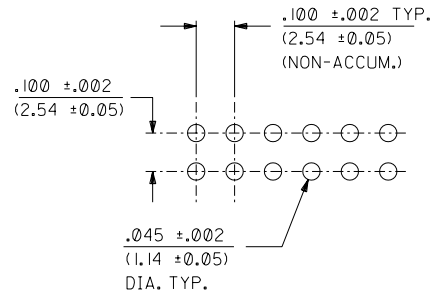
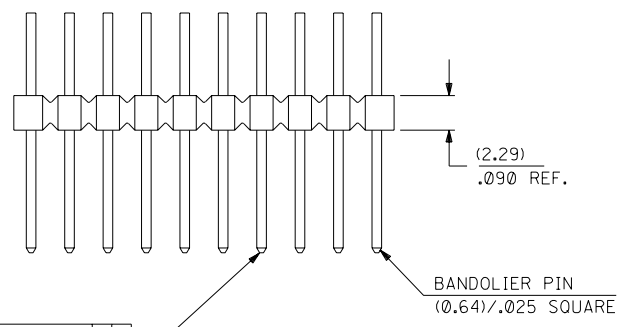
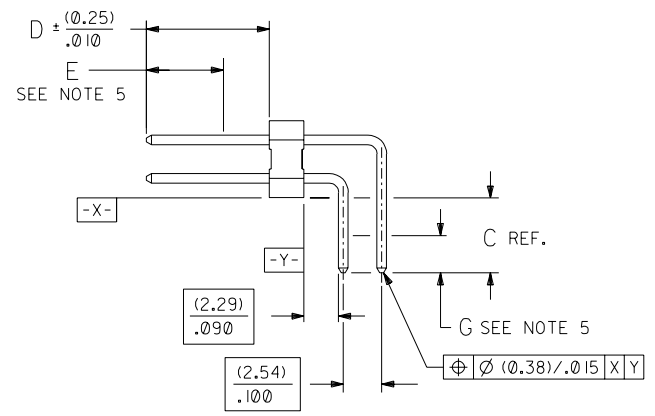
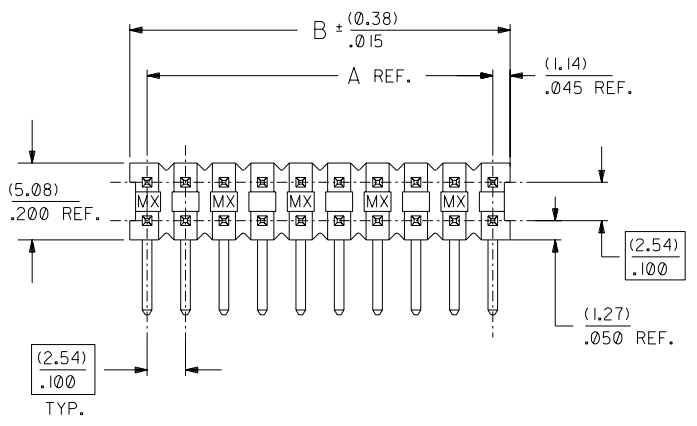


