

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0741620244](#)  
**Status:** **Active**  
**Overview:** [cgrid\\_sl\\_products](#)  
**Description:** 2.54mm (.100") Pitch C-Grid® Receptacle, Right Angle, Through Hole, Dual Row, Shrouded, Version A, High-Temperature, 44 Circuits, 0.4µm (15µ") Gold (Au)

**Documents:**

[3D Model](#) [Product Specification PS-74162-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

UL E29179

**General**

Product Family PCB Receptacles  
 Series [74162](#)  
 Application Board-to-Board  
 Overview [cgrid\\_sl\\_products](#)  
 Product Name C-Grid®

**Physical**

Circuits (Loaded) 44  
 Circuits (maximum) 44  
 Color - Resin Black  
 Durability (mating cycles max) 50  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Guide to Mating Part No  
 Keying to Mating Part None  
 Lock to Mating Part Yes  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Performance Thermoplastic  
 Number of Rows 2  
 Orientation Right Angle  
 PCB Locator No  
 PCB Retention None  
 Packaging Type Tube  
 Pitch - Mating Interface (in) 0.100 In  
 Pitch - Mating Interface (mm) 2.54 mm  
 Pitch - Term. Interface (in) 0.100 In  
 Pitch - Term. Interface (mm) 2.54 mm  
 Plating min: Mating (µin) 0.4  
 Plating min: Mating (µm) 15  
 Polarized to Mating Part No  
 Polarized to PCB No  
 Robotic Placement None  
 Stackable No  
 Surface Mount Compatible (SMC) No  
 Temperature Range - Operating -40°C to +105°C  
 Termination Interface: Style Through Hole

**Electrical**

Current - Maximum per Contact 2.5A  
 Grounding to PCB No



*image - Reference only*

*Series*

**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**Halogen-Free Status**  
**Not Reviewed**

**China RoHS**



**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto: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**  
[74162Series](#)

Voltage - Maximum 250V

### **Solder Process Data**

|  |                        |
|--|------------------------|
| Duration at Max. Process Temperature (seconds) | 5                      |
| Lead-free Process Capability                   | Wave Capable (TH only) |
| Max. Cycles at Max. Process Temperature        | 1                      |
| Process Temperature max. C                     | 260                    |

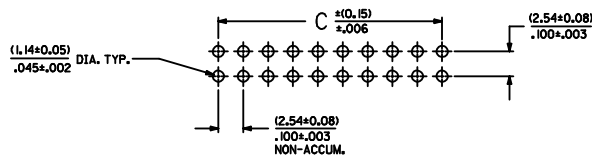
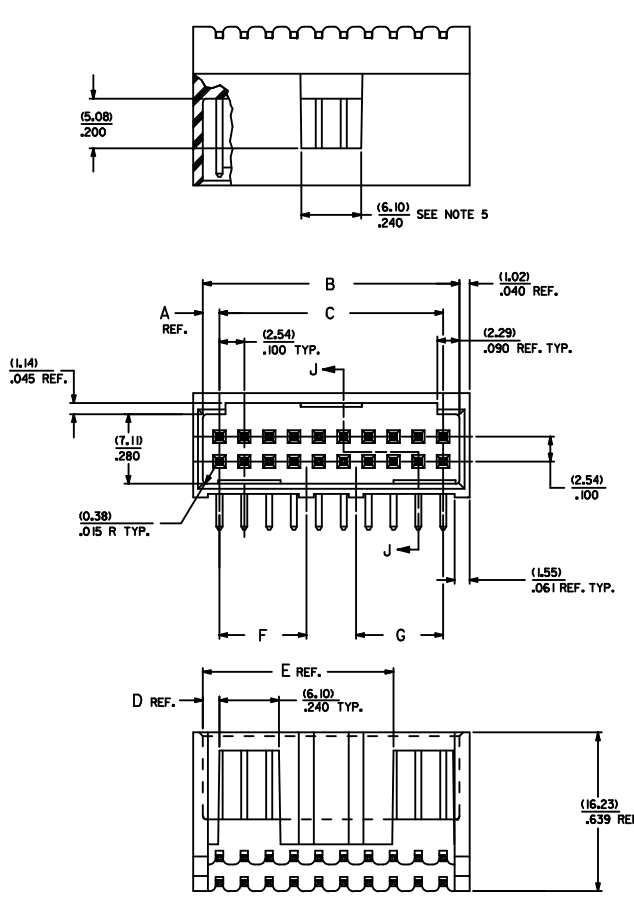
### **Material Info**

### **Reference - Drawing Numbers**

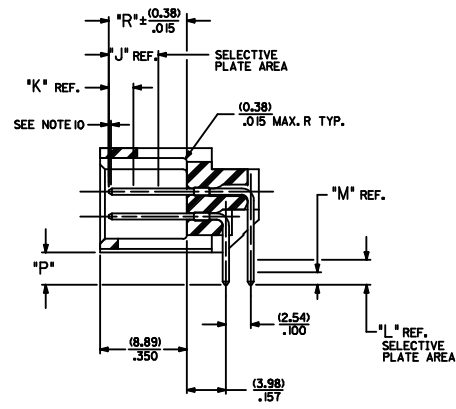
|                         |               |
|-------------------------|---------------|
| Packaging Specification | PK-70873-0019 |
| Product Specification   | PS-74162-001  |
| Sales Drawing           | SD-74162-001  |

This document was generated on 05/31/2010

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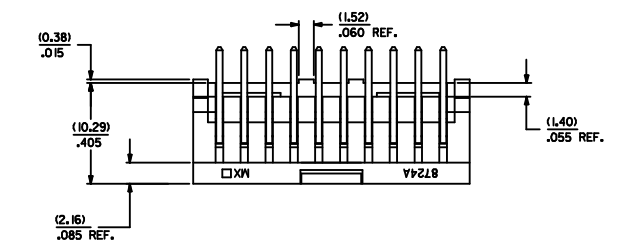


RECOMMENDED P.C. BOARD HOLE LAYOUT



SECTION J-J

- NOTES
- MATERIAL: SHROUDED WAFER: GLASS FILLED, LIQUID CRYSTAL POLYMER, COLOR: BLACK, UL94V-0  
PINS: PHOSPHOR BRONZE
  - FINISH:  
TIN - 3.81 MICROMETERS/150 MICROINCHES MINIMUM TIN PLATE OVER NICKEL UNDERPLATE OVERALL  
15 GOLD - 0.38 MICROMETERS/15 MICROINCHES MINIMUM GOLD PLATE IN SELECT AREA  
1.91 MICROMETERS/75 MICROINCHES MINIMUM TIN PLATE IN SELECT AREA OVER NICKEL UNDERPLATE OVERALL  
30 GOLD - 0.76 MICROMETERS/30 MICROINCHES MINIMUM GOLD PLATE IN SELECT AREA  
1.91 MICROMETERS/75 MICROINCHES MINIMUM TIN PLATE IN SELECT AREA OVER NICKEL UNDERPLATE OVERALL
  - PRODUCT SPECIFICATION: PS-74162-0001
  - PACKAGING INFORMATION: SEE CHARTS
  - WINDOW NOT AVAILABLE ON 6 CKT.
  - FOR CHARTED DIMENSIONS AND ASSEMBLY NOS NOT SHOWN ON THIS SHEET - SEE SHEET 2.
  - 20 CIRCUIT SIZE SHOWN FOR ILLUSTRATION PURPOSES.
  - PIN PUSHOUT FORCE: 117.79 N/4 LBS.
  - PINS MUST MEET SOLDERABILITY SPEC. MIL-STD-202 METHOD 208B.
  - ROW TO ROW PIN HEIGHT VARIATION MUST NOT EXCEED 0.25/0.10 IN.
  - THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.



