

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

**Part Number:** [0901361107](#)  
**Status:** **Active**  
**Overview:** [cgrid\\_iii](#)  
**Description:** 2.54mm (.100") Pitch C-Grid III™ Header, Single Row, Vertical, Shrouded, 7 Circuits, 4µm (160µ") Tin/Lead (Sn) over Nickel (Ni)

**Documents:**

[3D Model](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Drawing \(PDF\)](#)

**General**

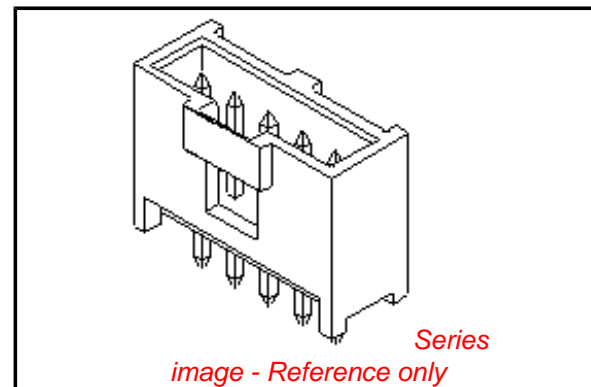
|                |                           |
|----------------|---------------------------|
| Product Family | PCB Headers               |
| Series         | <a href="#">90136</a>     |
| Application    | Wire-to-Board             |
| Overview       | <a href="#">cgrid_iii</a> |
| Product Name   | C-Grid III™               |

**Physical**

|                                |                 |
|--------------------------------|-----------------|
| Breakaway                      | No              |
| Circuits (Loaded)              | 7               |
| Circuits (maximum)             | 7               |
| Color - Resin                  | Black           |
| First Mate / Last Break        | No              |
| Glow-Wire Compliant            | No              |
| Guide to Mating Part           | No              |
| Keying to Mating Part          | None            |
| Lock to Mating Part            | Yes             |
| Material - Metal               | Brass           |
| Material - Plating Mating      | Tin             |
| Material - Plating Termination | Tin             |
| Material - Resin               | Polyester       |
| Number of Rows                 | 1               |
| Orientation                    | Vertical        |
| PC Tail Length (in)            | 0.114 In        |
| PC Tail Length (mm)            | 2.90 mm         |
| PCB Locator                    | No              |
| PCB Retention                  | None            |
| PCB Thickness Recommended (in) | 0.062 In        |
| PCB Thickness Recommended (mm) | 1.60 mm         |
| Packaging Type                 | Tray            |
| Pitch - Mating Interface (in)  | 0.100 In        |
| Pitch - Mating Interface (mm)  | 2.54 mm         |
| Plating min: Mating (µin)      | 120             |
| Plating min: Mating (µm)       | 3               |
| Plating min: Termination (µin) | 120             |
| Plating min: Termination (µm)  | 3               |
| Polarized to PCB               | No              |
| Shrouded                       | Fully           |
| Stackable                      | No              |
| Temperature Range - Operating  | -55°C to +125°C |
| Termination Interface: Style   | Through Hole    |

**Electrical**

|                               |      |
|-------------------------------|------|
| Current - Maximum per Contact | 3A   |
| Voltage - Maximum             | 350V |



**EU RoHS**

**ELV and RoHS  
Compliant**  
**REACH SVHC  
Contains SVHC: No**  
**Halogen-Free  
Status**

**China RoHS**



**Not Reviewed**

**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**

[90136Series](#)

**Mates With**

[90123 C-Grid III™ Modular Crimp Housing.](#)  
[90156 C-Grid III™ Crimp Housing](#)

**Solder Process Data**

Lead-free Process Capability

Wave Capable (TH only)