| CKT. SIZE | DIM. A REF. |       | DIM. B REF. |       |
|-----------|-------------|-------|-------------|-------|
|           | (MM)        | INCH  | (MM)        | INCH  |
| 4         | (2.54)      | .100  | (4.83)      | .190  |
| 6         | (5.08)      | .200  | (7.37)      | .290  |
| 8         | (7.62)      | .300  | (9.91)      | .390  |
| 10        | (10.16)     | .400  | (12.45)     | .490  |
| 12        | (12.70)     | .500  | (14.99)     | .590  |
| 14        | (15.24)     | .600  | (17.53)     | .690  |
| 16        | (17.78)     | .700  | (20.07)     | .790  |
| 18        | (20.32)     | .800  | (22.61)     | .890  |
| 20        | (22.86)     | .900  | (25.15)     | .990  |
| 22        | (25.40)     | 1.000 | (27.69)     | 1.090 |
| 24        | (27.94)     | 1.100 | (30.23)     | 1.190 |
| 26        | (30.48)     | 1.200 | (32.77)     | 1.290 |
| 28        | (33.02)     | 1.300 | (35.31)     | 1.390 |
| 30        | (35.56)     | 1.400 | (37.85)     | 1.490 |
| 32        | (38.10)     | 1.500 | (40.39)     | 1.590 |
| 34        | (40.64)     | 1.600 | (42.93)     | 1.690 |
| 36        | (43.18)     | 1.700 | (45.47)     | 1.790 |
| 38        | (45.72)     | 1.800 | (48.01)     | 1.890 |
| 40        | (48.26)     | 1.900 | (50.55)     | 1.990 |
| 42        | (50.80)     | 2.000 | (53.09)     | 2.090 |
| 44        | (53.34)     | 2.100 | (55.63)     | 2.190 |
| 46        | (55.88)     | 2.200 | (58.17)     | 2.290 |
| 48        | (58.42)     | 2.300 | (60.71)     | 2.390 |
| 50        | (60.96)     | 2.400 | (63.25)     | 2.490 |
| 52        | (63.50)     | 2.500 | (65.79)     | 2.590 |
| 54        | (66.04)     | 2.600 | (68.33)     | 2.690 |
| 56        | (68.58)     | 2.700 | (70.87)     | 2.790 |
| 58        | (71.12)     | 2.800 | (73.41)     | 2.890 |
| 60        | (73.66)     | 2.900 | (75.95)     | 2.990 |
| 62        | (76.20)     | 3.000 | (78.49)     | 3.090 |
| 64        | (78.74)     | 3.100 | (81.03)     | 3.190 |
| 66        | (81.28)     | 3.200 | (83.57)     | 3.290 |
| 68        | (83.82)     | 3.300 | (86.11)     | 3.390 |
| 70        | (86.36)     | 3.400 | (88.65)     | 3.490 |
| 72        | (88.90)     | 3.500 | (91.19)     | 3.590 |
| 74        | (91.44)     | 3.600 | (93.73)     | 3.690 |
| 76        | (93.98)     | 3.700 | (96.27)     | 3.790 |
| 78        | (96.52)     | 3.800 | (98.81)     | 3.890 |
| 80        | (99.06)     | 3.900 | (101.35)    | 3.990 |



RECOMMENDED P.C. BOARD HOLE LAYOUT



**NOTES:**

- PIN PUSHOUT FORCE: 4 LBS. MINIMUM
- FOR ILLUSTRATION PURPOSES, 20 (DUAL 10) CIRCUIT SIZE IS SHOWN.
- PINS MUST MEET SOLDERABILITY SPEC. ES-152, EXCEPT VOIDS ARE PERMISSIBLE AT BANDOLIER PIN FAYING SURFACE. (APPROX. .025 LNG X .006 WD. REF.) - 2 LOCATIONS
- WAFER TO BE FLAT WITHIN (0.03 MM/CM)/.003 IN./IN.
- MEASURE POINT FOR PLATING THICKNESS.
- THIS PRODUCT CONFORMS TO MOLEX PRODUCT SPEC. PS-70203.
- FOR ASSEMBLIES WITH VOIDS, REFER TO DRAWING NUMBER SDA-70203-5001-9999.
- PACKAGING INFORMATION: (UNLESS OTHERWISE NOTED IN TABLES)  

| CIRCUIT SIZE | PACKAGING DRAWING |
|--------------|-------------------|
| 4 THROUGH 8  | PK-70873-0353     |
| 10 AND OVER  | PK-70873-0075     |

**FINISH:**

- TIN - .000150 MINIMUM TIN PLATE OVER NICKEL PLATE.
  - 15 GOLD - .000015 MINIMUM GOLD PLATE IN SELECT AREA, .000075 MINIMUM TIN PLATE IN SELECT AREA, OVER NICKEL PLATE OVERALL.
  - 30 GOLD - .000030 MINIMUM GOLD PLATE IN SELECT AREA, .000075 MINIMUM TIN PLATE IN SELECT AREA, OVER NICKEL PLATE OVERALL.
- \*THE PRIMARY SHIPPING CARTON WILL BE LABELED \*COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC\*. CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH LEAD.

