dimensional requirements of the product drawings and contact resistance of para. 7.3. when tested per MIL-STD-202, Method 107, Condition A-1.

9.4 Temperature Life

9.4.1 The requirements of paras. 7.3 and 8.3 shall be met following thermal life per MIL-STD-202, Method 108, Test Condition "C" (500 hours at 105° C). Connectors shall remain in initial mated or unmated condition throughout thermal exposure.

9.5 Humidity (Cyclical)

9.5.1 There shall be no evidence of physical damage, or discoloration and the requirements of paras. 7.1, 7.2, and 7.3 shall be met following testing per MIL-STD-1344, Method 1002, Type II, 96 hours (omit steps 7A and 7B). Th the Connectors shall be mated during exposure.

9.6 Humidity (Steady State)

9.6.1 There shall be no evidence of physical damage, discoloration, or corrosion and the requirements of paras. 7.1, 7.2, & 7.3 shall be met following testing per MIL-STD-202 Method 103, Condition A. No polarizing voltage measurement shall be taken.

9.7 Resistance to Solder Heat

9.7.1 There shall be no evidence of any physical damage and the connectors shall meet the dimensional requirements of the product drawings following:

1. MIL-STD-202, Method 210, Test Condition C (260° C 10 seconds).
2. Standard wave soldering process.

9.8 Vibration

9.8.1 There shall be no evidence of any physical damage, loosening of parts or loss of electrical continuity greater than 1.0 microsecond when mated connectors are tested per MIL-STD-202, Method 204, Test Condition A.

9.9 Mechanical Shock

9.9.1 There shall be no evidence of any physical damage or loosening of parts. Nor shall there be any interuption of electrical continuity longer than one microsecond when tested per MIL-STD-202F, Method 213B, Condition A:
1. 1/2 Sine Wave.
2. 50 G, 11 millisecond pulse.
3. 3 shocks each along 3 mutually perpendicular axis, 18 shocks total.

9.10 Corrosive Atmosphere

9.10.1 Connectors shall meet the requirements of para. 7.3 when exposed to Flowers of Sulfur following conditioning per para. 8.4.

10.0 QUALITY ASSURANCE PROVISIONS

10.1 Materials Inspection

10.1.1 Materials inspection shall consist of certification supported by verifying data. Mechanical, chemical and electrical testing shall be done on a random basis.

11.0 PACKAGING

11.1 Unless otherwise specified, product will be packaged in tubes per packaging specifications PK-70783-0180 and PK-70783-0217.

12.0 QUALIFICATION REQUIREMENTS

12.1 Ambient conditions for qualification shall be per para. 4.1

12.2 Qualification testing shall be performed on samples taken from production lots.

12.3 Sample Grouping

12.3.1 Test group I shall consist of (20) A-79107-0024 (50 circuit, 15u" gold, through hole), (2) A-79109-0024 (50 ckt, 15u" gold, surface mount) connectors, and (22) 87089-5013 headers.

12.3.2 Test groups II & III shall consist of (16) A-79107-0024, (2) A-79109-0024 connectors, and (18) 87089-5013 headers each.

12.3.3 Test group IV shall consist of (4) A-79107-0024 connectors.

12.3.4 Test group V shall consist of (18) A-79107-0024 connectors mounted and loose as needed.

12.3.5 Test group VI shall consist of (24) A-79109-0024 and (26) A-79109-0260 connectors.

12.4 Sample Preparation

12.4.1 Through Hole: Four A-79107-0024 connectors are to be wave soldered to each through hole PC board.

12.4.2 Surface Mount: Solder paste consisting of metal alloy 63/37 eutectic tin-lead and a rosin mildly activated (RMA) flux is to be stenciled onto the solder lands of the surface mount boards in a layer no thicker than .010"(0.25mm). The surface mount connectors will then be vapor phase reflowed to the PC boards in approved equipment. Flourinert Liquid

FC-70 is to be used with a primary vapor zone reflow time of 15 seconds and a secondary vapor zone dwell time of 45 seconds. Each test board shall be cleaned immediately in a vapor degreaser and cleaned with freon TMS for at least 3 minutes.

12.5 Qualification testing shall be performed per the test sequence shown Figs. 9-15.

13.0 APPENDIX

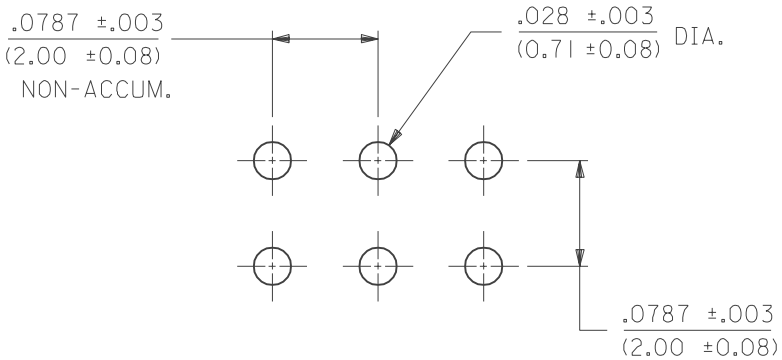
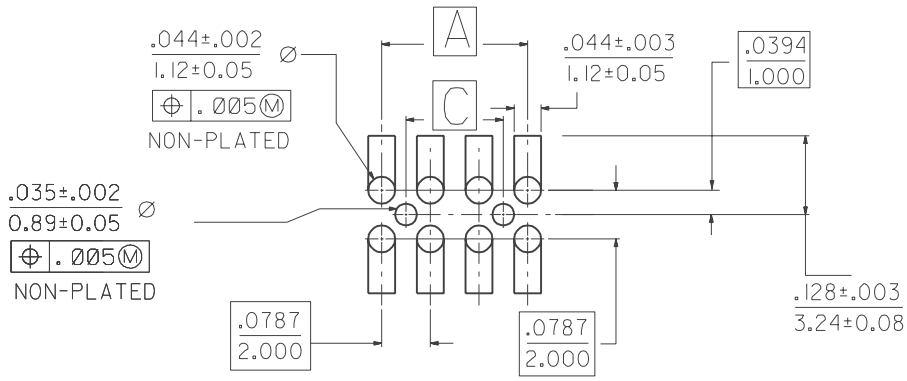


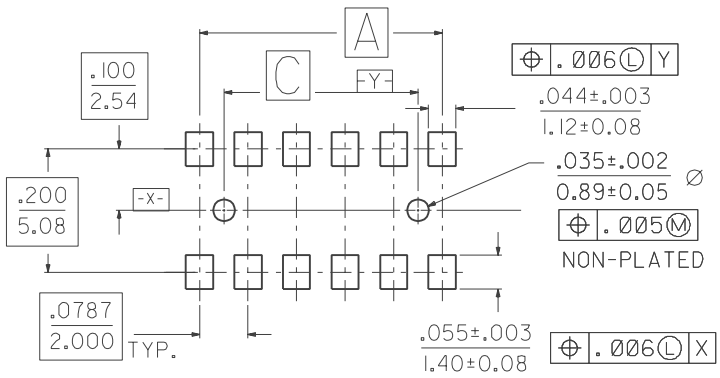
FIGURE 1
RECOMMENDED P.C. BOARD HOLE LAYOUT

DRWG. NO. PS-79107

PS-79107
PRODUCT SPECIFICATION
2mm DUAL ROW VERTICAL RECEPTACLE ASSEMBLIES



BOTTOM ENTRY LAND LAYOUT



SMT PC BOARD LAND LAYOUT

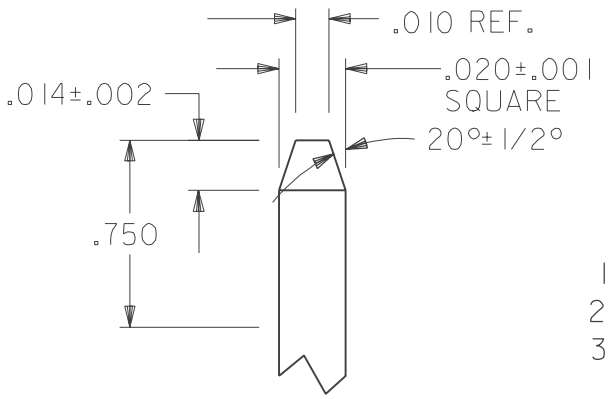
FIGURE 2
RECOMMENDED P.C. BOARD LAND LAYOUTS

DRWG. NO. PS-79107

PS-79107

PRODUCT SPECIFICATION

2mm DUAL ROW VERTICAL RECEPTACLE ASSEMBLIES



NOTES:

1. MATERIAL: TOOL STEEL.
2. FINISH: 4 MICROINCH MAX.
3. .020±.001 MUST BE HELD OVER .750" DIMENSION.

FIGURE 3
GAUGE PIN

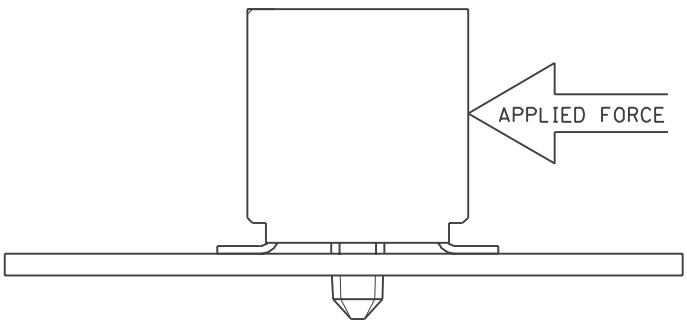


FIGURE 4
PERPENDICULAR SHEAR

DRWG. NO. PS-79107

PS-79107
PRODUCT SPECIFICATION
2mm DUAL ROW VERTICAL RECEPTACLE ASSEMBLIES

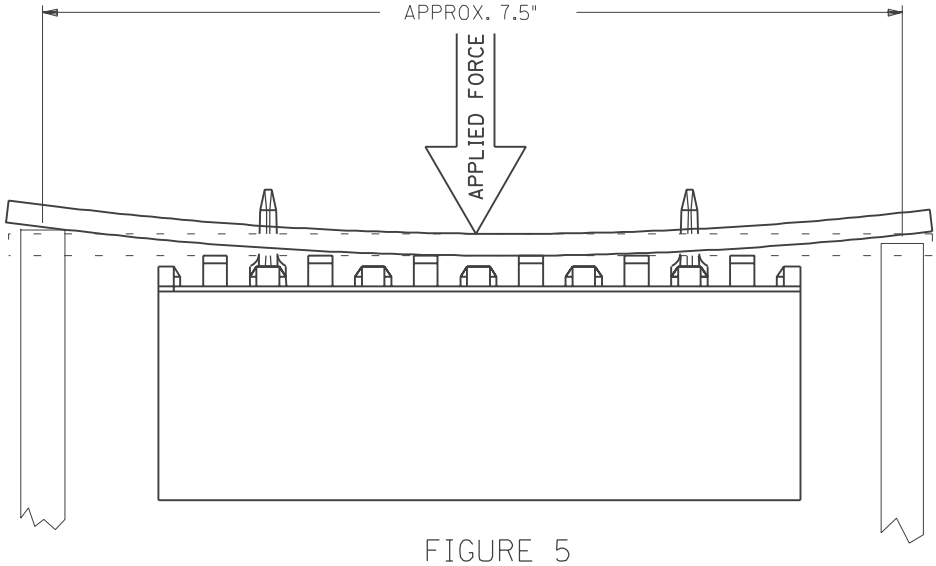


FIGURE 5
PERPENDICULAR SOLDER JOINT FATIGUE (TENSION)

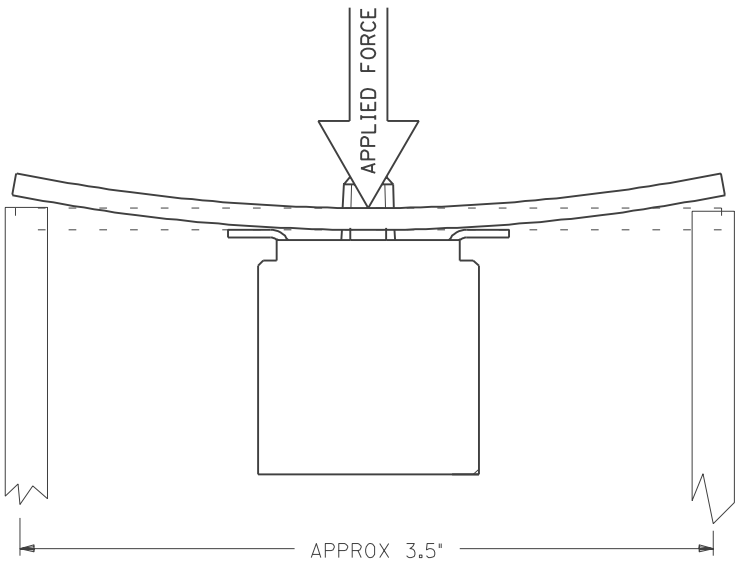


FIGURE 6
PARALLEL SOLDER JOINT FATIGUE (TENSION)

