

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

**Part Number:** [0901512234](#)  
**Status:** **Active**  
**Overview:** [cgrid\\_sl\\_products](#)  
**Description:** 2.54mm (.100") Pitch C-Grid III™ PC Board Connector, Dual Row, Vertical, 34 Circuits

**Documents:**

[3D Model](#)  
[Drawing \(PDF\)](#)

[RoHS Certificate of Compliance \(PDF\)](#)

**General**

|                |                                   |
|----------------|-----------------------------------|
| Product Family | PCB Receptacles                   |
| Series         | <a href="#">90151</a>             |
| Application    | Board-to-Board                    |
| Overview       | <a href="#">cgrid_sl_products</a> |
| Product Name   | C-Grid III™                       |

**Physical**

|                                |                 |
|--------------------------------|-----------------|
| Circuits (Loaded)              | 34              |
| Color - Resin                  | Black           |
| Glow-Wire Compliant            | No              |
| Guide to Mating Part           | No              |
| Keying to Mating Part          | None            |
| Lock to Mating Part            | No              |
| Material - Metal               | Phosphor Bronze |
| Material - Plating Mating      | Gold            |
| Material - Plating Termination | Tin             |
| Material - Resin               | Polyester       |
| Number of Rows                 | 2               |
| 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                 | Tube            |
| 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              |
| Temperature Range - Operating  | -55°C to +125°C |
| Termination Interface: Style   | Through Hole    |

**Electrical**

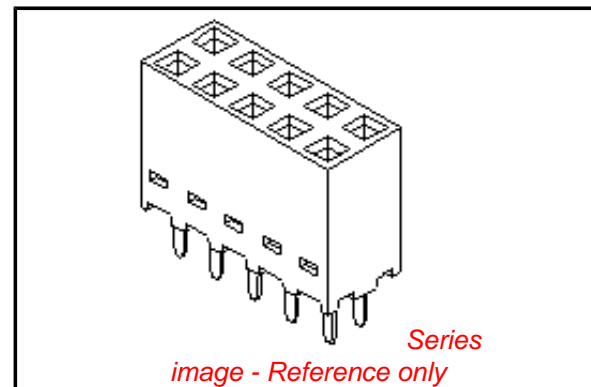
|                               |      |
|-------------------------------|------|
| Current - Maximum per Contact | 3A   |
| Grounding to PCB              | No   |
| Voltage - Maximum             | 350V |

**Solder Process Data**

|                              |                        |
|------------------------------|------------------------|
| Lead-free Process Capability | Wave Capable (TH only) |
|------------------------------|------------------------|

**Material Info**

**Reference - Drawing Numbers**



**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**

[90151Series](#)

**Mates With**

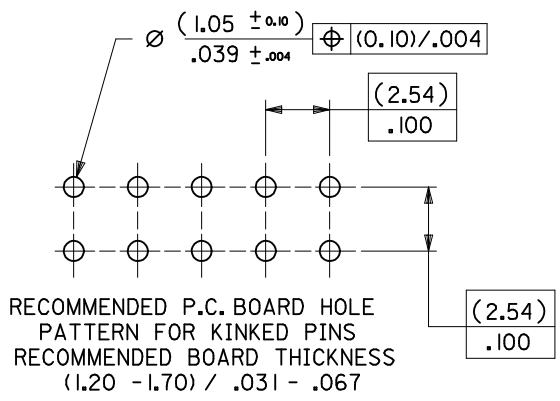
0.64mm (.025") square pins

This document was generated on 05/24/2010

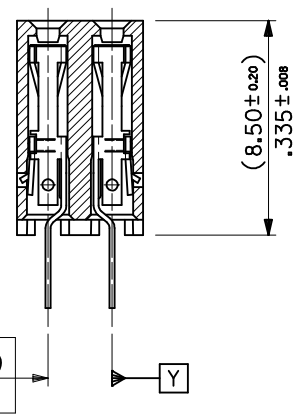
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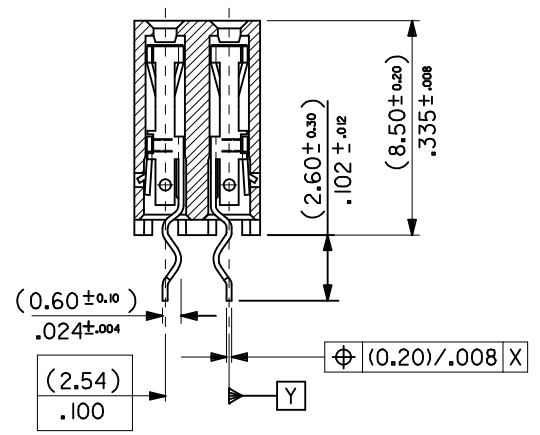
RECOMMENDED P.C. BOARD HOLE PATTERN FOR STRAIGHT PINS