**Material Info****Reference - Drawing Numbers**

Packaging Specification

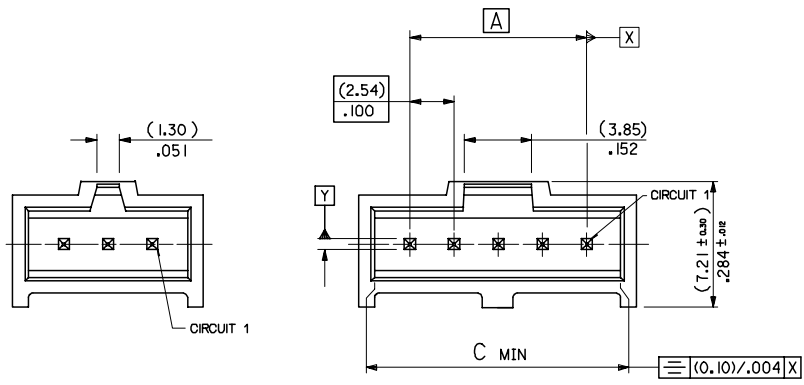
PK-90136-001

Sales Drawing

SDA-90136

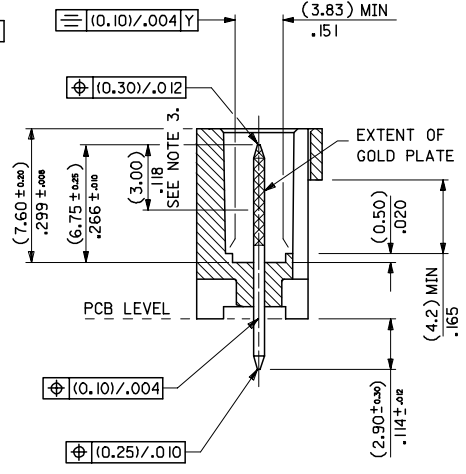
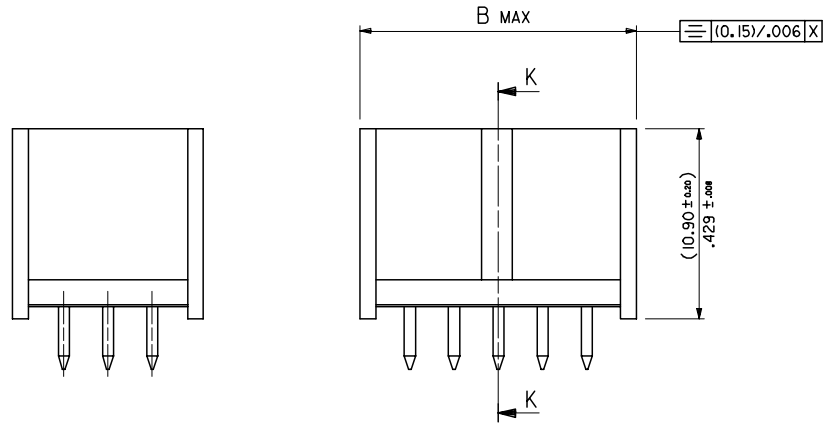
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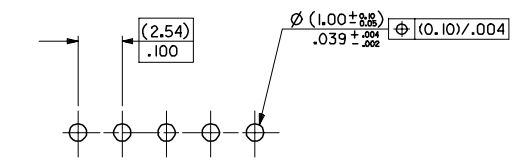
1 TO 3 CIRCUITS

