

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0901361204

Status:

Active

Overview:

cgrid\_iii

Description:

2.54mm (.100") Pitch C-Grid III™ Header, Single Row, Vertical, Shrouded, 4 Circuits, 0.38μm (15μ") Gold (Au) Selective Plating

Documents:

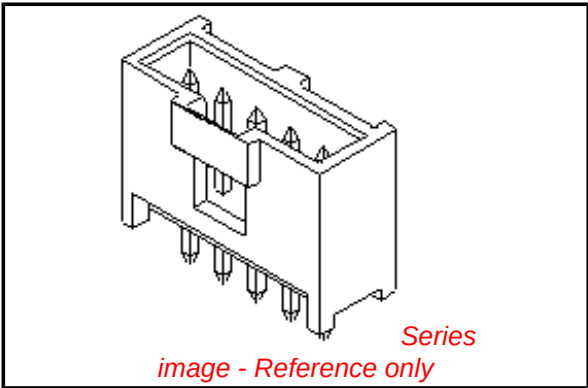
3D Model

RoHS Certificate of Compliance (PDF)

Drawing (PDF)

| General                        |                 |
|--------------------------------|-----------------|
| Product Family                 | PCB Headers     |
| Series                         | 90136           |
| Application                    | Wire-to-Board   |
| Overview                       | cgrid_iii       |
| Product Name                   | C-Grid III™     |
| Physical                       |                 |
| Breakaway                      | No              |
| Circuits (Loaded)              | 4               |
| Circuits (maximum)             | 4               |
| 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      | Gold            |
| 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)      | 15.2            |
| Plating min: Mating (μm)       | 0.38            |
| 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

Not Reviewed

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

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

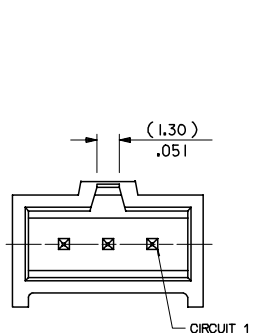
PK-90136-001

Sales Drawing

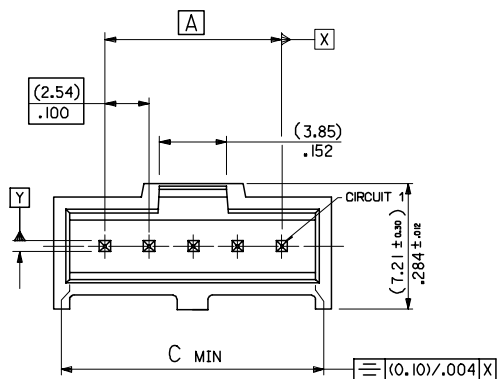
SDA-90136

This document was generated on 05/26/2010

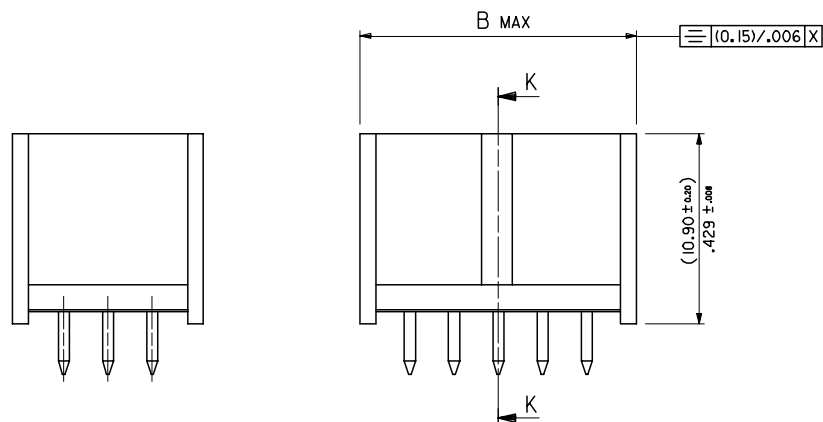
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1 TO 3 CIRCUITS