**MATERIAL:**

- WAFER - G.F. POLYESTER; 94V-0; COLOR: BLACK
- PIN - PHOSPHOR BRONZE

|    |   |
|----|---|
| D  | LEAD FREE<br>UCP2004-1770<br>RWHITE 04/04/23        |
| CI | REVISE PKGNG<br>ECN UDT2000-0949<br>SCHAFFER 00/4/6 |
| C  | REVISED<br>PER ECN # U60711<br>1/8/96 BJS/RCB       |
| BI | ADDED EDP<br>PER ECN # U60256<br>95/08/23 CAC       |
| B  | VOIDED EDP NO'S<br>PER ECN # U60097<br>95/07/27 CAC |
| A  | RELEASED<br>PER ECN # U31656<br>11/18/93 REED       |

|  |               |                |  |   |  |
|--|---------------|----------------|--|---|--|
| DIMENSIONS SHOWN (METRIC) INCH<br>UNLESS OTHERWISE SPECIFIED<br>TOLERANCES: ANGULAR ± 1/2°                             |               | ▽ = 0<br>▲ = 0 |  | REVISE ONLY ON CAD SYSTEM   |  |
| INCH METRIC  |               | TITLE          |  | SALES ASSY-DUAL ROW<br>WAFER W/BREAK-OFF OPTION<br>RIGHT ANGLE/.025 SQ PINS |  |
| 3 PLACE ± .005   | ---           | PART NO.       |  | SDA-70203-0001-5000   |  |
| 2 PLACE ± .01 ± 0.13   | ---           | DRAWG. NO.     |  | SEE CHART   |  |
| 1 PLACE --- ± 0.25   | ---           | FILE NAME      |  | 570203X1  |  |
| DRAFT WHERE APPLICABLE MUST<br>REMAIN WITHIN DIMENSIONS  |               | SHEET NO.      |  | 1 OF 2  |  |
| DATE   |               | U.S.A.         |  | 11/18/93  |  |
| DRWG. BY: SMR  | CHK'D BY: SMR | SCALE          |  | 4: 1  |  |
| APPR. BY:  |               | MFG, SH, REV.  |  | LTR.  |  |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. |               | DA             |  | C   |  |