4 TO 32 CIRCUITS



SECTION K-K

| No. OF CKTS | DIM A             | DIM B             | DIM C             |
|-------------|-------------------|-------------------|-------------------|
| 1           |                   | ( 5.89 ) / .232   | ( 4.06 ) / .160   |
| 2           | ( 2.54 ) / .100   | ( 8.43 ) / .332   | ( 6.60 ) / .260   |
| 3           | ( 5.08 ) / .200   | ( 10.97 ) / .432  | ( 9.14 ) / .360   |
| 4           | ( 7.62 ) / .300   | ( 13.51 ) / .532  | ( 11.68 ) / .460  |
| 5           | ( 10.16 ) / .400  | ( 16.05 ) / .632  | ( 14.22 ) / .560  |
| 6           | ( 12.70 ) / .500  | ( 18.59 ) / .732  | ( 16.76 ) / .660  |
| 7           | ( 15.24 ) / .600  | ( 21.13 ) / .832  | ( 19.30 ) / .760  |
| 8           | ( 17.78 ) / .700  | ( 23.67 ) / .932  | ( 21.84 ) / .860  |
| 9           | ( 20.32 ) / .800  | ( 26.21 ) / 1.032 | ( 24.38 ) / .960  |
| 10          | ( 22.86 ) / .900  | ( 28.75 ) / 1.132 | ( 26.92 ) / 1.060 |
| 11          | ( 25.4 ) / 1.000  | ( 31.29 ) / 1.232 | ( 29.46 ) / 1.160 |
| 12          | ( 27.94 ) / 1.100 | ( 33.83 ) / 1.332 | ( 32.00 ) / 1.260 |
| 13          | ( 30.48 ) / 1.200 | ( 36.37 ) / 1.432 | ( 34.54 ) / 1.360 |
| 14          | ( 33.02 ) / 1.300 | ( 38.91 ) / 1.532 | ( 37.08 ) / 1.460 |
| 15          | ( 35.56 ) / 1.400 | ( 41.45 ) / 1.632 | ( 39.62 ) / 1.560 |
| 16          | ( 38.10 ) / 1.500 | ( 43.99 ) / 1.732 | ( 42.16 ) / 1.660 |
| 17          | ( 40.64 ) / 1.600 | ( 46.53 ) / 1.832 | ( 44.70 ) / 1.760 |
| 18          | ( 43.18 ) / 1.700 | ( 49.07 ) / 1.932 | ( 47.24 ) / 1.860 |
| 19          | ( 45.72 ) / 1.800 | ( 51.61 ) / 2.032 | ( 49.78 ) / 1.960 |
| 20          | ( 48.26 ) / 1.900 | ( 54.15 ) / 2.132 | ( 52.32 ) / 2.060 |
| 21          | ( 50.80 ) / 2.000 | ( 56.69 ) / 2.232 | ( 54.86 ) / 2.160 |
| 22          | ( 53.34 ) / 2.100 | ( 59.23 ) / 2.332 | ( 57.40 ) / 2.260 |
| 23          | ( 55.88 ) / 2.200 | ( 61.77 ) / 2.432 | ( 59.94 ) / 2.360 |
| 24          | ( 58.42 ) / 2.300 | ( 64.31 ) / 2.532 | ( 62.48 ) / 2.460 |
| 25          | ( 60.96 ) / 2.400 | ( 66.85 ) / 2.632 | ( 65.02 ) / 2.560 |
| 26          | ( 63.50 ) / 2.500 | ( 69.39 ) / 2.732 | ( 67.56 ) / 2.660 |
| 27          | ( 66.04 ) / 2.600 | ( 71.93 ) / 2.832 | ( 70.10 ) / 2.760 |
| 28          | ( 68.58 ) / 2.700 | ( 74.47 ) / 2.932 | ( 72.64 ) / 2.860 |
| 29          | ( 71.12 ) / 2.800 | ( 77.01 ) / 3.032 | ( 75.18 ) / 2.960 |
| 30          | ( 73.66 ) / 2.900 | ( 79.55 ) / 3.132 | ( 77.72 ) / 3.060 |
| 31          | ( 76.20 ) / 3.000 | ( 82.09 ) / 3.232 | ( 80.26 ) / 3.160 |
| 32          | ( 78.74 ) / 3.100 | ( 84.63 ) / 3.332 | ( 82.80 ) / 3.260 |



RECOMMENDED P.C. BOARD HOLE PATTERN

- NOTES
- MATERIAL:-
    - PIN:- (0.635) / .025 SQ.BRASS WIRE.
    - HOUSING:- 15% GLASS FILLED POLYESTER
    - UL 94 V-0 COLOUR BLACK
  - FOR PLATING VERSIONS SEE SHEET 2.
  - MEASUREMENT POINT FOR MINIMUM PLATING THICKNESS
  - PRODUCT SPEC: PS-99020-0001
  - RECOMMENDED PCB THICKNESS 1.6mm

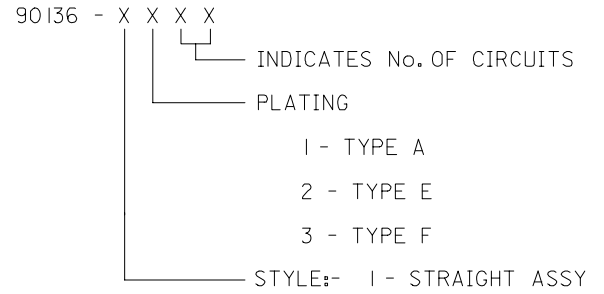
|   |                               |   |  |                           |                    |   |                        |                       |
|---|-------------------------------|---|--|---------------------------|--------------------|---|------------------------|-----------------------|
| ADDED CIRCUIT 1 INDICATOR<br>E.C. NO: E2008-0112<br>DRAWN BY: BRYNES<br>CHKD: 2007/09/10<br>APPR: WALLACE<br>2007/09/11 | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)   |  | DIMENSION STYLE<br>MM/IN  | SCALE<br>5:1       | DESIGN UNITS<br>METRIC                                  | THIRD ANGLE PROJECTION |                       |
|   |                               | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± .004<br>2 PLACES ± 0.10 ± ---<br>1 PLACE ± --- ± ---<br>ANGULAR ± 1/2°               | mm INCH<br>± --- ± ---<br>± .004 ± ---<br>± --- ± ---<br>± --- ± --- | DRAWN BY<br>KS            | DATE<br>1987/10/30 | TITLE<br>C-GRID III SINGLE ROW STRAIGHT SHROUDED HEADER |                        |                       |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |                               | SEE CHART   |  | MATERIAL NO.<br>SDA-90136 |                    | DOCUMENT NO.<br>MOLEX INCORPORATED                      |                        |                       |
| SIZE<br>A2  |                               | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |                           |                    |   |                        | SHEET NO.<br>1 OF 100 |