DRWG. NO. PS-79107

PS-79107

PRODUCT SPECIFICATION

2mm DUAL ROW VERTICAL RECEPTACLE ASSEMBLIES

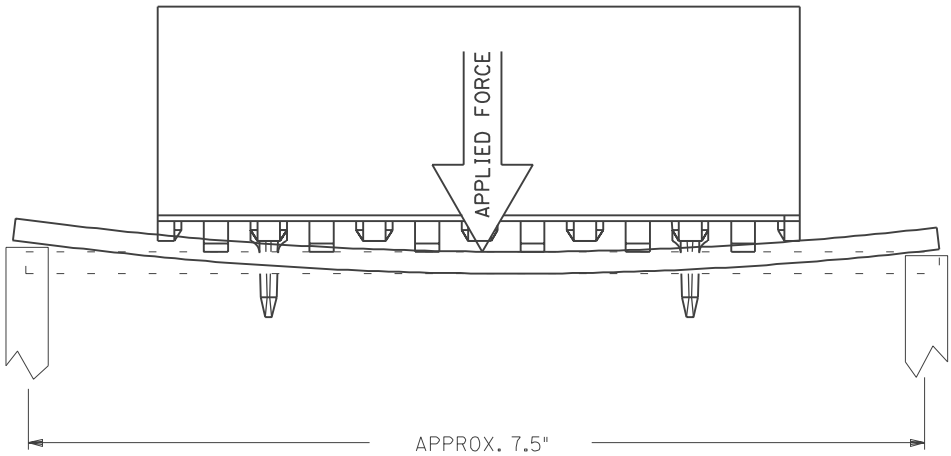


FIGURE 7

PERPENDICULAR SOLDER JOINT FATIGUE (COMPRESSION)

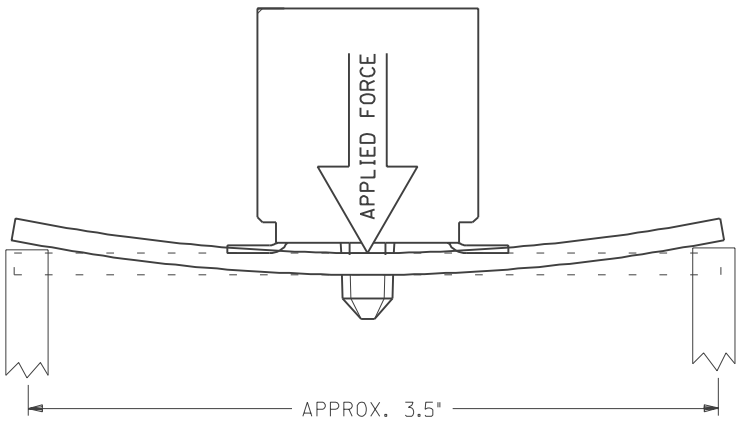


FIGURE 8

PARALLEL SOLDER JOINT FATIGUE (COMPRESSION)