| J | ENGINEERING NUMBER<br>A-70203 | RELEASE FOR<br>MANUFACTURE | EXPOSED PIN DIM. |                      | 9 | 8 | 7 | 6                               | 70203                 |                        | 4              | 3              | 2 | 1 |
|---|-------------------------------|----------------------------|------------------|----------------------|---|---|---|---------------------------------|-----------------------|------------------------|----------------|----------------|---|---|
|   |                               |                            | C<br>REF.        | D<br>±(0.25)<br>.010 |   |   |   |                                 | CONNECTOR END PLATING | P.C. BOARD END PLATING |                |                |   |   |
|   |                               |                            |                  |                      |   |   |   | PLATING<br>PER NOTES<br>SHEET 1 | TYPE                  | E<br>MEAS.             | TYPE           | G<br>MEAS.     |   |   |
|   | -0001/-0039                   | R.F.M.                     | (2.79)<br>.110   | (6.10)<br>.240       |   |   |   |                                 | TIN                   | TIN                    | (2.54)<br>.100 | (1.27)<br>.050 |   |   |
|   | -0040/-0078                   | R.F.M.                     | (2.79)<br>.110   | (8.13)<br>.320       |   |   |   |                                 | TIN                   | TIN                    | (4.57)<br>.180 | (1.27)<br>.050 |   |   |
| I | -0079/-0117                   | R.F.M.                     | (4.45)<br>.175   | (6.10)<br>.240       |   |   |   |                                 | TIN                   | TIN                    | (2.54)<br>.100 | (1.27)<br>.050 |   |   |
|   | -0157/-0195                   | R.F.M.                     | (2.79)<br>.110   | (6.10)<br>.240       |   |   |   | 15 GOLD                         | GOLD                  | (2.54)<br>.100         | (1.27)<br>.050 |                |   |   |
|   | -0196/-0234                   | R.F.M.                     | (2.79)<br>.110   | (8.13)<br>.320       |   |   |   | 15 GOLD                         | GOLD                  | (4.57)<br>.180         | (1.27)<br>.050 |                |   |   |
| H | -0313/-0351                   | R.F.M.                     | (2.79)<br>.110   | (6.10)<br>.240       |   |   |   | 30 GOLD                         | GOLD                  | (2.54)<br>.100         | (1.27)<br>.050 |                |   |   |
|   | -0352/-0390                   | R.F.M.                     | (2.79)<br>.110   | (8.13)<br>.320       |   |   |   | 30 GOLD                         | GOLD                  | (4.57)<br>.180         | (1.27)<br>.050 |                |   |   |