| CKT. | DIM. "A"       | DIM. "B"         | DIM. "C"         | DIM. "D"       | DIM. "E"         | DIM. "F"         | DIM. "G"         |
|------|----------------|------------------|------------------|----------------|------------------|------------------|------------------|
| 06   | (1.68)<br>.066 | (8.43)<br>.332   | (5.08)<br>.200   | (1.68)<br>.066 |                  |                  |                  |
| 08   | (1.68)<br>.066 | (10.87)<br>.432  | (7.52)<br>.300   | (1.68)<br>.066 |                  |                  |                  |
| 10   | (1.68)<br>.066 | (13.51)<br>.532  | (10.16)<br>.400  | (4.22)<br>.166 |                  |                  |                  |
| 12   | (1.68)<br>.066 | (16.05)<br>.632  | (12.70)<br>.500  | (4.22)<br>.166 |                  |                  |                  |
| 14   | (1.68)<br>.066 | (18.59)<br>.732  | (15.24)<br>.600  | (6.76)<br>.266 |                  |                  |                  |
| 16   | (1.68)<br>.066 | (21.13)<br>.832  | (17.78)<br>.700  | (6.76)<br>.266 |                  |                  |                  |
| 18   | (1.68)<br>.066 | (23.67)<br>.932  | (20.32)<br>.800  | (9.30)<br>.366 |                  |                  |                  |
| 20   | (1.68)<br>.066 | (26.21)<br>.1032 | (22.86)<br>.900  | (1.68)<br>.066 | (19.46)<br>.766  |                  |                  |
| 22   | (1.68)<br>.066 | (28.75)<br>.1132 | (25.40)<br>.1000 | (1.68)<br>.066 | (22.00)<br>.866  |                  |                  |
| 24   | (1.68)<br>.066 | (31.29)<br>.1232 | (27.94)<br>.1100 | (1.68)<br>.066 | (24.54)<br>.966  | (16.64)<br>.655  |                  |
| 26   | (1.68)<br>.066 | (33.83)<br>.1332 | (30.48)<br>.1200 | (1.68)<br>.066 | (27.08)<br>.1066 | (16.64)<br>.655  |                  |
| 28   | (1.68)<br>.066 | (36.37)<br>.1432 | (33.02)<br>.1300 | (1.68)<br>.066 | (29.62)<br>.1166 | (16.64)<br>.655  |                  |
| 30   | (1.68)<br>.066 | (38.91)<br>.1532 | (35.56)<br>.1400 | (1.68)<br>.066 | (32.16)<br>.1266 | (16.64)<br>.655  |                  |
| 32   | (1.68)<br>.066 | (41.45)<br>.1632 | (38.10)<br>.1500 | (1.68)<br>.066 | (34.70)<br>.1366 | (16.64)<br>.655  |                  |
| 34   | (1.68)<br>.066 | (43.99)<br>.1732 | (40.64)<br>.1600 | (1.68)<br>.066 | (37.24)<br>.1466 | (16.64)<br>.655  |                  |
| 36   | (1.68)<br>.066 | (46.53)<br>.1832 | (43.18)<br>.1700 | (1.68)<br>.066 | (39.78)<br>.1566 | (16.64)<br>.655  | (16.76)<br>.660  |
| 38   | (1.68)<br>.066 | (49.07)<br>.1932 | (45.72)<br>.1800 | (1.68)<br>.066 | (42.32)<br>.1666 | (16.64)<br>.655  | (16.76)<br>.660  |
| 40   | (1.68)<br>.066 | (51.61)<br>.2032 | (48.26)<br>.1900 | (1.68)<br>.066 | (44.86)<br>.1766 | (16.64)<br>.655  | (16.76)<br>.660  |
| 42   | (1.68)<br>.066 | (54.15)<br>.2132 | (50.80)<br>.2000 | (1.68)<br>.066 | (47.40)<br>.1866 | (16.64)<br>.655  | (16.76)<br>.660  |
| 44   | (1.68)<br>.066 | (56.69)<br>.2232 | (53.34)<br>.2100 | (1.68)<br>.066 | (49.94)<br>.1966 | (19.05)<br>.750  | (16.76)<br>.660  |
| 46   | (1.68)<br>.066 | (59.23)<br>.2332 | (55.88)<br>.2200 | (1.68)<br>.066 | (52.48)<br>.2066 | (19.05)<br>.750  | (16.76)<br>.660  |
| 48   | (1.68)<br>.066 | (61.77)<br>.2432 | (58.42)<br>.2300 | (1.68)<br>.066 | (55.02)<br>.2166 | (19.05)<br>.750  | (16.76)<br>.660  |
| 50   | (1.68)<br>.066 | (64.31)<br>.2532 | (60.96)<br>.2400 | (1.68)<br>.066 | (57.56)<br>.2266 | (19.05)<br>.750  | (16.76)<br>.660  |
| 52   | (1.68)<br>.066 | (66.85)<br>.2632 | (63.50)<br>.2500 | (1.68)<br>.066 | (60.10)<br>.2366 | (19.05)<br>.750  | (16.76)<br>.660  |
| 54   | (1.68)<br>.066 | (69.39)<br>.2732 | (66.04)<br>.2600 | (1.68)<br>.066 | (62.64)<br>.2466 | (21.59)<br>.850  | (21.84)<br>.860  |
| 56   | (1.68)<br>.066 | (71.93)<br>.2832 | (68.58)<br>.2700 | (1.68)<br>.066 | (65.18)<br>.2566 | (21.59)<br>.850  | (21.84)<br>.860  |
| 58   | (1.68)<br>.066 | (74.47)<br>.2932 | (71.12)<br>.2800 | (1.68)<br>.066 | (67.72)<br>.2666 | (27.81)<br>.1095 | (26.32)<br>.1060 |
| 60   | (1.68)<br>.066 | (77.01)<br>.3032 | (73.66)<br>.2900 | (1.68)<br>.066 | (70.26)<br>.2766 | (27.81)<br>.1095 | (26.32)<br>.1060 |
| 62   | (1.68)<br>.066 | (79.55)<br>.3132 | (76.20)<br>.3000 | (1.68)<br>.066 | (72.80)<br>.2866 | (27.81)<br>.1095 | (26.32)<br>.1060 |
| 64   | (1.68)<br>.066 | (82.09)<br>.3232 | (78.74)<br>.3100 | (1.68)<br>.066 | (75.34)<br>.2966 | (27.81)<br>.1095 | (26.32)<br>.1060 |
| 66   | (1.68)<br>.066 | (84.63)<br>.3332 | (81.28)<br>.3200 | (1.68)<br>.066 | (77.88)<br>.3066 | (27.81)<br>.1095 | (26.32)<br>.1060 |
| 68   | (1.68)<br>.066 | (87.17)<br>.3432 | (83.82)<br>.3300 | (1.68)<br>.066 | (80.42)<br>.3166 | (27.81)<br>.1095 | (26.32)<br>.1060 |
| 70   | (1.68)<br>.066 | (89.71)<br>.3532 | (86.36)<br>.3400 | (1.68)<br>.066 | (82.96)<br>.3266 | (27.81)<br>.1095 | (26.32)<br>.1060 |
| 72   | (1.68)<br>.066 | (92.25)<br>.3632 | (88.90)<br>.3500 | (1.68)<br>.066 | (85.50)<br>.3366 | (27.81)<br>.1095 | (26.32)<br>.1060 |

ASSEMBLY STYLES "A", "B", AND "G"

|  |  |  |
|--|--|--|
| <b>QUALITY SYMBOLS</b><br>◀=0<br>▼=0<br>▲<br>D | <b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b><br>DIMENSION STYLE: MM/IN<br>SCALE: INCH<br>DESIGN UNITS: INCH<br>THIRD ANGLE PROJECTION              |  |
|  | DRAWN BY: SMILLER<br>CHECKED BY: BBARKER<br>APPROVED BY: SMILLER<br>DATE: 2009/03/27   | DATE: 2009/03/27<br>DATE: 2009/03/27<br>DATE: 2009/03/27 |
|  | MATERIAL NO.: SEE TABLE<br>DOCUMENT NO.: SD-74162-001  |  |
|  | SHEET NO.: 1 OF 8<br>THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |

| ITEM NUMBER<br>74162 | P<br>REF     | PLATING<br>FINISH | CONNECTOR END PLATING |             |              | PC BOARD END PLATING |              |              | INFORMATION<br>PK-70873 |            |
|----------------------|--------------|-------------------|-----------------------|-------------|--------------|----------------------|--------------|--------------|-------------------------|------------|
|                      |              |                   | TYPE                  | J<br>LENGTH | K<br>MEAS.   | R<br>± 0.38<br>.015  | TYPE         | L<br>LENGTH  |                         | M<br>MEAS. |
| -0006-0072           | 3.30<br>.130 | TIN               | TIN                   | ---         | 2.54<br>.100 | 8.00<br>.315         | ---          | 1.27<br>.050 | 0019                    |            |
| -0106-0172           | 5.08<br>.200 | TIN               | TIN                   | ---         | 2.54<br>.100 | 8.00<br>.315         | ---          | 1.27<br>.050 | 0019                    |            |
| -0206-0272           | 3.30<br>.130 | 15 GOLD           | GOLD                  | ---         | 5.08<br>.200 | 2.54<br>.100         | 8.00<br>.315 | 2.54<br>.100 | 1.27<br>.050            | 0019       |
| -0306-0372           | 5.08<br>.200 | 15 GOLD           | GOLD                  | ---         | 5.08<br>.200 | 2.54<br>.100         | 8.00<br>.315 | 2.54<br>.100 | 1.27<br>.050            | 0019       |
| -0406-0472           | 3.30<br>.130 | 30 GOLD           | GOLD                  | ---         | 5.08<br>.200 | 2.54<br>.100         | 8.00<br>.315 | 2.54<br>.100 | 1.27<br>.050            | 0019       |
| -0506-0572           | 5.08<br>.200 | 30 GOLD           | GOLD                  | ---         | 5.08<br>.200 | 2.54<br>.100         | 8.00<br>.315 | 2.54<br>.100 | 1.27<br>.050            | 0019       |
| -0606-0672           | 3.30<br>.130 | TIN               | TIN                   | ---         | 2.54<br>.100 | 6.35<br>.250         | ---          | 1.27<br>.050 | 0019                    |            |