PS-79107

PRODUCT SPECIFICATION

2mm DUAL ROW VERTICAL RECEPTACLE ASSEMBLIES

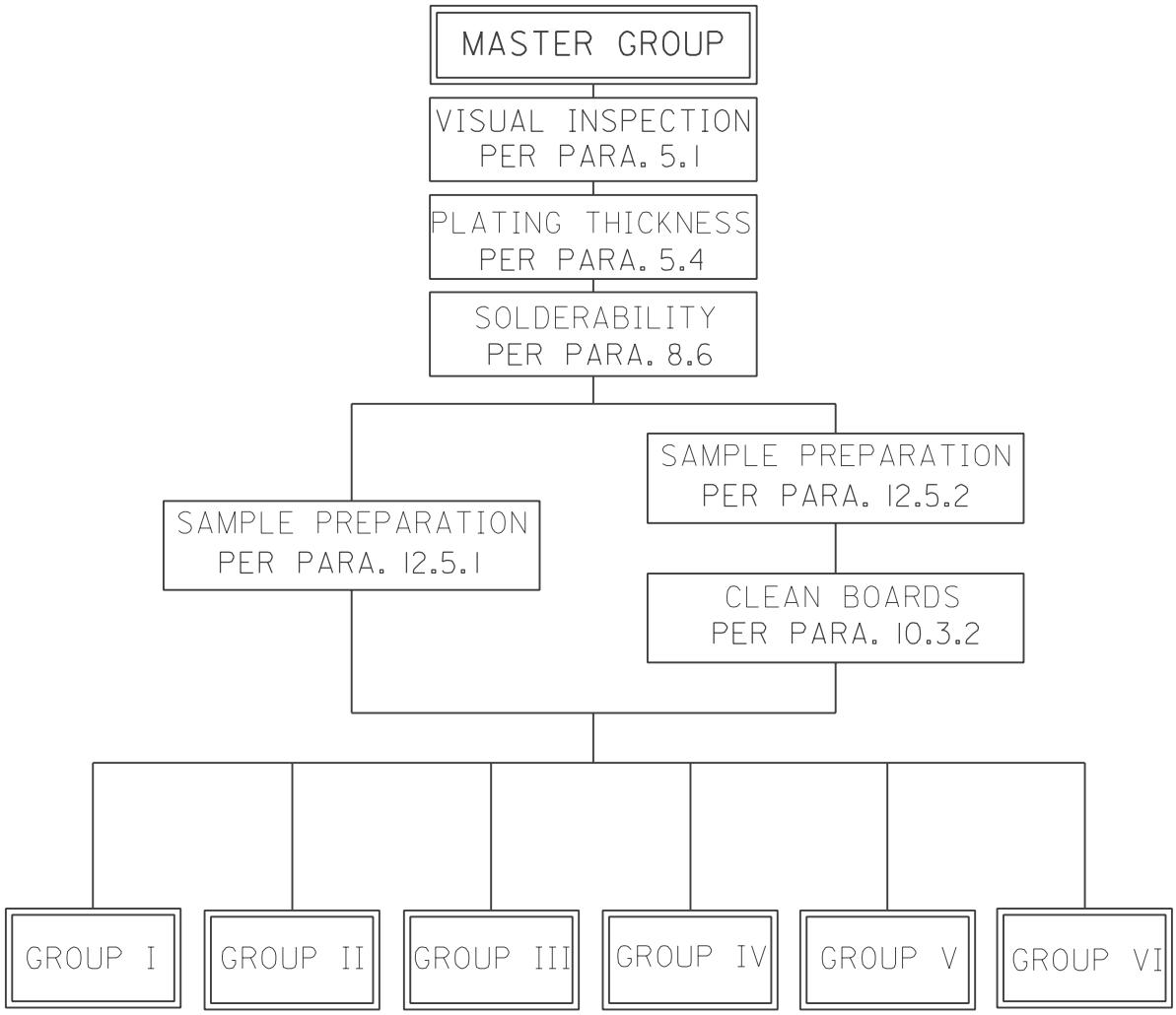


FIGURE 9

DRWG. NO. PS-79107

PS-79107

PRODUCT SPECIFICATION
2mm DUAL ROW VERTICAL RECEPTACLE ASSEMBLIES

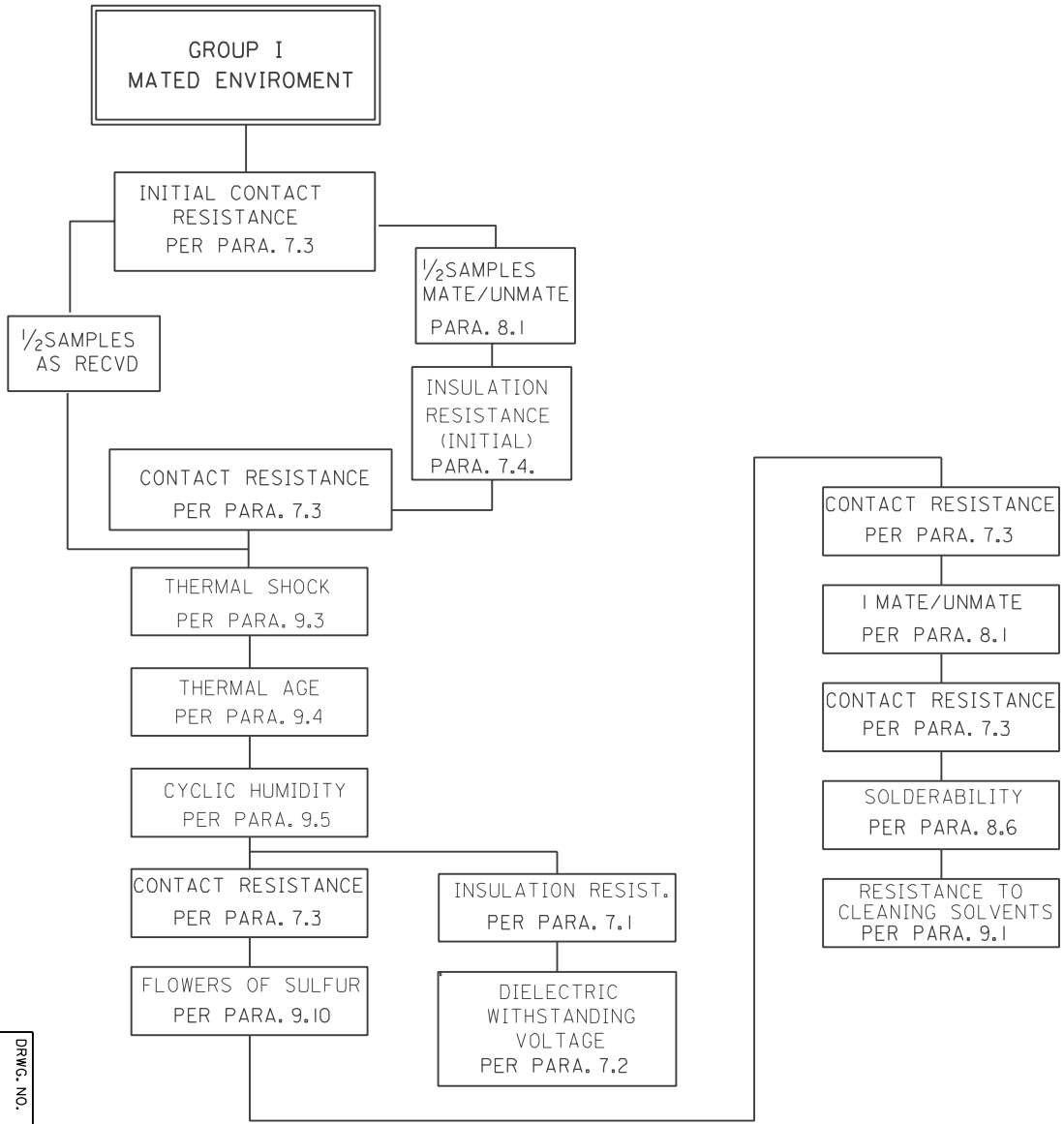


FIGURE 10

DRWG. NO. PS-79107

PS-79107

PRODUCT SPECIFICATION

2mm DUAL ROW VERTICAL RECEPTACLE ASSEMBLIES

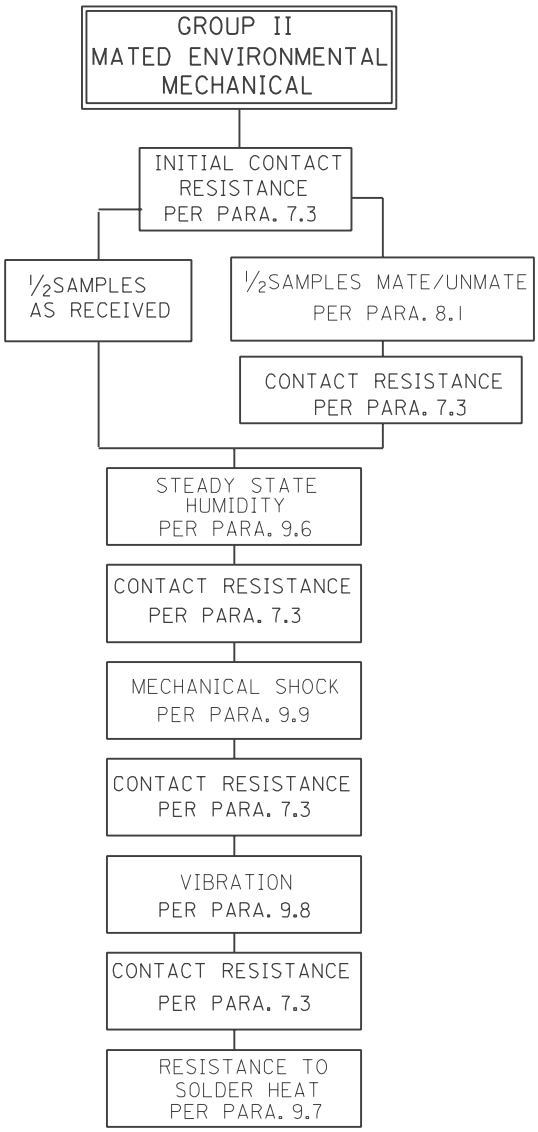


FIGURE 11

PS-79107

PRODUCT SPECIFICATION
2mm DUAL ROW VERTICAL RECEPTACLE ASSEMBLIES

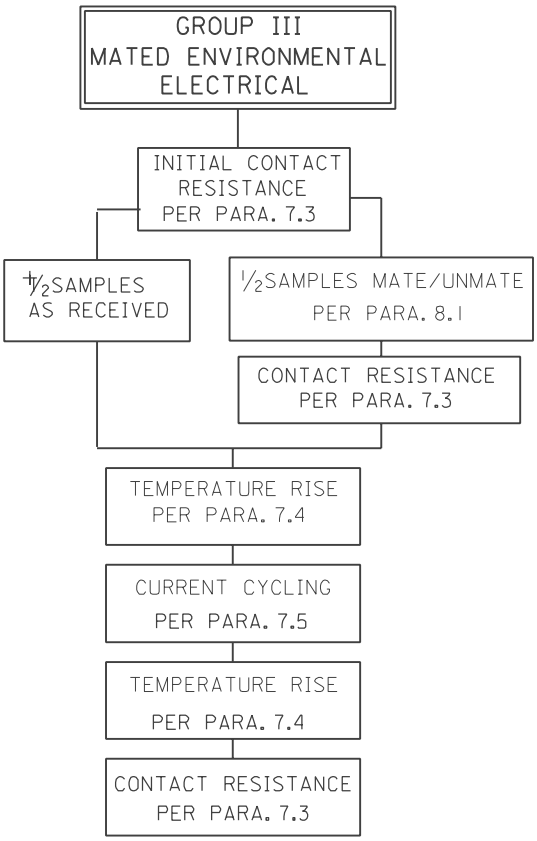


FIGURE 12

DRWG. NO. PS-79107

PS-79107

PRODUCT SPECIFICATION
2mm DUAL ROW VERTICAL RECEPTACLE ASSEMBLIES

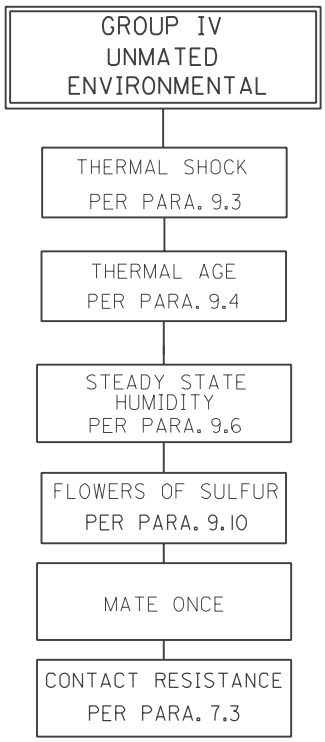


FIGURE 13

DRWG. NO. PS-79107

PS-79107
PRODUCT SPECIFICATION
2mm DUAL ROW VERTICAL RECEPTACLE ASSEMBLIES

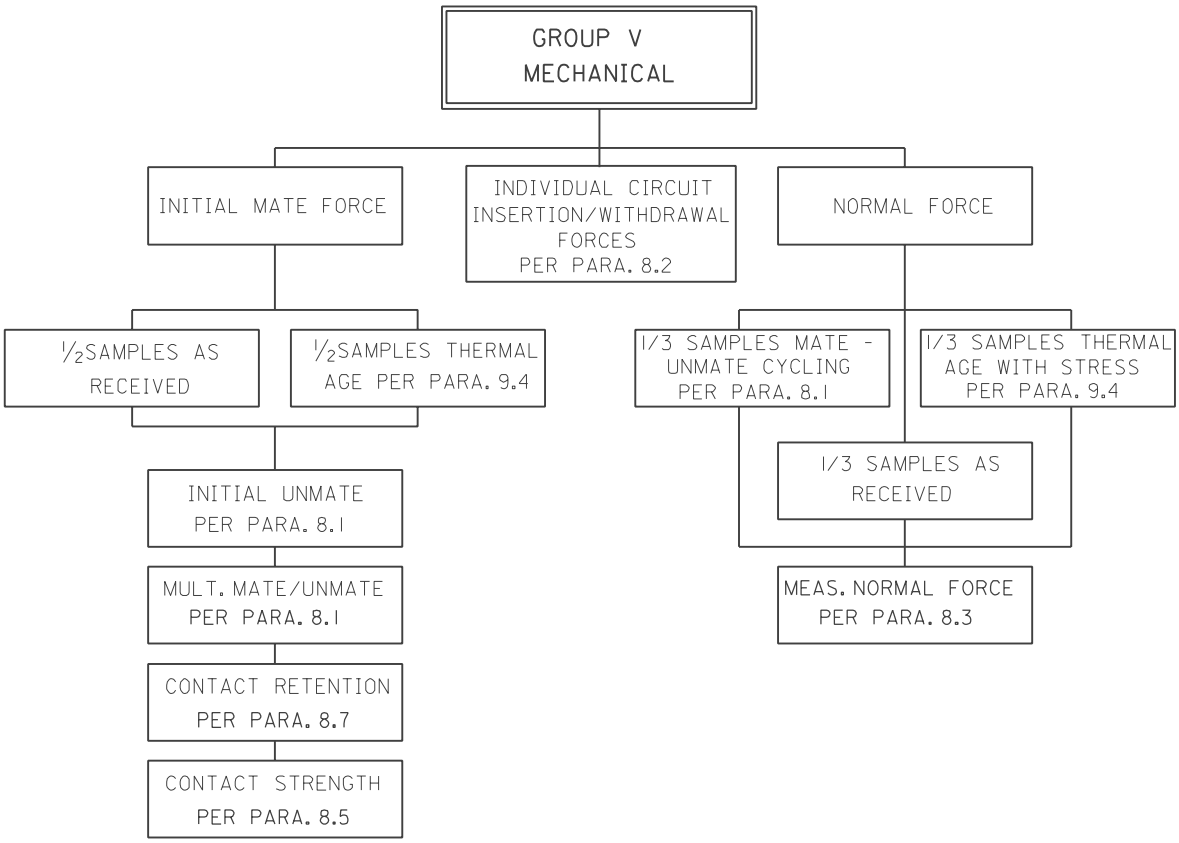


FIGURE 14

DRWG. NO. PS-79107

PS-79107

PRODUCT SPECIFICATION

2mm DUAL ROW VERTICAL RECEPTACLE ASSEMBLIES

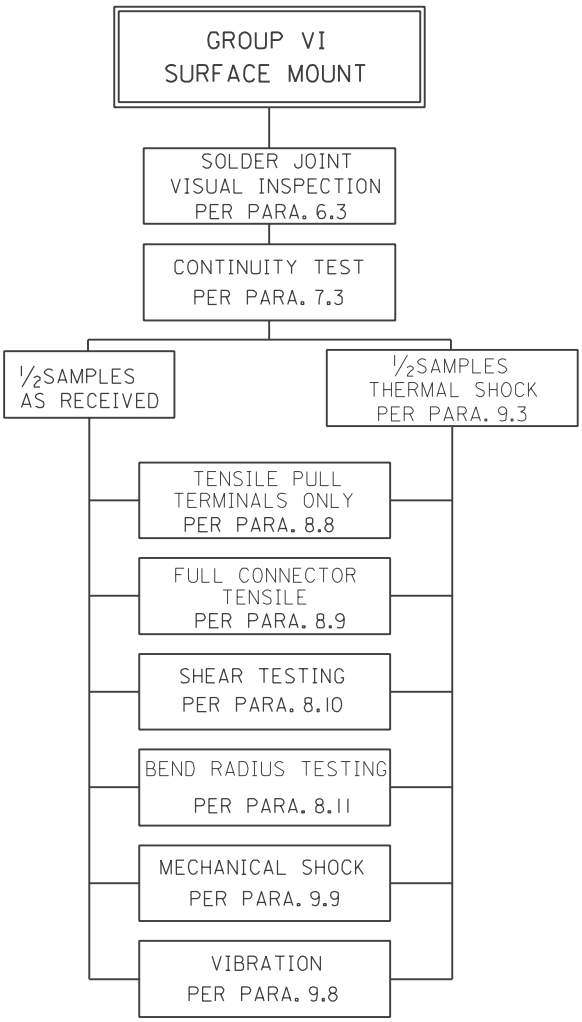


FIGURE 15

DRWG. NO. PS-79107

MOLEX INCORPORATED

LISLE, ILL. 60532 U.S.A.

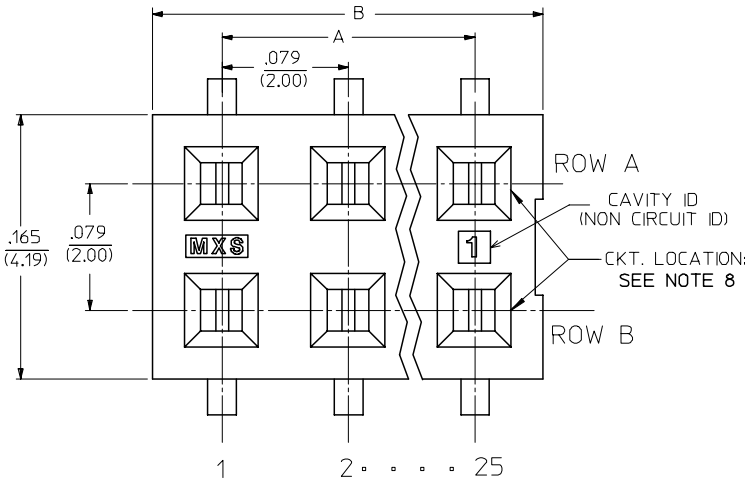
PS-79107

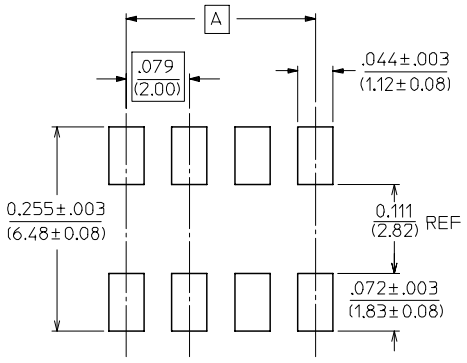
PRODUCT SPECIFICATION

2mm DUAL ROW VERTICAL RECEPTACLE ASSEMBLIES

REV.	COMMENTS	DATE	ENG.
A1	X-Release per ERO 28846	08/29/92	MJM
A2	Revised to CAD per ECR U10973	05/20/91	RWB
A3	Mod Sec2.3.1 per ECR U11204	07/10/91	RWB
A4	Mod Sec2.3.2 per ECR U11814	09/03/91	RWB
A5	Mod Sec4.3 per ECR U12276	11/25/92	RWB
A6	Re-wrote Spec per ECN U20337	02/28/92	RWB
AA	Re-wrote Spec per ECN U40449	04/04/94	WGM
AA1	Rel to S'pore per ECN #S2001-0287	010426	SEE