| G | CKTS | EDP NUMBER | ENG NUMBER   | EDP NUMBER | ENG NUMBER   | EDP NUMBER | ENG NUMBER   | EDP NUMBER | ENG NUMBER   | EDP NUMBER | ENG NUMBER   | EDP NUMBER | ENG NUMBER   | EDP NUMBER | ENG NUMBER   | CKTS |
|---|------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|------|
|   | 04   | 10-88-1045 | A-70203-0001 | 10-88-1046 | A-70203-0040 |            |              | 10-89-1046 | A-70203-0157 | 10-89-1047 | A-70203-0196 | 10-89-2046 | A-70203-0313 | 10-89-2047 | A-70203-0352 | 04   |
|   | 06   | 10-88-1065 | A-70203-0002 | 10-88-1066 | A-70203-0041 |            |              | 10-89-1066 | A-70203-0158 | 10-89-1067 | A-70203-0197 | 10-89-2066 | A-70203-0314 | 10-89-2067 | A-70203-0353 | 06   |
|   | 08   | 10-88-1085 | A-70203-0003 | 10-88-1086 | A-70203-0042 |            |              | 10-89-1086 | A-70203-0159 | 10-89-1087 | A-70203-0198 | 10-89-2086 | A-70203-0315 | 10-89-2087 | A-70203-0354 | 08   |
|   | 10   | 10-88-1105 | A-70203-0004 | 10-88-1106 | A-70203-0043 |            |              | 10-89-1106 | A-70203-0160 | 10-89-1107 | A-70203-0199 | 10-89-2106 | A-70203-0316 | 10-89-2107 | A-70203-0355 | 10   |
|   | 12   | 10-88-1125 | A-70203-0005 | 10-88-1126 | A-70203-0044 |            |              | 10-89-1126 | A-70203-0161 | 10-89-1127 | A-70203-0200 | 10-89-2126 | A-70203-0317 | 10-89-2127 | A-70203-0356 | 12   |
|   | 14   | 10-88-1145 | A-70203-0006 | 10-88-1146 | A-70203-0045 |            |              | 10-89-1146 | A-70203-0162 | 10-89-1147 | A-70203-0201 | 10-89-2146 | A-70203-0318 | 10-89-2147 | A-70203-0357 | 14   |
|   | 16   | 10-88-1165 | A-70203-0007 | 10-88-1166 | A-70203-0046 |            |              | 10-89-1166 | A-70203-0163 | 10-89-1167 | A-70203-0202 | 10-89-2166 | A-70203-0319 | 10-89-2167 | A-70203-0358 | 16   |
|   | 18   | 10-88-1185 | A-70203-0008 | 10-88-1186 | A-70203-0047 |            |              | 10-89-1186 | A-70203-0164 | 10-89-1187 | A-70203-0203 | 10-89-2186 | A-70203-0320 | 10-89-2187 | A-70203-0359 | 18   |
| F | 20   | 10-88-1205 | A-70203-0009 | 10-88-1206 | A-70203-0048 |            |              | 10-89-1206 | A-70203-0165 | 10-89-1207 | A-70203-0204 | 10-89-2206 | A-70203-0321 | 10-89-2207 | A-70203-0360 | 20   |
|   | 22   | 10-88-1225 | A-70203-0010 | 10-88-1226 | A-70203-0049 |            |              | 10-89-1226 | A-70203-0166 | 10-89-1227 | A-70203-0205 | 10-89-2226 | A-70203-0322 | 10-89-2227 | A-70203-0361 | 22   |
|   | 24   | 10-88-1245 | A-70203-0011 | 10-88-1246 | A-70203-0050 |            |              | 10-89-1246 | A-70203-0167 | 10-89-1247 | A-70203-0206 | 10-89-2246 | A-70203-0323 | 10-89-2247 | A-70203-0362 | 24   |
|   | 26   | 10-88-1265 | A-70203-0012 | 10-88-1266 | A-70203-0051 |            |              | 10-89-1266 | A-70203-0168 | 10-89-1267 | A-70203-0207 | 10-89-2266 | A-70203-0324 | 10-89-2267 | A-70203-0363 | 26   |
|   | 28   | 10-88-1285 | A-70203-0013 | 10-88-1286 | A-70203-0052 |            |              | 10-89-1286 | A-70203-0169 | 10-89-1287 | A-70203-0208 | 10-89-2286 | A-70203-0325 | 10-89-2287 | A-70203-0364 | 28   |
|   | 30   | 10-88-1305 | A-70203-0014 | 10-88-1306 | A-70203-0053 |            |              | 10-89-1306 | A-70203-0170 | 10-89-1307 | A-70203-0209 | 10-89-2306 | A-70203-0326 | 10-89-2307 | A-70203-0365 | 30   |
|   | 32   | 10-88-1325 | A-70203-0015 | 10-88-1326 | A-70203-0054 |            |              | 10-89-1326 | A-70203-0171 | 10-89-1327 | A-70203-0210 | 10-89-2326 | A-70203-0327 | 10-89-2327 | A-70203-0366 | 32   |
|   | 34   | 10-88-1345 | A-70203-0016 | 10-88-1346 | A-70203-0055 |            |              | 10-89-1346 | A-70203-0172 | 10-89-1347 | A-70203-0211 | 10-89-2346 | A-70203-0328 | 10-89-2347 | A-70203-0367 | 34   |
| E | 36   | 10-88-1365 | A-70203-0017 | 10-88-1366 | A-70203-0056 |            |              | 10-89-1366 | A-70203-0173 | 10-89-1367 | A-70203-0212 | 10-89-2366 | A-70203-0329 | 10-89-2367 | A-70203-0368 | 36   |
|   | 38   | 10-88-1385 | A-70203-0018 | 10-88-1386 | A-70203-0057 |            |              | 10-89-1386 | A-70203-0174 | 10-89-1387 | A-70203-0213 | 10-89-2386 | A-70203-0330 | 10-89-2387 | A-70203-0369 | 38   |
|   | 40   | 10-88-1405 | A-70203-0019 | 10-88-1406 | A-70203-0058 |            |              | 10-89-1406 | A-70203-0175 | 10-89-1407 | A-70203-0214 | 10-89-2406 | A-70203-0331 | 10-89-2407 | A-70203-0370 | 40   |