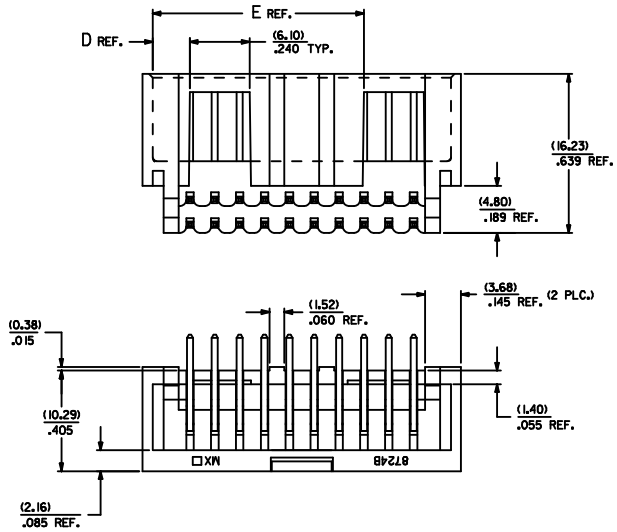
| NO. OF CKTS | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 6           | 74162-0006  | 74162-0106  | 74162-0206  | 74162-0306  | 74162-0406  | 74162-0506  | 74162-0606  |
| 8           | 74162-0008  | 74162-0108  | 74162-0208  | 74162-0308  | 74162-0408  | 74162-0508  | 74162-0608  |
| 10          | 74162-0010  | 74162-0110  | 74162-0210  | 74162-0310  | 74162-0410  | 74162-0510  | 74162-0610  |
| 12          | 74162-0012  | 74162-0112  | 74162-0212  | 74162-0312  | 74162-0412  | 74162-0512  | 74162-0612  |
| 14          | 74162-0014  | 74162-0114  | 74162-0214  | 74162-0314  | 74162-0414  | 74162-0514  | 74162-0614  |
| 16          | 74162-0016  | 74162-0116  | 74162-0216  | 74162-0316  | 74162-0416  | 74162-0516  | 74162-0616  |
| 18          | 74162-0018  | 74162-0118  | 74162-0218  | 74162-0318  | 74162-0418  | 74162-0518  | 74162-0618  |
| 20          | 74162-0020  | 74162-0120  | 74162-0220  | 74162-0320  | 74162-0420  | 74162-0520  | 74162-0620  |
| 22          | 74162-0022  | 74162-0122  | 74162-0222  | 74162-0322  | 74162-0422  | 74162-0522  | 74162-0622  |
| 24          | 74162-0024  | 74162-0124  | 74162-0224  | 74162-0324  | 74162-0424  | 74162-0524  | 74162-0624  |
| 26          | 74162-0026  | 74162-0126  | 74162-0226  | 74162-0326  | 74162-0426  | 74162-0526  | 74162-0626  |
| 28          | 74162-0028  | 74162-0128  | 74162-0228  | 74162-0328  | 74162-0428  | 74162-0528  | 74162-0628  |
| 30          | 74162-0030  | 74162-0130  | 74162-0230  | 74162-0330  | 74162-0430  | 74162-0530  | 74162-0630  |
| 32          | 74162-0032  | 74162-0132  | 74162-0232  | 74162-0332  | 74162-0432  | 74162-0532  | 74162-0632  |
| 34          | 74162-0034  | 74162-0134  | 74162-0234  | 74162-0334  | 74162-0434  | 74162-0534  | 74162-0634  |
| 36          | 74162-0036  | 74162-0136  | 74162-0236  | 74162-0336  | 74162-0436  | 74162-0536  | 74162-0636  |
| 38          | 74162-0038  | 74162-0138  | 74162-0238  | 74162-0338  | 74162-0438  | 74162-0538  | 74162-0638  |
| 40          | 74162-0040  | 74162-0140  | 74162-0240  | 74162-0340  | 74162-0440  | 74162-0540  | 74162-0640  |
| 42          | 74162-0042  | 74162-0142  | 74162-0242  | 74162-0342  | 74162-0442  | 74162-0542  | 74162-0642  |
| 44          | 74162-0044  | 74162-0144  | 74162-0244  | 74162-0344  | 74162-0444  | 74162-0544  | 74162-0644  |
| 46          | 74162-0046  | 74162-0146  | 74162-0246  | 74162-0346  | 74162-0446  | 74162-0546  | 74162-0646  |
| 48          | 74162-0048  | 74162-0148  | 74162-0248  | 74162-0348  | 74162-0448  | 74162-0548  | 74162-0648  |
| 50          | 74162-0050  | 74162-0150  | 74162-0250  | 74162-0350  | 74162-0450  | 74162-0550  | 74162-0650  |
| 52          | 74162-0052  | 74162-0152  | 74162-0252  | 74162-0352  | 74162-0452  | 74162-0552  | 74162-0652  |
| 54          | 74162-0054  | 74162-0154  | 74162-0254  | 74162-0354  | 74162-0454  | 74162-0554  | 74162-0654  |
| 56          | 74162-0056  | 74162-0156  | 74162-0256  | 74162-0356  | 74162-0456  | 74162-0556  | 74162-0656  |
| 58          | 74162-0058  | 74162-0158  | 74162-0258  | 74162-0358  | 74162-0458  | 74162-0558  | 74162-0658  |
| 60          | 74162-0060  | 74162-0160  | 74162-0260  | 74162-0360  | 74162-0460  | 74162-0560  | 74162-0660  |
| 62          | 74162-0062  | 74162-0162  | 74162-0262  | 74162-0362  | 74162-0462  | 74162-0562  | 74162-0662  |
| 64          | 74162-0064  | 74162-0164  | 74162-0264  | 74162-0364  | 74162-0464  | 74162-0564  | 74162-0664  |
| 66          | 74162-0066  | 74162-0166  | 74162-0266  | 74162-0366  | 74162-0466  | 74162-0566  | 74162-0666  |
| 68          | 74162-0068  | 74162-0168  | 74162-0268  | 74162-0368  | 74162-0468  | 74162-0568  | 74162-0668  |
| 70          | 74162-0070  | 74162-0170  | 74162-0270  | 74162-0370  | 74162-0470  | 74162-0570  | 74162-0670  |
| 72          | 74162-0072  | 74162-0172  | 74162-0272  | 74162-0372  | 74162-0472  | 74162-0572  | 74162-0672  |

|   |                               |   |  |  |  |  |              |                              |
|---|-------------------------------|---|--|--|--|--|--------------|------------------------------|
| <b>INITIAL RELEASE</b><br>EC NO. UCF2009-1776<br>DRAWN BY: 2009/03/27<br>CHYKOBARKER<br>APPR: SMILLER<br>2009/04/21 | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)   |  | DIMENSION STYLE<br>MM/IN               |  | SCALE  | DESIGN UNITS | THIRD ANGLE PROJECTION       |
|   |                               | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± .010<br>2 PLACES ± 0.25 ± .014<br>1 PLACE ± 0.36 ± --- |  | DRAWN BY DATE<br>SMILLER 2009/03/27    |  | TITLE<br>SALES ASSEMBLY<br>WAFER-RIGHT ANGLE FULLY<br>SHROUDED .100 GRID |              |                              |
|   |                               | ANGULAR ±1/2°   |  | CHECKED BY DATE<br>BBARKER 2009/03/27  |  | MOLEX INCORPORATED   |              |                              |
|   |                               | DRAFT WHERE APPLICABLE<br>MUST REMAIN WITHIN DIMENSIONS   |  | APPROVED BY DATE<br>SMILLER 2009/03/27 |  | MATERIAL NO.<br>SEE TABLE  |              | DOCUMENT NO.<br>SD-74162-001 |