DRWG. NO. PS-79107





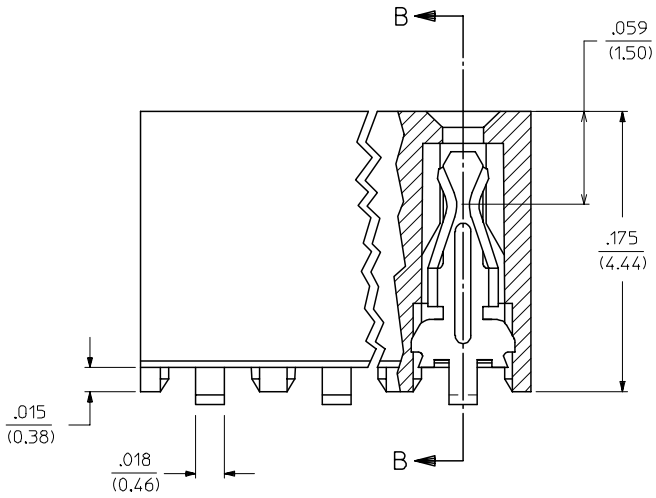
RECOMMENDED PCB PAD LAYOUT

NOTES:

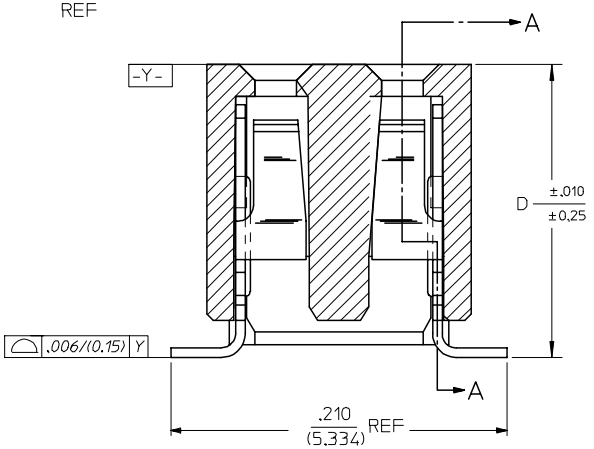
1. HOUSING MATERIAL:
   LCP, GLASS FILLED, UL 94V-0
   COLOUR BLACK.
2. TERMINAL MATERIAL:
   PHOSPHOR BRONZE
3. SEE APPROPRIATE SHEET FOR CIRCUIT SIZE, PART NUMBERS AND OVERALL DIMENSIONS.
4. FOR ILLUSTRATION, 6 CKT ASSY SHOWN.
5. REFER TO PRODUCT SPEC PS-79107.
6. TUBE PACKAGING PER PK-70873-0217 OR
   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.

PLATING OPTION:

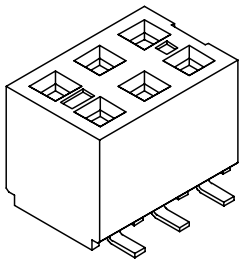
4. 30u" (0.75um) MIN. GOLD PLATE IN SELECTED AREA AND 75u" (1.88um) MIN. TIN PLATE IN SELECTED AREA OVER 50u" (1.25um) MIN. NICKEL OVERALL.
5. 15u" (0.38um) MIN. GOLD PLATE IN SELECTED AREA AND 75u" (1.88um) MIN. TIN PLATE IN SELECTED AREA OVER 50u' (1.25um) MIN. NICKEL OVERALL.
6. 5u" (0.13um) MIN.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



SECTION A-A



SECTION B-B



OBS TIN/LEAD P/N
EC NO: S2006-0728 2006/03/14
DRWN:MLONG 2006/03/21
CHKD:CGOH
APPR:PTLIM 2006/03/22
DESCRIPTION
M
REV

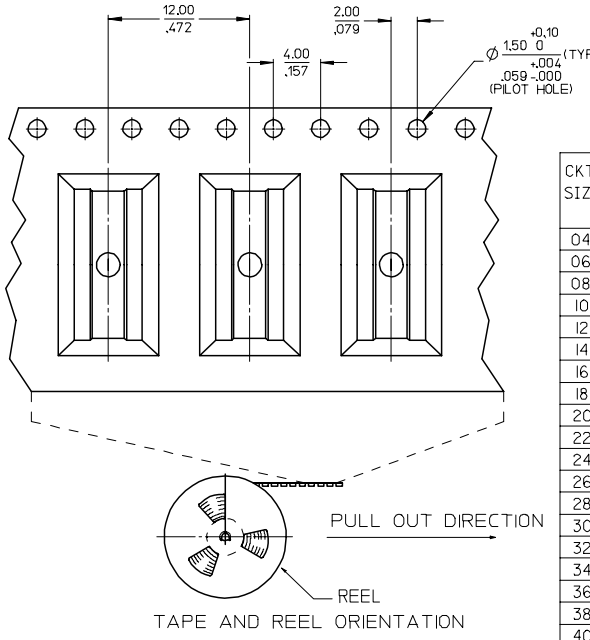
QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± .015
1 PLACE	± 0.38	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE	IN/MM
SCALE	NTS
DESIGN UNITS	INCH
	THIRD ANGLE PROJECTION
DRAWN BY	AAB
DATE	1989/05/15
CHECKED BY	MJM
DATE	1989/05/15
APPROVED BY	WAZ
DATE	1989/05/15
MATERIAL NO.	SEE TABLE
TITLE	2MM DUAL ROW VERTICAL RECEPTACLE, SMT
	MOLEX INCORPORATED
DOCUMENT NO.	SDA-79109-****
SHEET NO.	1 OF 6
SIZE	A3



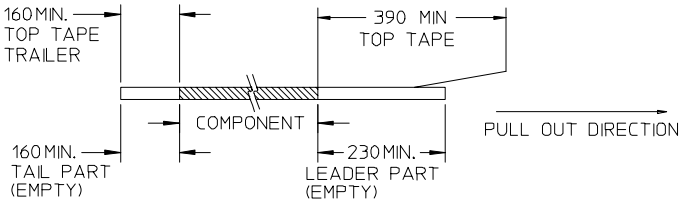
TAPE AND REEL ORIENTATION

CKT. SIZE	DIM. "A" INCH	DIM. "A" MM	DIM. "B" INCH	DIM. "B" MM	DIM. "D" INCH	DIM. "D" MM	PLATING OPTION 5 ITEM NO. TUBE PACKED (WITHOUT CAP)	PLATING OPTION 5 ITEM NO. TAPE PACKED (WITH CAP)	PLATING OPTION 4 ITEM NO. TUBE PACKED (WITHOUT CAP)	PLATING OPTION 4 ITEM NO. TAPE PACKED (WITH CAP)	PLATING OPTION 6 ITEM NO. TUBE PACKED (WITHOUT CAP)	PLATING OPTION 6 ITEM NO. TAPE PACKED (WITH CAP)
04	.079	(2.00)	.165	(4.19)	.183	(4.65)	79109-1001	79109-8401	79109-1051	79109-8451	X 79109-1101	-
06	.157	(4.00)	.244	(6.19)	.183	(4.65)	79109-1002	79109-8402	79109-1052	79109-8452	X 79109-1102	-
08	.236	(6.00)	.322	(8.19)	.183	(4.65)	79109-1003	79109-8403	79109-1053	79109-8453	X 79109-1103	-
10	.315	(8.00)	.401	(10.19)	.183	(4.65)	79109-1004	79109-8404	79109-1054	79109-8454	X 79109-1104	-
12	.394	(10.00)	.480	(12.19)	.183	(4.65)	79109-1005	79109-8405	79109-1055	79109-8455	X 79109-1105	-
14	.472	(12.00)	.559	(14.19)	.183	(4.65)	79109-1006	79109-8406	79109-1056	79109-8456	X 79109-1106	-
16	.551	(14.00)	.637	(16.19)	.183	(4.65)	79109-1007	79109-8407	79109-1057	79109-8457	X 79109-1107	-
18	.630	(16.00)	.716	(18.19)	.183	(4.65)	79109-1008	79109-8408	79109-1058	79109-8458	X 79109-1108	-
20	.709	(18.00)	.795	(20.19)	.183	(4.65)	79109-1009	79109-8409	79109-1059	79109-8459	X 79109-1109	-
22	.787	(20.00)	.874	(22.19)	.183	(4.65)	79109-1010	79109-8410	79109-1060	79109-8460	X 79109-1110	-
24	.866	(22.00)	.952	(24.19)	.183	(4.65)	79109-1011	79109-8411	79109-1061	79109-8461	X 79109-1111	-
26	.945	(24.00)	1.031	(26.19)	.183	(4.65)	79109-1012	79109-8412	79109-1062	79109-8462	X 79109-1112	-
28	1.024	(26.00)	1.110	(28.19)	.183	(4.65)	79109-1013	79109-8413	79109-1063	79109-8463	X 79109-1113	-
30	1.102	(28.00)	1.188	(30.19)	.183	(4.65)	79109-1014	79109-8414	79109-1064	79109-8464	X 79109-1114	-
32	1.181	(30.00)	1.267	(32.19)	.183	(4.65)	79109-1015	79109-8415	79109-1065	79109-8465	X 79109-1115	-
34	1.260	(32.00)	1.346	(34.19)	.183	(4.65)	79109-1016	79109-8416	79109-1066	79109-8466	X 79109-1116	-
36	1.338	(34.00)	1.425	(36.19)	.183	(4.65)	79109-1017	79109-8417	79109-1067	79109-8467	X 79109-1117	-
38	1.417	(36.00)	1.504	(38.19)	.183	(4.65)	79109-1018	79109-8418	79109-1068	79109-8468	X 79109-1118	-
40	1.496	(38.00)	1.582	(40.19)	.183	(4.65)	79109-1019	79109-8419	79109-1069	79109-8469	X 79109-1119	-
42	1.575	(40.00)	1.661	(42.19)	.183	(4.65)	79109-1020	79109-8420	79109-1070	79109-8470	X 79109-1120	-
44	1.654	(42.00)	1.740	(44.19)	.183	(4.65)	79109-1021	79109-8421	79109-1071	79109-8471	X 79109-1121	-
46	1.732	(44.00)	1.818	(46.19)	.183	(4.65)	79109-1022	79109-8422	79109-1072	79109-8472	X 79109-1122	-
48	1.811	(46.00)	1.897	(48.19)	.183	(4.65)	79109-1023	79109-8423	79109-1073	79109-8473	X 79109-1123	-
50	1.890	(48.00)	1.976	(50.19)	.183	(4.65)	79109-1024	79109-8424	79109-1074	79109-8474	X 79109-1124	-

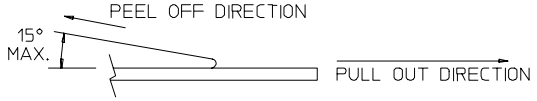
"X" INDICATES TOOLING NOT AVAILABLE

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. TAPE & REEL QUANTITY = 500 PCS/REEL

SPECIAL PACKAGING (TAPE PACKED WITHOUT CAP)

CKT. SIZE	DIM. "A" INCH	DIM. "A" MM	DIM. "B" INCH	DIM. "B" MM	DIM. "D" INCH	DIM. "D" MM	ITEM NO.	PLATING OPTION SEE SHEET 1
06	.157	(4.00)	.244	(6.19)	.183	(4.65)	79109-9004	5
20	.709	(18.00)	.795	(20.19)	.183	(4.65)	79109-9005	5
50	1.890	(48.00)	1.976	(50.19)	.183	(4.65)	79109-9006	5
34	1.260	(32.00)	1.346	(34.19)	.183	(4.65)	79109-9007	5

OBS TIN/LEAD P/N
EC NO: S2006-0728 2006/03/14
DRWN:MLONG 2006/03/21
CHKD:GOH
APPR:PTLIM 2006/03/22
DESCRIPTION
REV M

QUALITY SYMBOLS
▼=0
▽C=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± .015
1 PLACE	± 0.38	± ---

ANGULAR ± 3 °

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

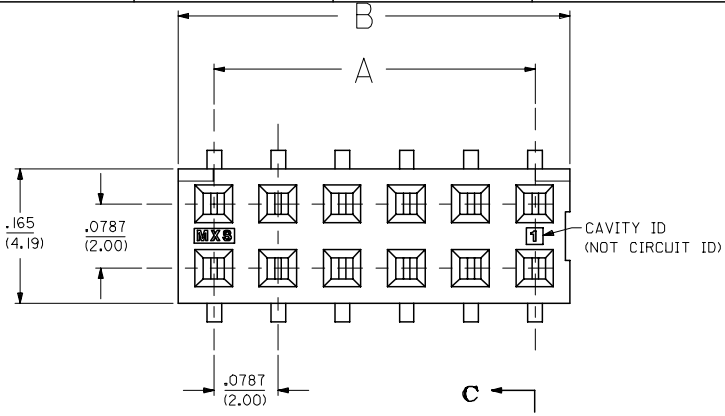
DIMENSION STYLE: IN/MM
SCALE: NTS
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