4 TO 32 CIRCUITS



# NOTES

## 1. MATERIAL:-

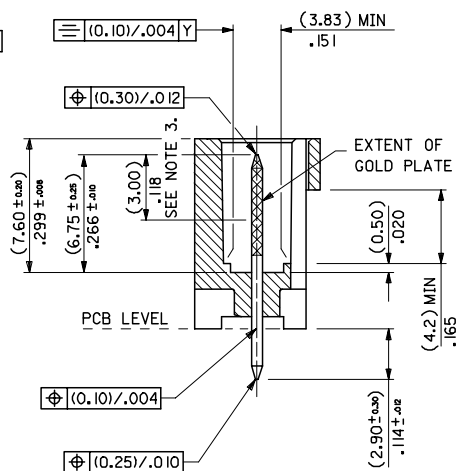
- PIN:- (0.635) / .025 SQ. BRASS WIRE.
- HOUSING:- 15% GLASS FILLED POLYESTER
- UL 94 V-0 COLOUR BLACK

## 2. FOR PLATING VERSIONS SEE SHEET 2.

## 3. MEASUREMENT POINT FOR MINIMUM PLATING THICKNESS

## 4. PRODUCT SPEC: PS-99020-0001

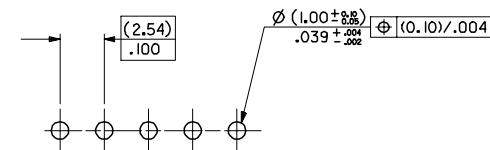
## 5. RECOMMENDED PCB THICKNESS 1.6mm



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



| REV                       | DESCRIPTION       | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED)                | DIMENSION STYLE |              | SCALE        | DESIGN UNITS | THIRD ANGLE PROJECTION                         |
|---------------------------|-------------------|-----------------|------------------------------------------------------|-----------------|--------------|--------------|--------------|------------------------------------------------|
|                           |                   |                 |                                                      | MM/IN           | DATE         |              |              |                                                |
| ADDED CIRCUIT 1 INDICATOR | EC NO: E2008-0112 | 2007/09/10      | 4 PLACES ± ---                                       | mm              | INCH         | DRAWN BY     | DATE         | TITLE                                          |
| DRW: NIDBYRMS             | CHKD: 2007/09/10  | 2007/09/10      | 3 PLACES ± ---                                       | ± .004          | KS           | 1987/10/30   |              | C-GRID III SINGLE ROW STRAIGHT SHROUDED HEADER |
| CHKO: 2007/09/10          | APPR: IMALLACE    | 2007/09/11      | 2 PLACES ± 0.10                                      | ± ---           | CHECKED BY   | DATE         |              | MOLEX INCORPORATED                             |
| APPR: IMALLACE            |                   |                 | 1 PLACE ± ---                                        | ± ---           | APPROVED BY  | DATE         |              | SDA-90136                                      |
|                           |                   |                 | ANGULAR ± 1/2°                                       |                 | MATERIAL NO. | DOCUMENT NO. |              | SHEET NO.                                      |
|                           |                   |                 | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |                 | SIZE         |              |              | 1 OF 100                                       |
|                           |                   |                 |                                                      |                 |              |              |              |                                                |

|                                           |                 |                   |                   |                   |   |   |   |   |   |   |   |  |
|-------------------------------------------|-----------------|-------------------|-------------------|-------------------|---|---|---|---|---|---|---|--|
|                                           |                 | 10                | 9                 | 8                 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| SEE CHART<br>SDA-90136                    | PART<br>NUMBERS |                   |                   |                   |   |   |   |   |   |   |   |  |
|                                           | NO. OF<br>CKTS  | PLATING<br>TYPE A | PLATING<br>TYPE E | PLATING<br>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 1                    |                 |                   |                   |                   |   |   |   |   |   |   |   |  |
| 2.FOR PLATING DETAILS SEE SDES 99000-0003 |                 |                   |                   |                   |   |   |   |   |   |   |   |  |
| 90136 - X X X X                           |                 |                   |                   |                   |   |   |   |   |   |   |   |  |
| INDICATES No. OF CIRCUITS                 |                 |                   |                   |                   |   |   |   |   |   |   |   |  |
| PLATING                                   |                 |                   |                   |                   |   |   |   |   |   |   |   |  |
| 1 - TYPE A                                |                 |                   |                   |                   |   |   |   |   |   |   |   |  |
| 2 - TYPE E                                |                 |                   |                   |                   |   |   |   |   |   |   |   |  |
| 3 - TYPE F                                |                 |                   |                   |                   |   |   |   |   |   |   |   |  |
| STYLE:- 1 - STRAIGHT ASSY                 |                 |                   |                   |                   |   |   |   |   |   |   |   |  |
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