SECTION J-J

- NOTES
1. MATERIAL: SHROUDED WAFER: GLASS FILLED, LIQUID CRYSTAL POLYMER, COLOR: BLACK, UL94V-0  
PINS: PHOSPHOR BRONZE
  2. FINISH:  
TIN - 3.81 MICROMETERS/150 MICRONS MINIMUM TIN PLATE OVER NICKEL UNDERPLATE OVERALL  
15 GOLD - 0.38 MICROMETERS/15 MICRONS MINIMUM GOLD PLATE IN SELECT AREA  
1.91 MICROMETERS/75 MICRONS MINIMUM TIN PLATE IN SELECT AREA OVER NICKEL UNDERPLATE OVERALL  
30 GOLD - 0.76 MICROMETERS/30 MICRONS MINIMUM GOLD PLATE IN SELECT AREA  
1.91 MICROMETERS/75 MICRONS MINIMUM TIN PLATE IN SELECT AREA OVER NICKEL UNDERPLATE OVERALL
  3. PRODUCT SPECIFICATION: PS-74162-0001
  4. PACKAGING INFORMATION: SEE CHARTS
  5. FOR CHARTED DIMENSIONS AND ASSEMBLY N.O.S NOT SHOWN ON THIS SHEET - SEE SHEET 4.
  6. WINDOW NOT AVAILABLE ON 6 CKT.
  7. 20 CIRCUIT SIZE SHOWN FOR ILLUSTRATION PURPOSES.
  8. PIN PUSHOUT FORCE: (17.79) N/4 LBS.
  9. PINS MUST MEET SOLDERABILITY SPEC. MIL-STD-202 METHOD 208B.
  10. ROW TO ROW PIN HEIGHT VARIATION MUST NOT EXCEED (0.25)/0.10 IN.
  11. THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.



| CKT. | DIM. 'A'    | DIM. 'B'      | DIM. 'C'      | DIM. 'D'      | DIM. 'E'     | DIM. 'F' | DIM. 'G' | DIM. 'H'      |
|------|-------------|---------------|---------------|---------------|--------------|----------|----------|---------------|
| 06   | (3.81) .150 | (12.70) .500  | (5.08) .200   | (3.81) .150   | ---          | ---      | ---      | (10.46) .412  |
| 08   | (3.81) .150 | (15.24) .600  | (7.62) .300   | (3.81) .150   | ---          | ---      | ---      | (13.00) .512  |
| 10   | (3.81) .150 | (17.78) .700  | (10.16) .400  | (6.35) .250   | ---          | ---      | ---      | (15.54) .612  |
| 12   | (3.81) .150 | (20.32) .800  | (12.70) .500  | (6.35) .250   | ---          | ---      | ---      | (18.08) .712  |
| 14   | (3.81) .150 | (22.86) .900  | (15.24) .600  | (8.89) .350   | ---          | ---      | ---      | (20.62) .812  |
| 16   | (3.81) .150 | (25.40) 1.000 | (17.78) .700  | (8.89) .350   | ---          | ---      | ---      | (23.16) .912  |
| 18   | (3.81) .150 | (27.94) 1.100 | (20.32) .800  | (11.43) .450  | ---          | ---      | ---      | (25.70) 1.012 |
| 20   | (3.81) .150 | (30.48) 1.200 | (22.86) .900  | (13.97) .550  | ---          | ---      | ---      | (28.24) 1.112 |
| 22   | (3.81) .150 | (33.02) 1.300 | (25.40) 1.000 | (16.51) .650  | ---          | ---      | ---      | (30.78) 1.212 |
| 24   | (3.81) .150 | (35.56) 1.400 | (27.94) 1.100 | (19.05) .750  | (16.64) .655 | ---      | ---      | (33.32) 1.312 |
| 26   | (3.81) .150 | (38.10) 1.500 | (30.48) 1.200 | (21.59) .850  | (16.64) .655 | ---      | ---      | (35.86) 1.412 |
| 28   | (3.81) .150 | (40.64) 1.600 | (33.02) 1.300 | (24.13) .950  | (16.64) .655 | ---      | ---      | (38.40) 1.512 |
| 30   | (3.81) .150 | (43.18) 1.700 | (35.56) 1.400 | (26.67) 1.050 | (16.64) .655 | ---      | ---      | (40.94) 1.612 |
| 32   | (3.81) .150 | (45.72) 1.800 | (38.10) 1.500 | (29.21) 1.150 | (16.64) .655 | ---      | ---      | (43.48) 1.712 |
| 34   | (3.81) .150 | (48.26) 1.900 | (40.64) 1.600 | (31.75) 1.250 | (16.64) .655 | ---      | ---      | (46.02) 1.812 |
| 36   | (3.81) .150 | (50.80) 2.000 | (43.18) 1.700 | (34.29) 1.350 | (16.64) .655 | ---      | ---      | (48.56) 1.912 |
| 38   | (3.81) .150 | (53.34) 2.100 | (45.72) 1.800 | (36.83) 1.450 | (16.64) .655 | ---      | ---      | (51.10) 2.012 |
| 40   | (3.81) .150 | (55.88) 2.200 | (48.26) 1.900 | (39.37) 1.550 | (16.64) .655 | ---      | ---      | (53.64) 2.112 |
| 42   | (3.81) .150 | (58.42) 2.300 | (50.80) 2.000 | (41.91) 1.650 | (16.64) .655 | ---      | ---      | (56.18) 2.212 |
| 44   | (3.81) .150 | (60.96) 2.400 | (53.34) 2.100 | (44.45) 1.750 | (16.64) .655 | ---      | ---      | (58.72) 2.312 |
| 46   | (3.81) .150 | (63.50) 2.500 | (55.88) 2.200 | (46.99) 1.850 | (16.64) .655 | ---      | ---      | (61.26) 2.412 |
| 48   | (3.81) .150 | (66.04) 2.600 | (58.42) 2.300 | (49.53) 1.950 | (16.64) .655 | ---      | ---      | (63.80) 2.512 |
| 50   | (3.81) .150 | (68.58) 2.700 | (60.96) 2.400 | (52.07) 2.050 | (16.64) .655 | ---      | ---      | (66.34) 2.612 |
| 52   | (3.81) .150 | (71.12) 2.800 | (63.50) 2.500 | (54.61) 2.150 | (16.64) .655 | ---      | ---      | (68.88) 2.712 |
| 54   | (3.81) .150 | (73.66) 2.900 | (66.04) 2.600 | (57.15) 2.250 | (16.64) .655 | ---      | ---      | (71.42) 2.812 |
| 56   | (3.81) .150 | (76.20) 3.000 | (68.58) 2.700 | (59.69) 2.350 | (16.64) .655 | ---      | ---      | (73.96) 2.912 |
| 58   | (3.81) .150 | (78.74) 3.100 | (71.12) 2.800 | (62.23) 2.450 | (16.64) .655 | ---      | ---      | (76.50) 3.012 |
| 60   | (3.81) .150 | (81.28) 3.200 | (73.66) 2.900 | (64.77) 2.550 | (16.64) .655 | ---      | ---      | (79.04) 3.112 |
| 62   | (3.81) .150 | (83.82) 3.300 | (76.20) 3.000 | (67.31) 2.650 | (16.64) .655 | ---      | ---      | (81.58) 3.212 |
| 64   | (3.81) .150 | (86.36) 3.400 | (78.74) 3.100 | (69.85) 2.750 | (16.64) .655 | ---      | ---      | (84.12) 3.312 |
| 66   | (3.81) .150 | (88.90) 3.500 | (81.28) 3.200 | (72.39) 2.850 | (16.64) .655 | ---      | ---      | (86.66) 3.412 |
| 68   | (3.81) .150 | (91.44) 3.600 | (83.82) 3.300 | (74.93) 2.950 | (16.64) .655 | ---      | ---      | (89.20) 3.512 |
| 70   | (3.81) .150 | (93.98) 3.700 | (86.36) 3.400 | (77.47) 3.050 | (16.64) .655 | ---      | ---      | (91.74) 3.612 |
| 72   | (3.81) .150 | (96.52) 3.800 | (88.90) 3.500 | (80.01) 3.150 | (16.64) .655 | ---      | ---      | (94.28) 3.712 |

ASSEMBLY STYLES "C" & "D"

| QUALITY SYMBOLS  | GENERAL TOLERANCES (UNLESS SPECIFIED)  | DIMENSION STYLE   |           | SCALE                               | DESIGN UNITS         | THIRD ANGLE PROJECTION  |                              |                     |
|--|--|---|-----------|-------------------------------------|----------------------|---|------------------------------|---------------------|
|  |  | MM  | INCH      |                                     |                      |   |                              |                     |
| INITIAL RELEASE<br>EC NO. UCF2009-1776<br>DRAWN BY BARRO 2009/03/27<br>CHECKED BY CHYD/BARKER 2009/04/20<br>APPR: SMILLER 2009/04/21 | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± .010<br>2 PLACES ± 0.25 ± .014<br>1 PLACE ± 0.36 ± ---<br>ANGULAR ±1/2° | MM/IN   | INCH      | DRAWN BY DATE<br>SMILLER 2009/03/27 | DESIGN UNITS<br>INCH | SALES ASSEMBLY<br>WAFER-RIGHT ANGLE FULLY<br>SHROUDED .100 GRID<br>MOLEX INCORPORATED |                              |                     |
|  |  | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  | SEE TABLE |                                     |                      |   | MATERIAL NO.<br>DOCUMENT NO. | SHEET NO.<br>3 OF 8 |
|  |  | MATERIAL NO.<br>SD-74162-001  |           |                                     |                      |   | SHEET NO.<br>3 OF 8          |                     |
|  |  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |           |                                     |                      |   |                              |                     |