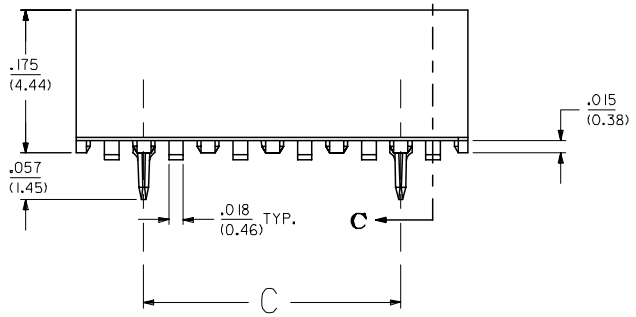
		DATE
DRAWN BY	AAB	1989/05/15
CHECKED BY	MJM	1989/05/15
APPROVED BY	WAZ	1989/05/15

TITLE: 2MM DUAL ROW VERTICAL RECEPTACLE, SMT

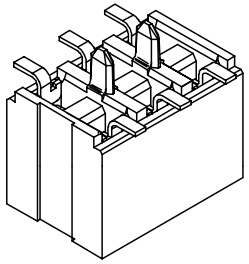
MOLEX INCORPORATED

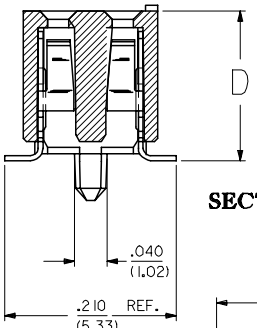
MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SDA-79109-****
SHEET NO.: 2 OF 6
SIZE: A3





PEG OPTION





SECTION C-C

PLATING OPTION:

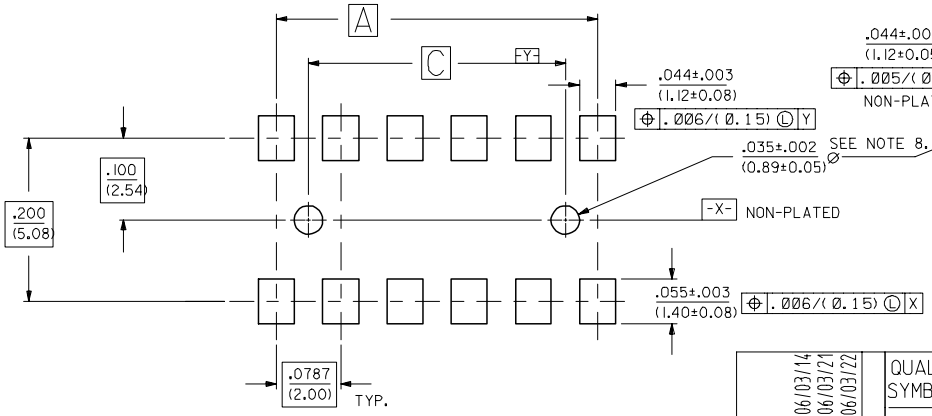
(4) 30uin (0.75um) MIN. GOLD PLATE IN SELECTED AREA AND 75uin (1.88um) MIN. TIN IN SELECTED AREA OVER 50uin (1.25um) MIN. NICKEL OVER-ALL.

(5) 15uin (0.38um) 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 (0.13um) MIN. GOLD PLATE IN SELECTED AREA AND 75uin (1.88um) MIN. TIN IN SELECTED AREA OVER 50uin (1.25um) MIN. NICKEL OVER-ALL.

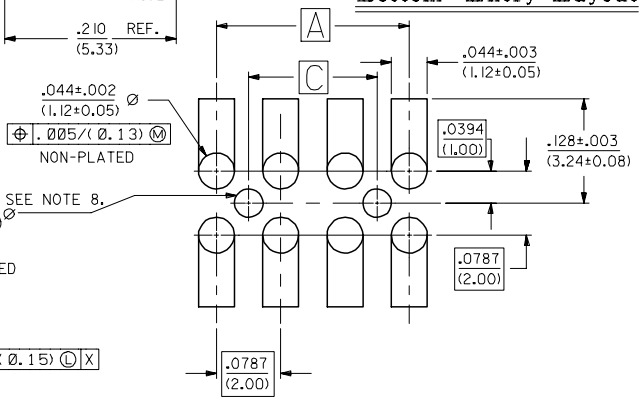
NOTES:

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.



Recommended P.C. Board Layouts

Bottom Entry Layout



REV	DESCRIPTION
M	OBS TIN/LEAD P/N EC NO: S2006-0728 DRWN:MLONG 2006/03/14 CHKD:CGOH 2006/03/21 APPR:PTLIM 2006/03/22

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± .015
1 PLACE	± 0.38	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE	IN/MM
SCALE	NTS
DESIGN UNITS	INCH
	THIRD ANGLE PROJECTION
DRAWN BY / DATE	AAB 1989/05/15
CHECKED BY / DATE	MJM 1989/05/15
APPROVED BY / DATE	WAZ 1989/05/15
TITLE	2MM DUAL ROW VERTICAL RECEPTACLE, SMT
	MOLEX INCORPORATED
MATERIAL NO.	SEE TABLE
DOCUMENT NO.	SDA-79109-****
SHEET NO.	3 OF 6
SIZE	A3

SPECIAL - PEG OPTION WITH CUSTOM TERMINAL FEET

CKT. SIZE	DIM. "A" INCH	DIM. "A" MM	DIM. "B" INCH	DIM. "B" MM	DIM. "C" INCH	DIM. "C" MM	DIM. "D" INCH	DIM. "D" MM	PLATING OPTION 5 ITEM NO. TUBE PACKED (WITHOUT CAP)		PLATING OPTION 5 ITEM NO. TAPE PACKED (WITH CAP)		PLATING OPTION 5 ITEM NO. TUBE PACKED (WITHOUT CAP)		PLATING OPTION 5 ITEM NO. TAPE PACKED (WITH CAP)		PLATE ITEM NO. TUBE PACKED (WITHOUT CAP)		PLATE ITEM NO. TAPE PACKED (WITH CAP)	
04	.079	(2.00)	.165	(4.19)	-	-	.185	(4.70)	X		X	79109-8751	X		X		X		X	
06	.157	(4.00)	.244	(6.19)	.079	(2.00)	.185	(4.70)	X		X	79109-8752	X		X		X		X	
08	.236	(6.00)	.322	(8.19)	.157	(4.00)	.185	(4.70)	X		X	79109-8753	X		X		X		X	
10	.315	(8.00)	.401	(10.19)	.236	(6.00)	.185	(4.70)	X		X	79109-8754	X		X		X		X	
12	.394	(10.00)	.480	(12.19)	.315	(8.00)	.185	(4.70)	X		X	79109-8755	X		X		X		X	
14	.472	(12.00)	.559	(14.19)	.394	(10.00)	.185	(4.70)	X		X	79109-8756	X		X		X		X	
16	.551	(14.00)	.637	(16.19)	.472	(12.00)	.185	(4.70)	X		X	79109-8757	X		X		X		X	
18	.630	(16.00)	.716	(18.19)	.551	(14.00)	.185	(4.70)	X		X	79109-8758	X		X		X		X	
20	.709	(18.00)	.795	(20.19)	.630	(16.00)	.185	(4.70)	X		X	79109-8759	X		X		X		X	
22	.787	(20.00)	.874	(22.19)	.709	(18.00)	.185	(4.70)	X		X	79109-8760	X		X		X		X	
24	.866	(22.00)	.952	(24.19)	.787	(20.00)	.185	(4.70)	X		X	79109-8761	X		X		X		X	
26	.945	(24.00)	1.031	(26.19)	.866	(22.00)	.185	(4.70)	X		X	79109-8762	X		X		X		X	
28	1.024	(26.00)	1.110	(28.19)	.945	(24.00)	.185	(4.70)	X		X	79109-8763	X		X		X		X	
30	1.102	(28.00)	1.188	(30.19)	1.024	(26.00)	.185	(4.70)		79109-7010		79109-8764	X			79109-7065	X		X	
32	1.181	(30.00)	1.267	(32.19)	1.102	(28.00)	.185	(4.70)	X		X	79109-8765	X		X		X		X	
34	1.260	(32.00)	1.346	(34.19)	1.181	(30.00)	.185	(4.70)	X		X	79109-8766	X		X		X		X	
36	1.338	(34.00)	1.425	(36.19)	1.260	(32.00)	.185	(4.70)	X		X	79109-8767	X		X		X		X	
38	1.417	(36.00)	1.504	(38.19)	1.338	(34.00)	.185	(4.70)	X		X	79109-8768	X		X		X		X	
40	1.496	(38.00)	1.582	(40.19)	1.417	(36.00)	.185	(4.70)	X		X	79109-8769	X		X		X		X	
42	1.575	(40.00)	1.661	(42.19)	1.496	(38.00)	.185	(4.70)	X		X	N.A.	X		X		X		X	N.A.
44	1.654	(42.00)	1.740	(44.19)	1.575	(40.00)	.185	(4.70)		79109-7016	X	N.A.	X		X		X		X	N.A.
46	1.732	(44.00)	1.818	(46.19)	1.654	(42.00)	.185	(4.70)	X		X	N.A.	X		X		X		X	N.A.
48	1.811	(46.00)	1.897	(48.19)	1.732	(44.00)	.185	(4.70)	X		X	N.A.	X		X		X		X	N.A.
50	1.890	(48.00)	1.976	(50.19)	1.811	(46.00)	.185	(4.70)		79109-7015	X	N.A.	X		X		X		X	N.A.

"X" INDICATES TOOLING NOT AVAILABLE

SPECIAL - PEG OPTION WITH CUSTOM T.F & VOIDED CIRCUITS

CKT. SIZE	ASSEMBLY ITEM NO. TUBE PACKED (WITHOUT CAP)		ASSEMBLY ITEM NO. TAPE PACKED (WITH CAP)		VOID LOCATION(S) SEE SHEET 1 FOR CONVENTION ROW	VOID LOCATION(S) SEE SHEET 1 FOR CONVENTION CKT. NO.(s)	PLATING OPTION	DIM. "A" INCH	DIM. "A" MM	DIM. "B" INCH	DIM. "B" MM	DIM. "C" INCH	DIM. "C" MM	DIM. "D" INCH	DIM. "D" MM
48		79109-7011	X	79109-8385	ROW A	1, 24	5	1.811	(46.00)	1.897	(48.19)	1.732	(44.00)	.185	(4.70)
42		79109-7012	X	79109-8386	ROW A	1, 21	5	1.575	(40.00)	1.661	(42.19)	1.496	(38.00)	.185	(4.70)
20		79109-7013		79109-8387	ROW A	1, 10	5	.709	(18.00)	.795	(20.19)	.630	(16.00)	.185	(4.70)
50		79109-7014	X	79109-8388	ROW B	13	5	1.890	(48.00)	1.976	(50.19)	1.811	(46.00)	.185	(4.70)

OBS TIN/LEAD P/N
EC NO: S2006-0728 2006/03/14
DRWN:MLONG 2006/03/21
CHKD:GOH
APPR:PTLIM 2006/03/22
DESCRIPTION
M
REV

QUALITY SYMBOLS
▼=0
▽C=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± .015
1 PLACE	± 0.38	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: NTS
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: AAB DATE: 1989/05/15
CHECKED BY: MJM DATE: 1989/05/15
APPROVED BY: WAZ DATE: 1989/05/15

TITLE: 2MM DUAL ROW VERTICAL RECEPTACLE, SMT

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SDA-79109-****
SHEET NO.: 5 OF 6

SIZE A3

VOIDED CIRCUIT OPTION

ASSEMBLIES WITHOUT PEGS

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

ASSEMBLIES WITH PEGS

CKT. SIZE	ASSEMBLY (WITHOUT CAPIN TUBE) ITEM NO.	ENG. NO.	VOID LOCATION(S) SEE SHEET 1 FOR CONVENTION ROW	CKT. NO.(S)	PLATING OPTION	DIM. "A" INCH	MM	DIM. "B" INCH	MM	DIM. "C" INCH	MM	DIM. "D" INCH	MM
48	79109-6011	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	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.