|   | 42   | 10-88-1425 | A-70203-0020 | 10-88-1426 | A-70203-0059 |            |              | 10-89-1426 | A-70203-0176 | 10-89-1427 | A-70203-0215 | 10-89-2426 | A-70203-0332 | 10-89-2427 | A-70203-0371 | 42   |
|   | 44   | 10-88-1445 | A-70203-0021 | 10-88-1446 | A-70203-0060 |            |              | 10-89-1446 | A-70203-0177 | 10-89-1447 | A-70203-0216 | 10-89-2446 | A-70203-0333 | 10-89-2447 | A-70203-0372 | 44   |
|   | 46   | 10-88-1465 | A-70203-0022 | 10-88-1466 | A-70203-0061 |            |              | 10-89-1466 | A-70203-0178 | 10-89-1467 | A-70203-0217 | 10-89-2466 | A-70203-0334 | 10-89-2467 | A-70203-0373 | 46   |
| D | 48   | 10-88-1485 | A-70203-0023 | 10-88-1486 | A-70203-0062 |            |              | 10-89-1486 | A-70203-0179 | 10-89-1487 | A-70203-0218 | 10-89-2486 | A-70203-0335 | 10-89-2487 | A-70203-0374 | 48   |
|   | 50   | 10-88-1505 | A-70203-0024 | 10-88-1506 | A-70203-0063 |            |              | 10-89-1506 | A-70203-0180 | 10-89-1507 | A-70203-0219 | 10-89-2506 | A-70203-0336 | 10-89-2507 | A-70203-0375 | 50   |
|   | 52   | 10-88-1525 | A-70203-0025 | 10-88-1526 | A-70203-0064 |            |              | 10-89-1526 | A-70203-0181 | 10-89-1527 | A-70203-0220 | 10-89-2526 | A-70203-0337 | 10-89-2527 | A-70203-0376 | 52   |
|   | 54   | 10-88-1545 | A-70203-0026 | 10-88-1546 | A-70203-0065 |            |              | 10-89-1546 | A-70203-0182 | 10-89-1547 | A-70203-0221 | 10-89-2546 | A-70203-0338 | 10-89-2547 | A-70203-0377 | 54   |
|   | 56   | 10-88-1565 | A-70203-0027 | 10-88-1566 | A-70203-0066 |            |              | 10-89-1566 | A-70203-0183 | 10-89-1567 | A-70203-0222 | 10-89-2566 | A-70203-0339 | 10-89-2567 | A-70203-0378 | 56   |
|   | 58   | 10-88-1585 | A-70203-0028 | 10-88-1586 | A-70203-0067 |            |              | 10-89-1586 | A-70203-0184 | 10-89-1587 | A-70203-0223 | 10-89-2586 | A-70203-0340 | 10-89-2587 | A-70203-0379 | 58   |
|   | 60   | 10-88-1605 | A-70203-0029 | 10-88-1606 | A-70203-0068 |            |              | 10-89-1606 | A-70203-0185 | 10-89-1607 | A-70203-0224 | 10-89-2606 | A-70203-0341 | 10-89-2607 | A-70203-0380 | 60   |
|   | 62   | 10-88-1625 | A-70203-0030 | 10-88-1626 | A-70203-0069 |            |              | 10-89-1626 | A-70203-0186 | 10-89-1627 | A-70203-0225 | 10-89-2626 | A-70203-0342 | 10-89-2627 | A-70203-0381 | 62   |
| C | 64   | 10-88-1645 | A-70203-0031 | 10-88-1646 | A-70203-0070 |            |              | 10-89-1646 | A-70203-0187 | 10-89-1647 | A-70203-0226 | 10-89-2646 | A-70203-0343 | 10-89-2647 | A-70203-0382 | 64   |
|   | 66   | 10-88-1665 | A-70203-0032 | 10-88-1666 | A-70203-0071 |            |              | 10-89-1666 | A-70203-0188 | 10-89-1667 | A-70203-0227 | 10-89-2666 | A-70203-0344 | 10-89-2667 | A-70203-0383 | 66   |
|   | 68   | 10-88-1685 | A-70203-0033 | 10-88-1686 | A-70203-0072 |            |              | 10-89-1686 | A-70203-0189 | 10-89-1687 | A-70203-0228 | 10-89-2686 | A-70203-0345 | 10-89-2687 | A-70203-0384 | 68   |
|   | 70   | 10-88-1705 | A-70203-0034 | 10-88-1706 | A-70203-0073 |            |              | 10-89-1706 | A-70203-0190 | 10-89-1707 | A-70203-0229 | 10-89-2706 | A-70203-0346 | 10-89-2707 | A-70203-0385 | 70   |
|   | 72   | 10-88-1725 | A-70203-0035 | 10-88-1726 | A-70203-0074 |            |              | 10-89-1726 | A-70203-0191 | 10-89-1727 | A-70203-0230 | 10-89-2726 | A-70203-0347 | 10-89-2727 | A-70203-0386 | 72   |
|   | 74   | 10-88-1745 | A-70203-0036 | 10-88-1746 | A-70203-0075 |            |              | 10-89-1746 | A-70203-0192 | 10-89-1747 | A-70203-0231 | 10-89-2746 | A-70203-0348 | 10-89-2747 | A-70203-0387 | 74   |
|   | 76   | 10-88-1765 | A-70203-0037 | 10-88-1766 | A-70203-0076 |            |              | 10-89-1766 | A-70203-0193 | 10-89-1767 | A-70203-0232 | 10-89-2766 | A-70203-0349 | 10-89-2767 | A-70203-0388 | 76   |
|   | 78   | 10-88-1785 | A-70203-0038 | 10-88-1786 | A-70203-0077 |            |              | 10-89-1786 | A-70203-0194 | 10-89-1787 | A-70203-0233 | 10-89-2786 | A-70203-0350 | 10-89-2787 | A-70203-0389 | 78   |
| B | 80   | 10-88-1805 | A-70203-0039 | 10-88-1806 | A-70203-0078 | 10-88-1807 | A-70203-0117 | 10-89-1806 | A-70203-0195 | 10-89-1807 | A-70203-0234 | 10-89-2806 | A-70203-0351 | 10-89-2807 | A-70203-0390 | 80   |