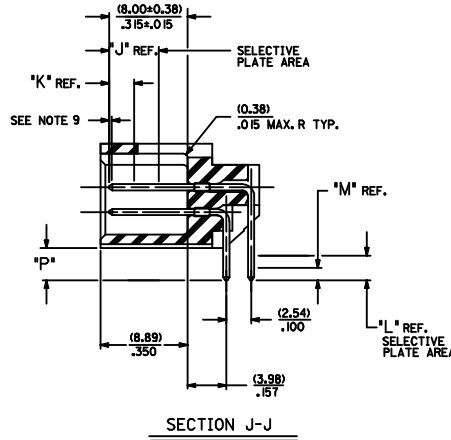
| ITEM NUMBER<br>74162 | P<br>REF     | PLATING<br>FINISH | CONNECTOR END PLATING |              |              | PC BOARD END PLATING |             |              | INFORMATION<br>PK-70873 |      |
|----------------------|--------------|-------------------|-----------------------|--------------|--------------|----------------------|-------------|--------------|-------------------------|------|
|                      |              |                   | TYPE                  | J<br>LENGTH  | K<br>MEAS.   | TYPE                 | L<br>LENGTH | M<br>MEAS.   |                         |      |
| -1006-1072           | 3.30<br>.130 | TIN               | TIN                   | ---          | 2.54<br>.100 |                      | TIN         | ---          | 1.27<br>.050            | 0019 |
| -1106-1172           | 5.08<br>.200 | TIN               | TIN                   | ---          | 2.54<br>.100 |                      | TIN         | ---          | 1.27<br>.050            | 0019 |
| -1206-1272           | 3.30<br>.130 | 15 GOLD           | GOLD                  | 5.08<br>.200 | 2.54<br>.100 |                      | TIN         | 2.54<br>.100 | 1.27<br>.050            | 0019 |
| -1306-1372           | 5.08<br>.200 | 15 GOLD           | GOLD                  | 5.08<br>.200 | 2.54<br>.100 |                      | TIN         | 2.54<br>.100 | 1.27<br>.050            | 0019 |
| -1406-1472           | 3.30<br>.130 | 30 GOLD           | GOLD                  | 5.08<br>.200 | 2.54<br>.100 |                      | TIN         | 2.54<br>.100 | 1.27<br>.050            | 0019 |
| -1506-1572           | 5.08<br>.200 | 30 GOLD           | GOLD                  | 5.08<br>.200 | 2.54<br>.100 |                      | TIN         | 2.54<br>.100 | 1.27<br>.050            | 0019 |

| NO. OF CKTS | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 6           | 74162-1006  | 74162-1106  | 74162-1206  | 74162-1306  | 74162-1406  | 74162-1506  |             |
| 8           | 74162-1008  | 74162-1108  | 74162-1208  | 74162-1308  | 74162-1408  | 74162-1508  |             |
| 10          | 74162-1010  | 74162-1110  | 74162-1210  | 74162-1310  | 74162-1410  | 74162-1510  |             |
| 12          | 74162-1012  | 74162-1112  | 74162-1212  | 74162-1312  | 74162-1412  | 74162-1512  |             |
| 14          | 74162-1014  | 74162-1114  | 74162-1214  | 74162-1314  | 74162-1414  | 74162-1514  |             |
| 16          | 74162-1016  | 74162-1116  | 74162-1216  | 74162-1316  | 74162-1416  | 74162-1516  |             |
| 18          | 74162-1018  | 74162-1118  | 74162-1218  | 74162-1318  | 74162-1418  | 74162-1518  |             |
| 20          | 74162-1020  | 74162-1120  | 74162-1220  | 74162-1320  | 74162-1420  | 74162-1520  |             |
| 22          | 74162-1022  | 74162-1122  | 74162-1222  | 74162-1322  | 74162-1422  | 74162-1522  |             |
| 24          | 74162-1024  | 74162-1124  | 74162-1224  | 74162-1324  | 74162-1424  | 74162-1524  |             |
| 26          | 74162-1026  | 74162-1126  | 74162-1226  | 74162-1326  | 74162-1426  | 74162-1526  |             |
| 28          | 74162-1028  | 74162-1128  | 74162-1228  | 74162-1328  | 74162-1428  | 74162-1528  |             |
| 30          | 74162-1030  | 74162-1130  | 74162-1230  | 74162-1330  | 74162-1430  | 74162-1530  |             |
| 32          | 74162-1032  | 74162-1132  | 74162-1232  | 74162-1332  | 74162-1432  | 74162-1532  |             |
| 34          | 74162-1034  | 74162-1134  | 74162-1234  | 74162-1334  | 74162-1434  | 74162-1534  |             |
| 36          | 74162-1036  | 74162-1136  | 74162-1236  | 74162-1336  | 74162-1436  | 74162-1536  |             |
| 38          | 74162-1038  | 74162-1138  | 74162-1238  | 74162-1338  | 74162-1438  | 74162-1538  |             |
| 40          | 74162-1040  | 74162-1140  | 74162-1240  | 74162-1340  | 74162-1440  | 74162-1540  |             |
| 42          | 74162-1042  | 74162-1142  | 74162-1242  | 74162-1342  | 74162-1442  | 74162-1542  |             |
| 44          | 74162-1044  | 74162-1144  | 74162-1244  | 74162-1344  | 74162-1444  | 74162-1544  |             |
| 46          | 74162-1046  | 74162-1146  | 74162-1246  | 74162-1346  | 74162-1446  | 74162-1546  |             |
| 48          | 74162-1048  | 74162-1148  | 74162-1248  | 74162-1348  | 74162-1448  | 74162-1548  |             |
| 50          | 74162-1050  | 74162-1150  | 74162-1250  | 74162-1350  | 74162-1450  | 74162-1550  |             |
| 52          | 74162-1052  | 74162-1152  | 74162-1252  | 74162-1352  | 74162-1452  | 74162-1552  |             |
| 54          | 74162-1054  | 74162-1154  | 74162-1254  | 74162-1354  | 74162-1454  | 74162-1554  |             |
| 56          | 74162-1056  | 74162-1156  | 74162-1256  | 74162-1356  | 74162-1456  | 74162-1556  |             |
| 58          | 74162-1058  | 74162-1158  | 74162-1258  | 74162-1358  | 74162-1458  | 74162-1558  |             |
| 60          | 74162-1060  | 74162-1160  | 74162-1260  | 74162-1360  | 74162-1460  | 74162-1560  |             |
| 62          | 74162-1062  | 74162-1162  | 74162-1262  | 74162-1362  | 74162-1462  | 74162-1562  |             |
| 64          | 74162-1064  | 74162-1164  | 74162-1264  | 74162-1364  | 74162-1464  | 74162-1564  |             |
| 66          | 74162-1066  | 74162-1166  | 74162-1266  | 74162-1366  | 74162-1466  | 74162-1566  |             |
| 68          | 74162-1068  | 74162-1168  | 74162-1268  | 74162-1368  | 74162-1468  | 74162-1568  |             |
| 70          | 74162-1070  | 74162-1170  | 74162-1270  | 74162-1370  | 74162-1470  | 74162-1570  |             |
| 72          | 74162-1072  | 74162-1172  | 74162-1272  | 74162-1372  | 74162-1472  | 74162-1572  |             |

|   |                                      |   |  |                                       |  |  |              |                              |
|---|--------------------------------------|---|--|---------------------------------------|--|--|--------------|------------------------------|
| <b>INITIAL RELEASE</b><br>EC NO. UCF2009-1776<br>DRAWN BY BARRA 2009/03/27<br>CHKD BY BARKER 2009/04/20<br>APPR. BY MILLER 2009/04/21 | <b>QUALITY SYMBOLS</b><br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)   |  | DIMENSION STYLE<br>MM/IN              |  | SCALE  | DESIGN UNITS | THIRD ANGLE PROJECTION       |
|   |                                      | 4 PLACES ±.010 ±.010<br>3 PLACES ±.025 ±.014<br>2 PLACES ±.036 ±.014<br>1 PLACE ±.036 ±.014 |  | DRAWN BY DATE<br>MILLER 2009/03/27    |  | TITLE<br>SALES ASSEMBLY<br>WAFER-RIGHT ANGLE FULLY<br>SHROUDED .100 GRID |              |                              |
|   |                                      | ANGULAR ±1/2°   |  | CHECKED BY DATE<br>BARKER 2009/03/27  |  | MOLEX INCORPORATED   |              |                              |
|   |                                      | DRAFT WHERE APPLICABLE<br>MUST REMAIN WITHIN DIMENSIONS                                     |  | APPROVED BY DATE<br>MILLER 2009/03/27 |  | MATERIAL NO.<br>SEE TABLE  |              | DOCUMENT NO.<br>SD-74162-001 |