OBS TIN/LEAD P/N
EC NO: S2006-0728 2006/03/14
DRWN:MLONG 2006/03/21
CHKD:GOH
APPR:PTLIM 2006/03/22
DESCRIPTION
M
REV

QUALITY SYMBOLS
▼=0
▽C=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± .015
1 PLACE	± 0.38	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: NTS
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

		DATE
DRAWN BY	AAB	1989/05/15
CHECKED BY	MJM	1989/05/15
APPROVED BY	WAZ	1989/05/15

TITLE: 2MM DUAL ROW VERTICAL RECEPTACLE, SMT

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SDA-79109-****
SHEET NO.: 6 OF 6
SIZE: A3

PEG OPTION

CKT. SIZE	DIM. "A" INCH	DIM. "A" MM	DIM. "B" INCH	DIM. "B" MM	DIM. "C" INCH	DIM. "C" MM	DIM. "D" INCH	DIM. "D" MM	PLATING OPTION 5 ITEM NO. TUBE PACKED (WITHOUT CAP)	PLATING OPTION 5 ITEM NO. TAPE PACKED (WITH CAP)	PLATING OPTION 4 ITEM NO. TUBE PACKED (WITHOUT CAP)	PLATING OPTION 4 ITEM NO. TAPE PACKED (WITH CAP)	PLATING OPTION 6 ITEM NO. TUBE PACKED (WITHOUT CAP)	PLATING OPTION 6 ITEM NO. TAPE PACKED (WITH CAP)
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

SPECIAL PACKAGING (TAPE PACKED WITHOUT CAP)

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

OBS TIN/LEAD P/N
EC NO: S2006-0728 2006/03/14
DRWN:MLONG 2006/03/21
CHKD:CGOH 2006/03/22
APPR:PTLIM
DESCRIPTION
M
REV

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± .015
1 PLACE	± 0.38	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: NTS
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: AAB DATE: 1989/05/15
CHECKED BY: MJM DATE: 1989/05/15
APPROVED BY: WAZ DATE: 1989/05/15

TITLE: 2MM DUAL ROW VERTICAL RECEPTACLE, SMT

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SDA-79109-****
SHEET NO.: 4 OF 6
SIZE: A3

TIN OPTION

CKT. SIZE	DIM. "A" INCH	DIM. "A" MM	DIM. "B" INCH	DIM. "B" MM	DIM. "D" INCH	DIM. "D" MM	PLATING OPTION 5 ITEM NO. TUBE PACKED (WITHOUT CAP)	PLATING OPTION 5 ITEM NO. TAPE PACKED (WITH CAP)	PLATING OPTION 4 ITEM NO. TUBE PACKED (WITHOUT CAP)	PLATING OPTION 4 ITEM NO. TAPE PACKED (WITH CAP)	PLATING OPTION 6 ITEM NO. TUBE PACKED (WITHOUT CAP)	PLATING OPTION 6 ITEM NO. TAPE PACKED (WITH CAP)
04	.079	(2.00)	.165	(4.19)	.183	(4.65)	79109-1001	79109-8401	79109-1051	79109-8451	X 79109-1101	-
06	.157	(4.00)	.244	(6.19)	.183	(4.65)	79109-1002	79109-8402	79109-1052	79109-8452	X 79109-1102	-
08	.236	(6.00)	.322	(8.19)	.183	(4.65)	79109-1003	79109-8403	79109-1053	79109-8453	X 79109-1103	-
10	.315	(8.00)	.401	(10.19)	.183	(4.65)	79109-1004	79109-8404	79109-1054	79109-8454	X 79109-1104	-
12	.394	(10.00)	.480	(12.19)	.183	(4.65)	79109-1005	79109-8405	79109-1055	79109-8455	X 79109-1105	-
14	.472	(12.00)	.559	(14.19)	.183	(4.65)	79109-1006	79109-8406	79109-1056	79109-8456	X 79109-1106	-
16	.551	(14.00)	.637	(16.19)	.183	(4.65)	79109-1007	79109-8407	79109-1057	79109-8457	X 79109-1107	-
18	.630	(16.00)	.716	(18.19)	.183	(4.65)	79109-1008	79109-8408	79109-1058	79109-8458	X 79109-1108	-
20	.709	(18.00)	.795	(20.19)	.183	(4.65)	79109-1009	79109-8409	79109-1059	79109-8459	X 79109-1109	-
22	.787	(20.00)	.874	(22.19)	.183	(4.65)	79109-1010	79109-8410	79109-1060	79109-8460	X 79109-1110	-
24	.866	(22.00)	.952	(24.19)	.183	(4.65)	79109-1011	79109-8411	79109-1061	79109-8461	X 79109-1111	-
26	.945	(24.00)	1.031	(26.19)	.183	(4.65)	79109-1012	79109-8412	79109-1062	79109-8462	X 79109-1112	-
28	1.024	(26.00)	1.110	(28.19)	.183	(4.65)	79109-1013	79109-8413	79109-1063	79109-8463	X 79109-1113	-
30	1.102	(28.00)	1.188	(30.19)	.183	(4.65)	79109-1014	79109-8414	79109-1064	79109-8464	X 79109-1114	-
32	1.181	(30.00)	1.267	(32.19)	.183	(4.65)	79109-1015	79109-8415	79109-1065	79109-8465	X 79109-1115	-
34	1.260	(32.00)	1.346	(34.19)	.183	(4.65)	79109-1016	79109-8416	79109-1066	79109-8466	X 79109-1116	-
36	1.338	(34.00)	1.425	(36.19)	.183	(4.65)	79109-1017	79109-8417	79109-1067	79109-8467	X 79109-1117	-
38	1.417	(36.00)	1.504	(38.19)	.183	(4.65)	79109-1018	79109-8418	79109-1068	79109-8468	X 79109-1118	-
40	1.496	(38.00)	1.582	(40.19)	.183	(4.65)	79109-1019	79109-8419	79109-1069	79109-8469	X 79109-1119	-
42	1.575	(40.00)	1.661	(42.19)	.183	(4.65)	79109-1020	79109-8420	79109-1070	79109-8470	X 79109-1120	-
44	1.654	(42.00)	1.740	(44.19)	.183	(4.65)	79109-1021	79109-8421	79109-1071	79109-8471	X 79109-1121	-
46	1.732	(44.00)	1.818	(46.19)	.183	(4.65)	79109-1022	79109-8422	79109-1072	79109-8472	X 79109-1122	-
48	1.811	(46.00)	1.897	(48.19)	.183	(4.65)	79109-1023	79109-8423	79109-1073	79109-8473	X 79109-1123	-
50	1.890	(48.00)	1.976	(50.19)	.183	(4.65)	79109-1024	79109-8424	79109-1074	79109-8474	X 79109-1124	-

"X" INDICATES TOOLING NOT AVAILABLE

SPECIAL PACKAGING (TAPE PACKED WITHOUT CAP)

CKT. SIZE	DIM. "A" INCH	DIM. "A" MM	DIM. "B" INCH	DIM. "B" MM	DIM. "D" INCH	DIM. "D" MM	ITEM NO.	PLATING OPTION SEE SHEET 1
06	.157	(4.00)	.244	(6.19)	.183	(4.65)	79109-9004	5
20	.709	(18.00)	.795	(20.19)	.183	(4.65)	79109-9005	5
50	1.890	(48.00)	1.976	(50.19)	.183	(4.65)	79109-9006	5
34	1.260	(32.00)	1.346	(34.19)	.183	(4.65)	79109-9007	5

UPDATE REVISION
EC NO: S2005-0714 2005/10/19
DRWN:KSEE 2005/10/19
CHKD:BHLOW 2005/11/06
APPR:PTLIM
DESCRIPTION
REV
L3

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± .015
1 PLACE	± 0.38	± ---

ANGULAR ± 3 °

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: NTS
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: AAB DATE: 1989/05/15
CHECKED BY: MJM DATE: 1989/05/15
APPROVED BY: WAZ DATE: 1989/05/15

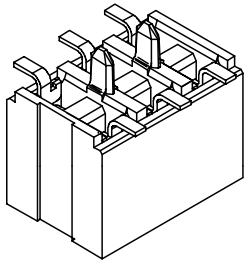
TITLE: SALES DRAWING 2MM DUAL ROW VERTICAL RECEPTACLE, SMT

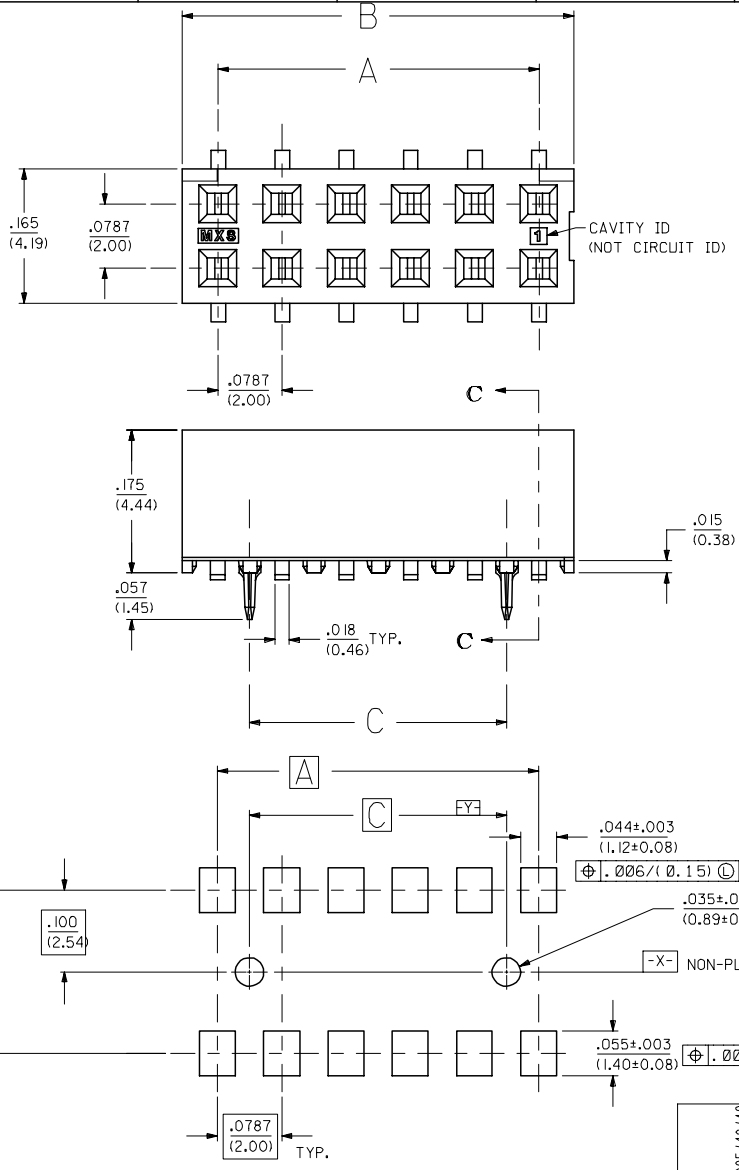
molex MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SDA-79109-****
SHEET NO.: 3 OF 9

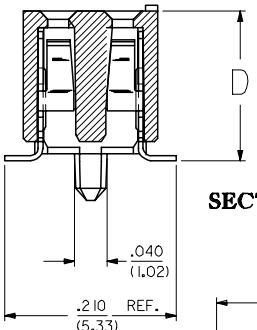
SIZE A3

PEG OPTION



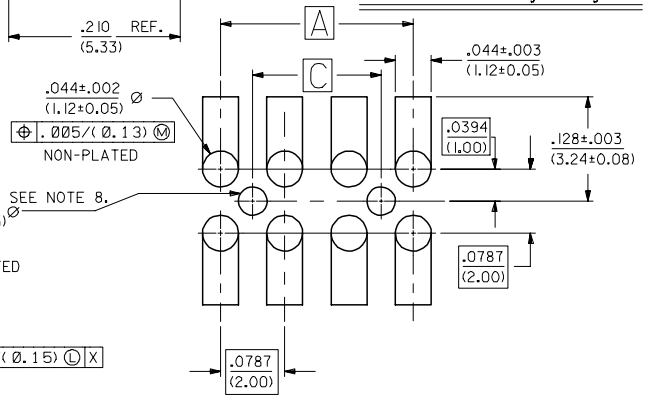


Recommended P.C. Board Layouts



SECTION C-C

Bottom Entry Layout



PLATING OPTION:

(1) 30uin (0.75um) MIN. GOLD PLATE IN SELECTED AREA AND 75uin (1.88um) MIN. TIN/LEAD IN SELECTED AREA OVER 50uin (1.25um) MIN. NICKEL OVER-ALL.