10 9 8 7 6 5 4 3 2 1

SEE CHART  
SDA-90136

| NO. OF CKTS | PART NUMBERS   |                |                |
|-------------|----------------|----------------|----------------|
|             | PLATING TYPE A | PLATING TYPE E | PLATING TYPE F |
| 1           | 90136-1101     | 90136-1201     | 90136-1301     |
| 2           | ▲ -1102        | ▲ -1202        | ▲ -1302        |
| 3           | -1103          | -1203          | -1303          |
| 4           | -1104          | -1204          | -1304          |
| 5           | -1105          | -1205          | -1305          |
| 6           | -1106          | -1206          | -1306          |
| 7           | -1107          | -1207          | -1307          |
| 8           | -1108          | -1208          | -1308          |
| 9           | -1109          | -1209          | -1309          |
| 10          | -1110          | -1210          | -1310          |
| 11          | -1111          | -1211          | -1311          |
| 12          | -1112          | -1212          | -1312          |
| 13          | -1113          | -1213          | -1313          |
| 14          | -1114          | -1214          | -1314          |
| 15          | -1115          | -1215          | -1315          |
| 16          | -1116          | -1216          | -1316          |
| 17          | -1117          | -1217          | -1317          |
| 18          | -1118          | -1218          | -1318          |
| 19          | -1119          | -1219          | -1319          |
| 20          | -1120          | -1220          | -1320          |
| 21          | -1121          | -1221          | -1321          |
| 22          | -1122          | -1222          | -1322          |
| 23          | -1123          | -1223          | -1323          |
| 24          | -1124          | -1224          | -1324          |
| 25          | -1125          | -1225          | -1325          |
| 26          | -1126          | -1226          | -1326          |
| 27          | -1127          | -1227          | -1327          |
| 28          | -1128          | -1228          | -1328          |
| 29          | -1129          | -1229          | -1329          |
| 30          | -1130          | -1230          | -1330          |
| 31          | ▼ -1131        | ▼ -1231        | ▼ -1331        |
| 32          | 90136-1132     | 90136-1232     | 90136-1332     |

NOTES  
1.FOR ASSY SEE SHEET I  
2.FOR PLATING DETAILS SEE SDES 99000-0003



A

|   |                 |   |  |                |   |   |                           |
|---|-----------------|---|--|----------------|---|---|---------------------------|
| CORRECTED TABLE<br>EC NO: E2007-1001<br>DRWN:DBYRNES 2007/06/07<br>CHKD: 2007/06/07<br>APPR:EDMAHONY 2007/06/07 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED)   | DIMENSION STYLE<br>MM ONLY                                 | SCALE<br>---   | DESIGN UNITS<br>METRIC  | THIRD ANGLE PROJECTION  |                           |
|   | ▼=0<br>◻=0      | 4 PLACES ±--- ±---<br>3 PLACES ±--- ±---<br>2 PLACES ±--- ±---<br>1 PLACE ±--- ±--- | mm INCH  | DRAWN BY<br>KS | DATE<br>1987/09/28  | TITLE<br>C-GRID 111<br>SINGLE ROW STRAIGHT<br>SHROUDED HEADER |                           |
|   |                 | ANGULAR ±---°   | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS | APPROVED BY    | DATE  | MATERIAL NO.  | DOCUMENT NO.<br>SDA-90136 |
|   |                 |   |  | SIZE<br>A3     | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |   | SHEET NO.<br>2 OF 8       |

9 8 7 6 5 4 3 2 1