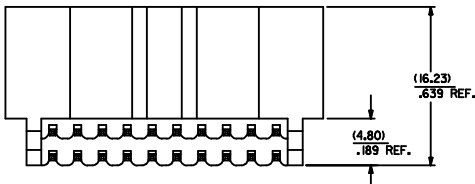


RECOMMENDED P.C. BOARD HOLE LAYOUT



SECTION J-J

- NOTES
- MATERIAL: SHROUDED WAFER: GLASS FILLED, LIQUID CRYSTAL POLYMER, COLOR: BLACK, UL94V-0  
PINS: PHOSPHOR BRONZE
  - FINISH:  
TIN - 3.81 MICROMETERS/150 MICRONS MINIMUM TIN PLATE OVER NICKEL UNDERPLATE OVERALL  
15 GOLD - 0.38 MICROMETERS/15 MICRONS MINIMUM GOLD PLATE IN SELECT AREA  
1.91 MICROMETERS/75 MICRONS MINIMUM TIN PLATE IN SELECT AREA OVER NICKEL UNDERPLATE OVERALL  
30 GOLD - 0.76 MICROMETERS/30 MICRONS MINIMUM GOLD PLATE IN SELECT AREA  
1.91 MICROMETERS/75 MICRONS MINIMUM TIN PLATE IN SELECT AREA OVER NICKEL UNDERPLATE OVERALL
  - PRODUCT SPECIFICATION: PS-74162-0001
  - PACKAGING INFORMATION: SEE CHARTS
  - FOR CHARTED DIMENSIONS AND ASSEMBLY N.O.S NOT SHOWN ON THIS SHEET - SEE SHEET 6.
  - 20 CIRCUIT SIZE SHOWN FOR ILLUSTRATION PURPOSES.
  - PIN PUSH-OUT FORCE: (17.79) N/4 LBS.
  - PINS MUST MEET SOLDERABILITY SPEC. MIL-STD-202 METHOD 208B.
  - ROW TO ROW PIN HEIGHT VARIATION MUST NOT EXCEED (0.25)/.010 IN.
  - THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.



| CKT. | DIM. 'A'    | DIM. 'B'      | DIM. 'C'      | DIM. 'F'      | DIM. 'G'      | DIM. 'H'      | DIM. 'X'    |
|------|-------------|---------------|---------------|---------------|---------------|---------------|-------------|
| 06   | (3.81) .150 | (12.70) .500  | (5.08) .200   |               |               | (10.46) .412  | (3.30) .130 |
| 08   | (3.81) .150 | (15.24) .600  | (7.62) .300   |               |               | (13.00) .512  | (3.30) .130 |
| 10   | (3.81) .150 | (17.78) .700  | (10.16) .400  |               |               | (15.54) .612  | (4.42) .174 |
| 12   | (3.81) .150 | (20.32) .800  | (12.70) .500  |               |               | (18.08) .712  | (4.42) .174 |
| 14   | (3.81) .150 | (22.86) .900  | (15.24) .600  |               |               | (20.62) .812  | (4.42) .174 |
| 16   | (3.81) .150 | (25.40) 1.000 | (17.78) .700  |               |               | (23.16) .912  | (4.42) .174 |
| 18   | (3.81) .150 | (27.94) 1.100 | (20.32) .800  |               |               | (25.70) 1.012 | (4.42) .174 |
| 20   | (3.81) .150 | (30.48) 1.200 | (22.86) .900  |               |               | (28.24) 1.112 | (4.42) .174 |
| 22   | (3.81) .150 | (33.02) 1.300 | (25.40) 1.000 |               |               | (30.78) 1.212 | (4.42) .174 |
| 24   | (3.81) .150 | (35.56) 1.400 | (27.94) 1.100 | (16.64) .655  |               | (33.32) 1.312 | (4.42) .174 |
| 26   | (3.81) .150 | (38.10) 1.500 | (30.48) 1.200 | (16.64) .655  |               | (35.86) 1.412 | (4.42) .174 |
| 28   | (3.81) .150 | (40.64) 1.600 | (33.02) 1.300 | (16.64) .655  |               | (38.40) 1.512 | (4.42) .174 |
| 30   | (3.81) .150 | (43.18) 1.700 | (35.56) 1.400 | (16.64) .655  |               | (40.94) 1.612 | (4.42) .174 |
| 32   | (3.81) .150 | (45.72) 1.800 | (38.10) 1.500 | (16.64) .655  |               | (43.48) 1.712 | (4.42) .174 |
| 34   | (3.81) .150 | (48.26) 1.900 | (40.64) 1.600 | (16.64) .655  | (16.76) .660  | (46.02) 1.812 | (4.42) .174 |
| 36   | (3.81) .150 | (50.80) 2.000 | (43.18) 1.700 | (16.64) .655  | (16.76) .660  | (48.56) 1.912 | (4.42) .174 |
| 38   | (3.81) .150 | (53.34) 2.100 | (45.72) 1.800 | (16.64) .655  | (16.76) .660  | (51.10) 2.012 | (4.42) .174 |
| 40   | (3.81) .150 | (55.88) 2.200 | (48.26) 1.900 | (16.64) .655  | (16.76) .660  | (53.64) 2.112 | (4.42) .174 |
| 42   | (3.81) .150 | (58.42) 2.300 | (50.80) 2.000 | (16.64) .655  | (16.76) .660  | (56.18) 2.212 | (4.42) .174 |
| 44   | (3.81) .150 | (60.96) 2.400 | (53.34) 2.100 | (19.05) .750  | (16.76) .660  | (58.72) 2.312 | (4.42) .174 |
| 46   | (3.81) .150 | (63.50) 2.500 | (55.88) 2.200 | (19.05) .750  | (16.76) .660  | (61.26) 2.412 | (4.42) .174 |
| 48   | (3.81) .150 | (66.04) 2.600 | (58.42) 2.300 | (19.05) .750  | (16.76) .660  | (63.80) 2.512 | (4.42) .174 |
| 50   | (3.81) .150 | (68.58) 2.700 | (60.96) 2.400 | (19.05) .750  | (16.76) .660  | (66.34) 2.612 | (4.42) .174 |
| 52   | (3.81) .150 | (71.12) 2.800 | (63.50) 2.500 | (19.05) .750  | (16.76) .660  | (68.88) 2.712 | (4.42) .174 |
| 54   | (3.81) .150 | (73.66) 2.900 | (66.04) 2.600 | (21.59) .850  | (21.84) .860  | (71.42) 2.812 | (4.42) .174 |
| 56   | (3.81) .150 | (76.20) 3.000 | (68.58) 2.700 | (21.59) .850  | (21.84) .860  | (73.96) 2.912 | (4.42) .174 |
| 58   | (3.81) .150 | (78.74) 3.100 | (71.12) 2.800 | (27.81) 1.095 | (26.32) 1.060 | (76.50) 3.012 | (4.42) .174 |
| 60   | (3.81) .150 | (81.28) 3.200 | (73.66) 2.900 | (27.81) 1.095 | (26.32) 1.060 | (79.04) 3.112 | (4.42) .174 |
| 62   | (3.81) .150 | (83.82) 3.300 | (76.20) 3.000 | (27.81) 1.095 | (26.32) 1.060 | (81.58) 3.212 | (4.42) .174 |
| 64   | (3.81) .150 | (86.36) 3.400 | (78.74) 3.100 | (27.81) 1.095 | (26.32) 1.060 | (84.12) 3.312 | (4.42) .174 |
| 66   | (3.81) .150 | (88.90) 3.500 | (81.28) 3.200 | (27.81) 1.095 | (26.32) 1.060 | (86.66) 3.412 | (4.42) .174 |
| 68   | (3.81) .150 | (91.44) 3.600 | (83.82) 3.300 | (27.81) 1.095 | (26.32) 1.060 | (89.20) 3.512 | (4.42) .174 |
| 70   | (3.81) .150 | (93.98) 3.700 | (86.36) 3.400 | (27.81) 1.095 | (26.32) 1.060 | (91.74) 3.612 | (4.42) .174 |
| 72   | (3.81) .150 | (96.52) 3.800 | (88.90) 3.500 | (27.81) 1.095 | (26.32) 1.060 | (94.28) 3.712 | (4.42) .174 |

|  |                 |  |  |                                    |                  |                        |
|--|-----------------|--|--|------------------------------------|------------------|------------------------|
| INITIAL RELEASE<br>EC NO: UCP2009-1776<br>DRWN:SBARRA 2009/03/27<br>CHKD:BBARKER 2009/04/20<br>APPR:SMILLER 2009/04/21 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED)  | DIMENSION STYLE  | SCALE                              | DESIGN UNITS     | THIRD ANGLE PROJECTION |
|  | ▼=0<br>▽=0      | mm INCH  | MM/IN  |                                    | INCH             |                        |
|  |                 | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± .010<br>2 PLACES ± 0.25 ± .014<br>1 PLACE ± 0.36 ± ---<br>ANGULAR ±1/2° | DRAWN BY SMILLER DATE 2009/03/27<br>CHECKED BY BBARKER DATE 2009/03/27<br>APPROVED BY SMILLER DATE 2009/03/27  |                                    |                  |                        |
|  |                 | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS   | MATERIAL NO. SEE TABLE<br>SIZE D THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | MOLEX INCORPORATED<br>SD-74162-001 | SHEET NO. 5 OF 8 |                        |