(2) 15uin (0.38um) MIN. GOLD PLATE IN SELECTED AREA AND 75uin (1.88um) MIN. TIN/LEAD IN SELECTED AREA OVER 50uin (1.25um) MIN. NICKEL OVER-ALL.

(3) 5uin (0.13um) MIN. GOLD PLATE IN SELECTED AREA AND 75uin (1.88um) MIN. TIN/LEAD IN SELECTED AREA OVER 50uin (1.25um) MIN. NICKEL OVER-ALL.

(4) 30uin (0.75um) 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 (0.38um) 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 (0.13um) 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. PS-79107 DOES NOT APPLY TO 608 PLATING.
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.

UPDATE REVISION
EC NO: S2005-0714
DRWN:KSEE 2005/10/19
CHKD:BHLOW 2005/10/19
APPR:PTLIM 2005/11/06
DESCRIPTION
L3
REV

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± .015
1 PLACE	± 0.38	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: NTS
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: RWB DATE: 1991/07/01
CHECKED BY: JD DATE: 1991/07/01
APPROVED BY: WAZ DATE: 1991/07/01
MATERIAL NO.: SEE TABLE

TITLE: SALES DRAWING 2MM DUAL ROW VERTICAL RECEPTACLE, SMT
MOLEX INCORPORATED
DOCUMENT NO.: SDA-79109-****
SHEET NO.: 4 OF 9
SIZE: A3

PEG OPTION (TIN/LEAD)

CKT. SIZE	DIM. "A" INCH	DIM. "A" MM	DIM. "B" INCH	DIM. "B" MM	DIM. "C" INCH	DIM. "C" MM	DIM. "D" INCH	DIM. "D" MM	PLATING OPTION 2 ITEM NO. TUBE PACKED (WITHOUT CAP)	PLATING OPTION 2 ITEM NO. TAPE PACKED (WITH CAP)	PLATING OPTION 1 ITEM NO. TUBE PACKED (WITHOUT CAP)	PLATING OPTION 1 ITEM NO. TAPE PACKED (WITH CAP)	PLATING OPTION 3	PLATING OPTION 3 ITEM NO. TUBE PACKED (WITHOUT CAP)	PLATING OPTION 3 ITEM NO. TAPE PACKED (WITH CAP)
04	.079	(2.00)	.165	(4.19)	-	-	.183	(4.65)	79109-0201	79109-8201	79109-0251	79109-8251	X	79109-0301	-
06	.157	(4.00)	.244	(6.19)	.079	(2.00)	.183	(4.65)	79109-0202	79109-8202	79109-0252	79109-8252	X	79109-0302	-
08	.236	(6.00)	.322	(8.19)	.157	(4.00)	.183	(4.65)	79109-0203	79109-8203	79109-0253	79109-8253	X	79109-0303	-
10	.315	(8.00)	.401	(10.19)	.236	(6.00)	.183	(4.65)	79109-0204	79109-8204	79109-0254	79109-8254	X	79109-0304	-
12	.394	(10.00)	.480	(12.19)	.315	(8.00)	.183	(4.65)	79109-0205	79109-8205	79109-0255	79109-8255	X	79109-0305	-
14	.472	(12.00)	.559	(14.19)	.394	(10.00)	.183	(4.65)	79109-0206	79109-8206	79109-0256	79109-8256	X	79109-0306	-
16	.551	(14.00)	.637	(16.19)	.472	(12.00)	.183	(4.65)	79109-0207	79109-8207	79109-0257	79109-8257	X	79109-0307	-
18	.630	(16.00)	.716	(18.19)	.551	(14.00)	.183	(4.65)	79109-0208	79109-8208	79109-0258	79109-8258	X	79109-0308	-
20	.709	(18.00)	.795	(20.19)	.630	(16.00)	.183	(4.65)	79109-0209	79109-8209	79109-0259	79109-8259	X	79109-0309	-
22	.787	(20.00)	.874	(22.19)	.709	(18.00)	.183	(4.65)	79109-0210	79109-8210	79109-0260	79109-8260	X	79109-0310	-
24	.866	(22.00)	.952	(24.19)	.787	(20.00)	.183	(4.65)	79109-0211	79109-8211	79109-0261	79109-8261	X	79109-0311	-
26	.945	(24.00)	1.031	(26.19)	.866	(22.00)	.183	(4.65)	79109-0212	79109-8212	79109-0262	79109-8262	X	79109-0312	-
28	1.024	(26.00)	1.110	(28.19)	.945	(24.00)	.183	(4.65)	79109-0213	79109-8213	79109-0263	79109-8263	X	79109-0313	-
30	1.102	(28.00)	1.188	(30.19)	1.024	(26.00)	.183	(4.65)	79109-0214	79109-8214	79109-0264	79109-8264	X	79109-0314	-
32	1.181	(30.00)	1.267	(32.19)	1.102	(28.00)	.183	(4.65)	79109-0215	79109-8215	79109-0265	79109-8265	X	79109-0315	-
34	1.260	(32.00)	1.346	(34.19)	1.181	(30.00)	.183	(4.65)	79109-0216	79109-8216	79109-0266	79109-8266	X	79109-0316	-
36	1.338	(34.00)	1.425	(36.19)	1.260	(32.00)	.183	(4.65)	79109-0217	79109-8217	79109-0267	79109-8267	X	79109-0317	-
38	1.417	(36.00)	1.504	(38.19)	1.338	(34.00)	.183	(4.65)	79109-0218	79109-8218	79109-0268	79109-8268	X	79109-0318	-
40	1.496	(38.00)	1.582	(40.19)	1.417	(36.00)	.183	(4.65)	79109-0219	79109-8219	79109-0269	79109-8269	X	79109-0319	-
42	1.575	(40.00)	1.661	(42.19)	1.496	(38.00)	.183	(4.65)	79109-0220	79109-8220	79109-0270	79109-8270	X	79109-0320	-
44	1.654	(42.00)	1.740	(44.19)	1.575	(40.00)	.183	(4.65)	79109-0221	79109-8221	79109-0271	79109-8271	X	79109-0321	-
46	1.732	(44.00)	1.818	(46.19)	1.654	(42.00)	.183	(4.65)	79109-0222	79109-8222	79109-0272	79109-8272	X	79109-0322	-
48	1.811	(46.00)	1.897	(48.19)	1.732	(44.00)	.183	(4.65)	79109-0223	79109-8223	79109-0273	79109-8273	X	79109-0323	-
50	1.890	(48.00)	1.976	(50.19)	1.811	(46.00)	.183	(4.65)	79109-0224	79109-8224	79109-0274	79109-8274	X	79109-0324	-

"X" INDICATES TOOLING NOT AVAILABLE

SPECIAL PACKAGING (TAPE PACKED WITHOUT CAP)

CKT. SIZE	DIM. "A" INCH	DIM. "A" MM	DIM. "B" INCH	DIM. "B" MM	DIM. "D" INCH	DIM. "D" MM	ITEM NO.	PLATING OPTION SEE SHEET 1
50	1.890	(48.00)	1.976	(50.19)	.183	(4.65)	79109-9102	2

UPDATE REVISION
EC NO: S2005-0714
DRWN:KSEE 2005/10/19
CHKD:BHLOW 2005/10/19
APPR:PTLIM 2005/11/06
DESCRIPTION
REV
L3

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± .015
1 PLACE	± 0.38	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: NTS
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: RWB DATE: 1991/07/01
CHECKED BY: JD DATE: 1991/07/01
APPROVED BY: WAZ DATE: 1991/07/01

TITLE: SALES DRAWING 2MM DUAL ROW, WITH PEG VERTICAL RECEPTACLE, SMT

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SDA-79109-****
SHEET NO.: 5 OF 9
SIZE: A3

PEG OPTION (TIN)

CKT. SIZE	DIM. "A" INCH	DIM. "A" MM	DIM. "B" INCH	DIM. "B" MM	DIM. "C" INCH	DIM. "C" MM	DIM. "D" INCH	DIM. "D" MM	PLATING OPTION 5 ITEM NO. TUBE PACKED (WITHOUT CAP)	PLATING OPTION 5 ITEM NO. TAPE PACKED (WITH CAP)	PLATING OPTION 4 ITEM NO. TUBE PACKED (WITHOUT CAP)	PLATING OPTION 4 ITEM NO. TAPE PACKED (WITH CAP)	PLATING OPTION 6 ITEM NO. TUBE PACKED (WITHOUT CAP)	PLATING OPTION 6 ITEM NO. TAPE PACKED (WITH CAP)
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

SPECIAL PACKAGING (TAPE PACKED WITHOUT CAP)

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

UPDATE REVISION
EC NO: S2005-0714
DRWN:KSEE 2005/10/19
CHKD:BHLOW 2005/10/19
APPR:PTLIM 2005/11/07
DESCRIPTION
REV
L3

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± .015
1 PLACE	± 0.38	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: NTS
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: RWB DATE: 1991/07/01
CHECKED BY: JD DATE: 1991/07/01
APPROVED BY: WAZ DATE: 1991/07/01

TITLE: SALES DRAWING 2MM DUAL ROW VERTICAL RECEPTACLE, SMT

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SDA-79109-****
SHEET NO.: 6 OF 9

SIZE A3

SPECIAL - PEG OPTION WITH CUSTOM TERMINAL FEET (TIN/LEAD)

CKT. SIZE	DIM. "A" INCH	DIM. "A" MM	DIM. "B" INCH	DIM. "B" MM	DIM. "C" INCH	DIM. "C" MM	DIM. "D" INCH	DIM. "D" MM	PLATING OPTION 2 ITEM NO. TUBE PACKED (WITHOUT CAP)		PLATING OPTION 2 ITEM NO. TAPE PACKED (WITH CAP)		PLATING OPTION 2 ITEM NO. TUBE PACKED (WITHOUT CAP)		PLATING OPTION 2 ITEM NO. TAPE PACKED (WITH CAP)		PLATE ITEM NO. TUBE PACKED (WITHOUT CAP)		PLATE ITEM NO. TAPE PACKED (WITH CAP)	
04	.079	(2.00)	.165	(4.19)	-	-	.185	(4.70)	X		X	79109-8351	X		X		X		X	
06	.157	(4.00)	.244	(6.19)	.079	(2.00)	.185	(4.70)	X		X	79109-8352	X		X		X		X	
08	.236	(6.00)	.322	(8.19)	.157	(4.00)	.185	(4.70)	X		X	79109-8353	X		X		X		X	
10	.315	(8.00)	.401	(10.19)	.236	(6.00)	.185	(4.70)	X		X	79109-8354	X		X		X		X	
12	.394	(10.00)	.480	(12.19)	.315	(8.00)	.185	(4.70)	X		X	79109-8355	X		X		X		X	
14	.472	(12.00)	.559	(14.19)	.394	(10.00)	.185	(4.70)	X		X	79109-8356	X		X		X		X	
16	.551	(14.00)	.637	(16.19)	.472	(12.00)	.185	(4.70)	X		X	79109-8357	X		X		X		X	
18	.630	(16.00)	.716	(18.19)	.551	(14.00)	.185	(4.70)	X		X	79109-8358	X		X		X		X	
20	.709	(18.00)	.795	(20.19)	.630	(16.00)	.185	(4.70)	X		X	79109-8359	X		X		X		X	
22	.787	(20.00)	.874	(22.19)	.709	(18.00)	.185	(4.70)	X		X	79109-8360	X		X		X		X	
24	.866	(22.00)	.952	(24.19)	.787	(20.00)	.185	(4.70)	X		X	79109-8361	X		X		X		X	
26	.945	(24.00)	1.031	(26.19)	.866	(22.00)	.185	(4.70)	X		X	79109-8362	X		X		X		X	
28	1.024	(26.00)	1.110	(28.19)	.945	(24.00)	.185	(4.70)	X		X	79109-8363	X		X		X		X	
30	1.102	(28.00)	1.188	(30.19)	1.024	(26.00)	.185	(4.70)		79109-7000		79109-8364	X			79109-7064	X		X	
32	1.181	(30.00)	1.267	(32.19)	1.102	(28.00)	.185	(4.70)	X		X	79109-8365	X		X		X		X	
34	1.260	(32.00)	1.346	(34.19)	1.181	(30.00)	.185	(4.70)	X		X	79109-8366	X		X		X		X	
36	1.338	(34.00)	1.425	(36.19)	1.260	(32.00)	.185	(4.70)	X		X	79109-8367	X		X		X		X	
38	1.417	(36.00)	1.504	(38.19)	1.338	(34.00)	.185	(4.70)	X		X	79109-8368	X		X		X		X	
40	1.496	(38.00)	1.582	(40.19)	1.417	(36.00)	.185	(4.70)	X		X	79109-8369	X		X		X		X	
42	1.575	(40.00)	1.661	(42.19)	1.496	(38.00)	.185	(4.70)	X		X	N.A.	X		X		X		X	N.A.
44	1.654	(42.00)	1.740	(44.19)	1.575	(40.00)	.185	(4.70)		79109-7006	X	N.A.	X		X		X		X	N.A.
46	1.732	(44.00)	1.818	(46.19)	1.654	(42.00)	.185	(4.70)	X		X	N.A.	X		X		X		X	N.A.
48	1.811	(46.00)	1.897	(48.19)	1.732	(44.00)	.185	(4.70)	X		X	N.A.	X		X		X		X	N.A.
50	1.890	(48.00)	1.976	(50.19)	1.811	(46.00)	.185	(4.70)		79109-7005	X	N.A.	X		X		X		X	N.A.