|    |             |             |  |   |  |   |                |                  |
|----|-------------|-------------|--|---|--|---|----------------|------------------|
| D  |             | SEE SHEET 1 | DIMENSIONS SHOWN (METRIC) INCH<br>UNLESS OTHERWISE SPECIFIED<br>TOLERANCES: ANGULAR ± 1/2° | ▽ = 0   ▼ = 0   REVISE ONLY ON CAD SYSTEM | TITLE<br>SALES ASSY-DUAL ROW<br>WAFER W/BREAK-OFF OPTION<br>RIGHT ANGLE/.025 SQ PINS | MOLEX INCORPORATED<br>L15LEJLL 69532 U.S.A. | SHEET NO.<br>2 | DATE<br>11/18/93 |
| C1 | SEE SHEET 1 |             |  |   |  |   |                |                  |
| C  | SEE SHEET 1 |             | DRAFT WHERE APPLICABLE MUST<br>REMAIN WITHIN DIMENSIONS                                    | PART NO.<br>SEE CHART                     | DRWG. NO.<br>SDA-70203-0001-5000   | FILE NAME<br>S70203X2                       | DIV.<br>DA     |                  |
| B1 | SEE SHEET 1 |             |  |   |  |   |                |                  |
| B  | SEE SHEET 1 |             | DRG. BY<br>SMR   | CHK'D. BY<br>SMR                          | SCALE<br>:   | APP'D. BY                                   | SIZE           |                  |
| A  | SEE SHEET 1 |             | LTR.   | REVISIONS                                 | LTR.   | REVISIONS                                   |                |                  |