| ITEM NUMBER<br>74162 | P<br>REF     | PLATING<br>FINISH | CONNECTOR END PLATING |              |              | PC BOARD END PLATING |             |              | INFORMATION<br>PK-70873 |      |
|----------------------|--------------|-------------------|-----------------------|--------------|--------------|----------------------|-------------|--------------|-------------------------|------|
|                      |              |                   | TYPE                  | J<br>LENGTH  | K<br>MEAS.   | TYPE                 | L<br>LENGTH | M<br>MEAS.   |                         |      |
| -2006-2072           | 3.30<br>.130 | TIN               | TIN                   | ---          | 2.54<br>.100 |                      |             | 1.27<br>.050 | 0019                    |      |
| -2106-2172           | 5.08<br>.200 | TIN               | TIN                   | ---          | 2.54<br>.100 |                      |             | 1.27<br>.050 | 0019                    |      |
| -2206-2272           | 3.30<br>.130 | 15 GOLD           | GOLD                  | 5.08<br>.200 | 2.54<br>.100 |                      | TIN         | 2.54<br>.100 | 1.27<br>.050            | 0019 |
| -2306-2372           | 5.08<br>.200 | 15 GOLD           | GOLD                  | 5.08<br>.200 | 2.54<br>.100 |                      | TIN         | 2.54<br>.100 | 1.27<br>.050            | 0019 |
| -2406-2472           | 3.30<br>.130 | 30 GOLD           | GOLD                  | 5.08<br>.200 | 2.54<br>.100 |                      | TIN         | 2.54<br>.100 | 1.27<br>.050            | 0019 |
| -2506-2572           | 5.08<br>.200 | 30 GOLD           | GOLD                  | 5.08<br>.200 | 2.54<br>.100 |                      | TIN         | 2.54<br>.100 | 1.27<br>.050            | 0019 |

| NO. OF CKTS | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 6           | 74162-2006  | 74162-2106  | 74162-2206  | 74162-2306  | 74162-2406  | 74162-2506  |             |
| 8           | 74162-2008  | 74162-2108  | 74162-2208  | 74162-2308  | 74162-2408  | 74162-2508  |             |
| 10          | 74162-2010  | 74162-2110  | 74162-2210  | 74162-2310  | 74162-2410  | 74162-2510  |             |
| 12          | 74162-2012  | 74162-2112  | 74162-2212  | 74162-2312  | 74162-2412  | 74162-2512  |             |
| 14          | 74162-2014  | 74162-2114  | 74162-2214  | 74162-2314  | 74162-2414  | 74162-2514  |             |
| 16          | 74162-2016  | 74162-2116  | 74162-2216  | 74162-2316  | 74162-2416  | 74162-2516  |             |
| 18          | 74162-2018  | 74162-2118  | 74162-2218  | 74162-2318  | 74162-2418  | 74162-2518  |             |
| 20          | 74162-2020  | 74162-2120  | 74162-2220  | 74162-2320  | 74162-2420  | 74162-2520  |             |
| 22          | 74162-2022  | 74162-2122  | 74162-2222  | 74162-2322  | 74162-2422  | 74162-2522  |             |
| 24          | 74162-2024  | 74162-2124  | 74162-2224  | 74162-2324  | 74162-2424  | 74162-2524  |             |
| 26          | 74162-2026  | 74162-2126  | 74162-2226  | 74162-2326  | 74162-2426  | 74162-2526  |             |
| 28          | 74162-2028  | 74162-2128  | 74162-2228  | 74162-2328  | 74162-2428  | 74162-2528  |             |
| 30          | 74162-2030  | 74162-2130  | 74162-2230  | 74162-2330  | 74162-2430  | 74162-2530  |             |
| 32          | 74162-2032  | 74162-2132  | 74162-2232  | 74162-2332  | 74162-2432  | 74162-2532  |             |
| 34          | 74162-2034  | 74162-2134  | 74162-2234  | 74162-2334  | 74162-2434  | 74162-2534  |             |
| 36          | 74162-2036  | 74162-2136  | 74162-2236  | 74162-2336  | 74162-2436  | 74162-2536  |             |
| 38          | 74162-2038  | 74162-2138  | 74162-2238  | 74162-2338  | 74162-2438  | 74162-2538  |             |
| 40          | 74162-2040  | 74162-2140  | 74162-2240  | 74162-2340  | 74162-2440  | 74162-2540  |             |
| 42          | 74162-2042  | 74162-2142  | 74162-2242  | 74162-2342  | 74162-2442  | 74162-2542  |             |
| 44          | 74162-2044  | 74162-2144  | 74162-2244  | 74162-2344  | 74162-2444  | 74162-2544  |             |
| 46          | 74162-2046  | 74162-2146  | 74162-2246  | 74162-2346  | 74162-2446  | 74162-2546  |             |
| 48          | 74162-2048  | 74162-2148  | 74162-2248  | 74162-2348  | 74162-2448  | 74162-2548  |             |
| 50          | 74162-2050  | 74162-2150  | 74162-2250  | 74162-2350  | 74162-2450  | 74162-2550  |             |
| 52          | 74162-2052  | 74162-2152  | 74162-2252  | 74162-2352  | 74162-2452  | 74162-2552  |             |
| 54          | 74162-2054  | 74162-2154  | 74162-2254  | 74162-2354  | 74162-2454  | 74162-2554  |             |
| 56          | 74162-2056  | 74162-2156  | 74162-2256  | 74162-2356  | 74162-2456  | 74162-2556  |             |
| 58          | 74162-2058  | 74162-2158  | 74162-2258  | 74162-2358  | 74162-2458  | 74162-2558  |             |
| 60          | 74162-2060  | 74162-2160  | 74162-2260  | 74162-2360  | 74162-2460  | 74162-2560  |             |
| 62          | 74162-2062  | 74162-2162  | 74162-2262  | 74162-2362  | 74162-2462  | 74162-2562  |             |
| 64          | 74162-2064  | 74162-2164  | 74162-2264  | 74162-2364  | 74162-2464  | 74162-2564  |             |
| 66          | 74162-2066  | 74162-2166  | 74162-2266  | 74162-2366  | 74162-2466  | 74162-2566  |             |
| 68          | 74162-2068  | 74162-2168  | 74162-2268  | 74162-2368  | 74162-2468  | 74162-2568  |             |
| 70          | 74162-2070  | 74162-2170  | 74162-2270  | 74162-2370  | 74162-2470  | 74162-2570  |             |
| 72          | 74162-2072  | 74162-2172  | 74162-2272  | 74162-2372  | 74162-2472  | 74162-2572  |             |

|   |  |  |  |  |                           |  |                     |
|---|--|--|--|--|---------------------------|--|---------------------|
| <b>INITIAL RELEASE</b><br>EC NO. UCF2009-1776<br>2009/03/27<br>DRAWN BY BARBA<br>2009/04/20<br>CHKD BARBA<br>APPR: SMILLER<br>2009/04/21<br>REV DESCRIPTION | QUALITY SYMBOLS  | GENERAL TOLERANCES (UNLESS SPECIFIED)  | DIMENSION STYLE  | SCALE  | DESIGN UNITS              | THIRD ANGLE PROJECTION   |                     |
|   | ▽=0<br>▽=0   | mm INCH  | MM/IN  | DATE   | INCH                      | DATE<br>2009/03/27<br>DATE<br>2009/03/27<br>DATE<br>2009/03/27 |                     |
|   | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± .010<br>2 PLACES ± 0.25 ± .014<br>1 PLACE ± 0.36 ± ---<br>ANGULAR ±1/2° | DRAWN BY<br>SMILLER<br>CHECKED BY<br>BBARKER<br>APPROVED BY<br>SMILLER   | DATE<br>2009/03/27<br>DATE<br>2009/03/27<br>DATE<br>2009/03/27 | TITLE<br>SALES ASSEMBLY<br>WAFER-RIGHT ANGLE FULLY<br>SHROUDED .100 GRID | MATERIAL NO.<br>SEE TABLE | DOCUMENT NO.<br>SD-74162-001                                   | SHEET NO.<br>6 OF 8 |
|   | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS   | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |  |                           |  |                     |



**STYLE "A"**



**STYLE "B"**



**STYLE "C"**



USE FOR LOCATING VOIDED PINS ON ALL STYLES  
 LETTERS AND NUMBERS ARE NOT DESIGNATED ON WAFER HOUSING  
 (SEE NOTE 10 AND CHART ON SHEET 8)