"X" INDICATES TOOLING NOT AVAILABLE

SPECIAL - PEG OPTION WITH CUSTOM T.F & VOIDED CIRCUITS (TIN/LEAD)

CKT. SIZE	ASSEMBLY ITEM NO. TUBE PACKED (WITHOUT CAP)		ASSEMBLY ITEM NO. TAPE PACKED (WITH CAP)		VOID LOCATION(S) SEE SHEET 1 FOR CONVENTION ROW	VOID LOCATION(S) SEE SHEET 1 FOR CONVENTION CKT. NO.(s)	PLATING OPTION	DIM. "A" INCH	DIM. "A" MM	DIM. "B" INCH	DIM. "B" MM	DIM. "C" INCH	DIM. "C" MM	DIM. "D" INCH	DIM. "D" MM
48		79109-7001	X	79109-8381	ROW A	1, 24	2	1.811	(46.00)	1.897	(48.19)	1.732	(44.00)	.185	(4.70)
42		79109-7002	X	79109-8382	ROW A	1, 21	2	1.575	(40.00)	1.661	(42.19)	1.496	(38.00)	.185	(4.70)
20		79109-7003		79109-8383	ROW A	1, 10	2	.709	(18.00)	.795	(20.19)	.630	(16.00)	.185	(4.70)
50		79109-7004	X	79109-8384	ROW B	13	2	1.890	(48.00)	1.976	(50.19)	1.811	(46.00)	.185	(4.70)

UPDATE REVISION
EC NO: S2005-0714
DRWN:KSEE 2005/10/19
CHKD:BHLOW 2005/10/19
APPR:PTLIM 2005/11/07
DESCRIPTION
REV
L3

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± .015
1 PLACE	± 0.38	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: NTS
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

	DRAWN BY	DATE
	RWB	1991/07/18
	CHECKED BY	DATE
	JD	1991/07/18
	APPROVED BY	DATE
	WAZ	1991/07/18

TITLE
SALES DRAWING
2MM DUAL ROW
VERTICAL RECEPTACLE, SMT

molex MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SDA-79109-****
SHEET NO.: 7 OF 9

SIZE A3

SPECIAL - PEG OPTION WITH CUSTOM TERMINAL FEET (TIN)

CKT. SIZE	DIM. "A" INCH	DIM. "A" MM	DIM. "B" INCH	DIM. "B" MM	DIM. "C" INCH	DIM. "C" MM	DIM. "D" INCH	DIM. "D" MM	PLATING OPTION 5 ITEM NO. TUBE PACKED (WITHOUT CAP)		PLATING OPTION 5 ITEM NO. TAPE PACKED (WITH CAP)		PLATING OPTION 5 ITEM NO. TUBE PACKED (WITHOUT CAP)		PLATING OPTION 5 ITEM NO. TAPE PACKED (WITH CAP)		PLATE ITEM NO. TUBE PACKED (WITHOUT CAP)		PLATE ITEM NO. TAPE PACKED (WITH CAP)	
04	.079	(2.00)	.165	(4.19)	-	-	.185	(4.70)	X		X	79109-8751	X		X		X		X	
06	.157	(4.00)	.244	(6.19)	.079	(2.00)	.185	(4.70)	X		X	79109-8752	X		X		X		X	
08	.236	(6.00)	.322	(8.19)	.157	(4.00)	.185	(4.70)	X		X	79109-8753	X		X		X		X	
10	.315	(8.00)	.401	(10.19)	.236	(6.00)	.185	(4.70)	X		X	79109-8754	X		X		X		X	
12	.394	(10.00)	.480	(12.19)	.315	(8.00)	.185	(4.70)	X		X	79109-8755	X		X		X		X	
14	.472	(12.00)	.559	(14.19)	.394	(10.00)	.185	(4.70)	X		X	79109-8756	X		X		X		X	
16	.551	(14.00)	.637	(16.19)	.472	(12.00)	.185	(4.70)	X		X	79109-8757	X		X		X		X	
18	.630	(16.00)	.716	(18.19)	.551	(14.00)	.185	(4.70)	X		X	79109-8758	X		X		X		X	
20	.709	(18.00)	.795	(20.19)	.630	(16.00)	.185	(4.70)	X		X	79109-8759	X		X		X		X	
22	.787	(20.00)	.874	(22.19)	.709	(18.00)	.185	(4.70)	X		X	79109-8760	X		X		X		X	
24	.866	(22.00)	.952	(24.19)	.787	(20.00)	.185	(4.70)	X		X	79109-8761	X		X		X		X	
26	.945	(24.00)	1.031	(26.19)	.866	(22.00)	.185	(4.70)	X		X	79109-8762	X		X		X		X	
28	1.024	(26.00)	1.110	(28.19)	.945	(24.00)	.185	(4.70)	X		X	79109-8763	X		X		X		X	
30	1.102	(28.00)	1.188	(30.19)	1.024	(26.00)	.185	(4.70)		79109-7010		79109-8764	X			79109-7065	X		X	
32	1.181	(30.00)	1.267	(32.19)	1.102	(28.00)	.185	(4.70)	X		X	79109-8765	X		X		X		X	
34	1.260	(32.00)	1.346	(34.19)	1.181	(30.00)	.185	(4.70)	X		X	79109-8766	X		X		X		X	
36	1.338	(34.00)	1.425	(36.19)	1.260	(32.00)	.185	(4.70)	X		X	79109-8767	X		X		X		X	
38	1.417	(36.00)	1.504	(38.19)	1.338	(34.00)	.185	(4.70)	X		X	79109-8768	X		X		X		X	
40	1.496	(38.00)	1.582	(40.19)	1.417	(36.00)	.185	(4.70)	X		X	79109-8769	X		X		X		X	
42	1.575	(40.00)	1.661	(42.19)	1.496	(38.00)	.185	(4.70)	X		X	N.A.	X		X		X		X	N.A.
44	1.654	(42.00)	1.740	(44.19)	1.575	(40.00)	.185	(4.70)		79109-7016	X	N.A.	X		X		X		X	N.A.
46	1.732	(44.00)	1.818	(46.19)	1.654	(42.00)	.185	(4.70)	X		X	N.A.	X		X		X		X	N.A.
48	1.811	(46.00)	1.897	(48.19)	1.732	(44.00)	.185	(4.70)	X		X	N.A.	X		X		X		X	N.A.
50	1.890	(48.00)	1.976	(50.19)	1.811	(46.00)	.185	(4.70)		79109-7015	X	N.A.	X		X		X		X	N.A.

"X" INDICATES TOOLING NOT AVAILABLE

SPECIAL - PEG OPTION WITH CUSTOM T.F & VOIDED CIRCUITS (TIN)

CKT. SIZE	ASSEMBLY ITEM NO. TUBE PACKED (WITHOUT CAP)		ASSEMBLY ITEM NO. TAPE PACKED (WITH CAP)		VOID LOCATION(S) SEE SHEET 1 FOR CONVENTION ROW	VOID LOCATION(S) SEE SHEET 1 FOR CONVENTION CKT. NO.(s)	PLATING OPTION	DIM. "A" INCH	DIM. "A" MM	DIM. "B" INCH	DIM. "B" MM	DIM. "C" INCH	DIM. "C" MM	DIM. "D" INCH	DIM. "D" MM
48		79109-7011	X	79109-8385	ROW A	1, 24	5	1.811	(46.00)	1.897	(48.19)	1.732	(44.00)	.185	(4.70)
42		79109-7012	X	79109-8386	ROW A	1, 21	5	1.575	(40.00)	1.661	(42.19)	1.496	(38.00)	.185	(4.70)
20		79109-7013		79109-8387	ROW A	1, 10	5	.709	(18.00)	.795	(20.19)	.630	(16.00)	.185	(4.70)
50		79109-7014	X	79109-8388	ROW B	13	5	1.890	(48.00)	1.976	(50.19)	1.811	(46.00)	.185	(4.70)

UPDATE REVISION
EC NO: S2005-0714
DRWN:KSEE 2005/10/19
CH'KD:BHLOW 2005/10/19
APPR:PTLIM 2005/11/07
DESCRIPTION
REV
L3

QUALITY SYMBOLS
▼=0
▽C=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± .015
1 PLACE	± 0.38	± ---

ANGULAR ± 3 °

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: NTS
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: RWB DATE: 1991/07/18
CHECKED BY: JD DATE: 1991/07/18
APPROVED BY: WAZ DATE: 1991/07/18

TITLE: SALES DRAWING 2MM DUAL ROW VERTICAL RECEPTACLE, SMT

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SDA-79109-****
SHEET NO.: 8 OF 9

SIZE A3

VOIDED CIRCUIT OPTION

ASSEMBLIES WITHOUT PEGS

CKT. SIZE	ASSEMBLY (WITHOUT CAP IN TUBE) ITEM NO.	ENG. NO.	VOID LOCATION(S) SEE SHEET 1 FOR CONVENTION ROW	CKT. NO.(s)	PLATING OPTION	DIM. "A" INCH	MM	DIM. "B" INCH	MM	DIM. "D" INCH	MM	PLATING OPTION
22	79109-5001	79109-5001	ROW A	2	1	.787	(20.00)	.874	(22.19)	.183	(4.65)	TIN/LEAD
6	79109-5002	79109-5002	ROW A	2	2	.157	(4.00)	.244	(6.19)	.183	(4.65)	
22	79109-5011	79109-5011	ROW A	2	4	.787	(20.00)	.874	(22.19)	.183	(4.65)	TIN
6	79109-5012	79109-5012	ROW A	2	5	.157	(4.00)	.244	(6.19)	.183	(4.65)	

ASSEMBLIES WITH PEGS

CKT. SIZE	ASSEMBLY (WITHOUT CAPIN TUBE) ITEM NO.	ENG. NO.	VOID LOCATION(S) SEE SHEET 1 FOR CONVENTION ROW	CKT. NO.(s)	PLATING OPTION	DIM. "A" INCH	MM	DIM. "B" INCH	MM	DIM. "C" INCH	MM	DIM. "D" INCH	MM	PLATING OPTION
48	79109-6001	79109-6001	ROW A	1, 24	2	1.811	(46.00)	1.897	(48.19)	1.732	(44.00)	.183	(4.65)	TIN/LEAD
44	79109-6002	79109-6002	ROW B	10	2	1.654	(42.00)	1.740	(44.19)	1.575	(42.00)	.183	(4.65)	
48	79109-6011	79109-6011	ROW A	1, 24	5	1.811	(46.00)	1.897	(48.19)	1.732	(44.00)	.183	(4.65)	TIN
44	79109-6012	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.

UPDATE REVISION
EC NO: S2005-0714
DRWN:KSEE 2005/10/19
CH'KD:BHLOW 2005/10/19
APPR:PTLIM 2005/11/08
DESCRIPTION
REV

L3

QUALITY SYMBOLS
▼=0
▽C=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	±.010
2 PLACES	± 0.25	±.015
1 PLACE	± 0.38	± ---
ANGULAR ± 3 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: NTS
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: RWB DATE: 1991/07/18
CHECKED BY: JD DATE: 1991/07/18
APPROVED BY: WAZ DATE: 1991/07/18

TITLE: SALES DRAWING 2MM DUAL ROW VERTICAL RECEPTACLE, SMT

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SDA-79109-****
SHEET NO.: 9 OF 9

SIZE A3