SECTION J-J

**NOTES**

- MATERIAL: SHROUDED WAFER: GLASS FILLED, LIQUID CRYSTAL POLYMER, COLOR: BLACK, UL94V-0  
PINS: PHOSPHOR BRONZE
- FINISH:  
TIN - 3.81 MICROMETERS/150 MICRONCHES MINIMUM TIN PLATE OVER NICKEL UNDERPLATE OVERALL  
15 GOLD - 0.38 MICROMETERS/15 MICRONCHES MINIMUM GOLD PLATE IN SELECT AREA OVER NICKEL UNDERPLATE OVERALL  
30 GOLD - 0.76 MICROMETERS/30 MICRONCHES MINIMUM GOLD PLATE IN SELECT AREA OVER NICKEL UNDERPLATE OVERALL
- PRODUCT SPECIFICATION: PS-74162-0001
- PACKAGING INFORMATION: SEE CHARTS
- PINS MUST MEET SOLDERABILITY SPEC. MIL-STD-202 METHOD 208B.
- PIN PUSHOUT FORCE: (17.79 N) 4 LBS.
- ROW TO ROW PIN HEIGHT VARIATION MUST NOT EXCEED (0.25) .010 IN.
- 20 CIRCUIT SIZE WITH PINS VOIDED IN LOCATIONS A-2 AND B-2 SHOWN FOR ILLUSTRATION PURPOSES.
- FOR VARIABLE DIMENSIONS, CIRCUIT SIZE, WAFER STYLE AND ASSEMBLY NUMBER - SEE SHEET 8.
- FOR VOIDED PIN LOCATIONS SEE STYLE 'C' AND CHART ON SHEET 8.
- FOR DIMENSIONS NOT SHOWN, FIRST: DETERMINE THE SHROUDED WAFER STYLE FROM CHART ON SHEET 8, SECOND: USING WAFER STYLE, LOCATE THE CORRESPONDING SHEET WITH NON-VOIDED ASSEMBLIES AND DIMENSIONS FOR ALL CIRCUIT SIZES.
- THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

|  |                               |                                       |                     |   |                    |                                   |                                  |  |  |  |
|--|-------------------------------|---------------------------------------|---------------------|---|--------------------|-----------------------------------|----------------------------------|--|--|--|
| INITIAL RELEASE<br>EC NO: UCP2009-1776<br>DRWN:SI BARRA 2009/03/27<br>CHKD:BBARKER 2009/04/20<br>APPR:SMILLER 2009/04/21 | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) |                     | DIMENSION STYLE<br>MM/IN  |                    | SCALE<br>INCH                     | DESIGN UNITS<br>INCH             | THIRD ANGLE PROJECTION   |  |  |
|  |                               | 4 PLACES ±--- ±---                    | 3 PLACES ±--- ±.010 | 2 PLACES ±0.25 ±.014  | 1 PLACE ±0.36 ±--- | DRAWN BY<br>SMILLER 2009/03/27    | CHECKED BY<br>BBARKER 2009/03/27 | TITLE<br>SALES ASSEMBLY<br>WAFER-RIGHT ANGLE FULLY<br>SHROUDED .100 GRID |  |  |
|  |                               | ANGULAR ±1/2°                         |                     | DRAFT WHERE APPLICABLE<br>MUST REMAIN WITHIN DIMENSIONS   |                    | APPROVED BY<br>SMILLER 2009/03/27 |                                  | MATERIAL NO.<br>SEE TABLE  |  |  |
|  |                               | SIZE D                                |                     | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                    | DOCUMENT NO.<br>SD-74162-001      |                                  | SHEET NO.<br>7 OF 8  |  |  |

| ITEM NUMBER<br>74162 | SHROUDED<br>WAFER<br>STYLE<br>SEE SHEET 7 | CKT<br>SIZE | R<br>±<br>0.38<br>.015 | P<br>REF     | PLATING<br>FINISH | CONNECTOR END PLATING |  |              | PC BOARD END PLATING |  |              | VOIDED PIN LOCATION(S)<br>(SEE NOTE 3 ON SHEET 7) |          | INFORMATION<br>PK-70873 |
|----------------------|---|-------------|------------------------|--------------|-------------------|-----------------------|--|--------------|----------------------|--|--------------|---|----------|-------------------------|
|                      |   |             |                        |              |                   | TYPE                  |  | K<br>MEAS.   | TYPE                 |  | M<br>MEAS.   | ROW   | POSITION |                         |
| 74162-3001           | B   | 14          | 8.00<br>.315           | 3.30<br>.130 | TIN               | TIN                   |  | 2.54<br>.100 | TIN                  |  | 1.27<br>.050 | A   | 1        | 0019                    |
| 74162-3002           | A   | 16          | 8.00<br>.315           | 5.08<br>.200 | TIN               | TIN                   |  | 2.54<br>.100 | TIN                  |  | 1.27<br>.050 | A   | 8        | 0019                    |
| 74612-3003           | A   | 30          | 8.00<br>.315           | 3.30<br>.130 | 15 GOLD           | GOLD                  |  | 2.54<br>.100 | TIN                  |  | 1.27<br>.050 | A   | 4        | 0019                    |
| X                    | X   |             | 8.00<br>.315           | 5.08<br>.200 | 15 GOLD           | GOLD                  |  | 2.54<br>.100 | TIN                  |  | 1.27<br>.050 |   |          |                         |
| X                    | X   |             | 8.00<br>.315           | 3.30<br>.130 | 30 GOLD           | GOLD                  |  | 2.54<br>.100 | TIN                  |  | 1.27<br>.050 |   |          |                         |
| X                    | X   |             | 8.00<br>.315           | 5.08<br>.200 | 30 GOLD           | GOLD                  |  | 2.54<br>.100 | TIN                  |  | 1.27<br>.050 |   |          |                         |
| X                    | X   |             | 6.35<br>.250           | 3.30<br>.130 | TIN               | TIN                   |  | 2.54<br>.100 | TIN                  |  | 1.27<br>.050 |   |          |                         |

| <b>INITIAL RELEASE</b><br>IEC NO: UICP2009-1776<br>DRAWN BY: BARRA 2009/03/27<br>CHYKOBARKER 2009/04/20<br>APPR: SMILLER 2009/04/21 | QUALITY SYMBOLS   | GENERAL TOLERANCES (UNLESS SPECIFIED)   | DIMENSION STYLE   | SCALE              | DESIGN UNITS        | THIRD ANGLE PROJECTION |       |       |          |       |       |          |       |       |         |       |       |       |      |      |  |
|---|---|---|---|--------------------|---------------------|------------------------|-------|-------|----------|-------|-------|----------|-------|-------|---------|-------|-------|-------|------|------|--|
|   | $\nabla=0$<br>$\nabla=0$  | <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>±.010</td> <td>±.004</td> </tr> <tr> <td>3 PLACES</td> <td>±.025</td> <td>±.010</td> </tr> <tr> <td>2 PLACES</td> <td>±.036</td> <td>±.014</td> </tr> <tr> <td>1 PLACE</td> <td>±.050</td> <td>±.020</td> </tr> </table> |   | mm                 | INCH                | 4 PLACES               | ±.010 | ±.004 | 3 PLACES | ±.025 | ±.010 | 2 PLACES | ±.036 | ±.014 | 1 PLACE | ±.050 | ±.020 | MM/IN | INCH | INCH |  |
|   |   | mm  | INCH  |                    |                     |                        |       |       |          |       |       |          |       |       |         |       |       |       |      |      |  |
|   | 4 PLACES  | ±.010   | ±.004   |                    |                     |                        |       |       |          |       |       |          |       |       |         |       |       |       |      |      |  |
| 3 PLACES  | ±.025   | ±.010   |   |                    |                     |                        |       |       |          |       |       |          |       |       |         |       |       |       |      |      |  |
| 2 PLACES  | ±.036   | ±.014   |   |                    |                     |                        |       |       |          |       |       |          |       |       |         |       |       |       |      |      |  |
| 1 PLACE   | ±.050   | ±.020   |   |                    |                     |                        |       |       |          |       |       |          |       |       |         |       |       |       |      |      |  |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS  | DRAWN BY: SMILLER 2009/03/27<br>CHECKED BY: BBARKER 2009/03/27<br>APPROVED BY: SMILLER 2009/03/27 | MATERIAL NO.<br><b>SEE TABLE</b>  | TITLE<br><b>SALES ASSEMBLY<br/>         WAFER-RIGHT ANGLE FULLY<br/>         SHROUDED .100 GRID</b> | MOLEX INCORPORATED | SHEET NO.<br>8 OF 8 |                        |       |       |          |       |       |          |       |       |         |       |       |       |      |      |  |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION    | DOCUMENT NO.<br><b>SD-74162-001</b>   |   |   |                    |                     |                        |       |       |          |       |       |          |       |       |         |       |       |       |      |      |  |