RECOMMENDED P.C. BOARD HOLE PATTERN FOR KINKED PINS  
RECOMMENDED BOARD THICKNESS (1.20 - 1.70) / .031 - .067



SECTION C-C



SECTION C-C

NOTES

- 1) CONTACT-PLATED PHOSPHOR BRONZE.
- 2) HOUSING-15% GLASS FILLED POLYESTER. COLOUR-BLACK.
- 3) COMPATIBLE WITH PCB HOLE PATTERN.
- 4) FOR (0.635)/.025 SQ. MALE PINS THE LENGTH MUST BE (5.65)/.222 MIN & (7.00)/.276 MAX. TO ENSURE GOOD CONNECTION WITH CONTACT.

|   |    |
|---|----|
| 6 | AF |
| 5 | AD |
| 4 | AD |
| 3 | AD |
| 2 | AG |
| 1 | AH |

| ADD INSET FOR GATE<br>EC NO: E2009-0250<br>DRWN: BMAGUIRE 2008/12/08<br>CHKD: 2008/12/08<br>APPR: BMAGUIRE 2008/12/08 | QUALITY SYMBOLS<br>▽=0<br>◻=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)   |       | DIMENSION STYLE<br>MM ONLY |    | SCALE<br>1:1              |          | DESIGN UNITS<br>METRIC |       | THIRD ANGLE PROJECTION |       |       |          |        |       |         |        |       |                |  |                  |  |  |  |  |  |
|---|-------------------------------|---|-------|----------------------------|----|---------------------------|----------|------------------------|-------|------------------------|-------|-------|----------|--------|-------|---------|--------|-------|----------------|--|------------------|--|--|--|--|--|
|   |                               | <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.05</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.10</td> <td>± ---</td> </tr> </tbody> </table> |       |                            | mm | INCH                      | 4 PLACES | ± ---                  | ± --- | 3 PLACES               | ± --- | ± --- | 2 PLACES | ± 0.05 | ± --- | 1 PLACE | ± 0.10 | ± --- | DRAWN BY<br>DB |  | DATE<br>21/07/86 |  | TITLE<br>C-GRID III DUAL ROW VERTICAL P.C. BOARD CONNECTOR |  |  |  |
|   |                               |   | mm    | INCH                       |    |                           |          |                        |       |                        |       |       |          |        |       |         |        |       |                |  |                  |  |  |  |  |  |
|   |                               | 4 PLACES  | ± --- | ± ---                      |    |                           |          |                        |       |                        |       |       |          |        |       |         |        |       |                |  |                  |  |  |  |  |  |
| 3 PLACES  | ± ---                         | ± ---   |       |                            |    |                           |          |                        |       |                        |       |       |          |        |       |         |        |       |                |  |                  |  |  |  |  |  |
| 2 PLACES  | ± 0.05                        | ± ---   |       |                            |    |                           |          |                        |       |                        |       |       |          |        |       |         |        |       |                |  |                  |  |  |  |  |  |
| 1 PLACE   | ± 0.10                        | ± ---   |       |                            |    |                           |          |                        |       |                        |       |       |          |        |       |         |        |       |                |  |                  |  |  |  |  |  |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |                               | APPROVED BY   |       | DATE                       |    | MOLEX INCORPORATED        |          |                        |       |                        |       |       |          |        |       |         |        |       |                |  |                  |  |  |  |  |  |
| AH  |                               | REV   |       | MATERIAL NO.<br>SEE CHART  |    | DOCUMENT NO.<br>SDA-90151 |          | SHEET NO.<br>1 OF 5    |       |                        |       |       |          |        |       |         |        |       |                |  |                  |  |  |  |  |  |

SEE CHART  
PART NO. SDA-90151  
DWG. NO.

| PART NO.<br>STRAIGHT<br>PINS | PART NO.<br>KINKED<br>PINS | NO.OF<br>CKTS. | DIM." A"      | DIM." B"<br>( $\pm 0.00$ ): $\pm 0.02$ | QTY. PER<br>TUBE |
|------------------------------|----------------------------|----------------|---------------|--|------------------|
| 90151-2X04                   | 90151-3X04                 | 4              | ( 2.54 ) .100 | ( 5.08 ) .200                          | 105              |
| ▲ ▲ 06                       | ▲ ▲ 06                     | 6              | ( 5.08 ) .200 | ( 7.62 ) .300                          | 72               |
| 08                           | 08                         | 8              | ( 7.62 ) .300 | (10.16) .400                           | 52               |
| 10                           | 10                         | 10             | (10.16) .400  | (12.70) .500                           | 44               |
| 12                           | 12                         | 12             | (12.70) .500  | (15.24) .600                           | 36               |
| 14                           | 14                         | 14             | (15.24) .600  | (17.78) .700                           | 30               |
| 16                           | 16                         | 16             | (17.78) .700  | (20.32) .800                           | 26               |
| 18                           | 18                         | 18             | (20.32) .800  | (22.86) .900                           | 24               |
| 20                           | 20                         | 20             | (22.86) .900  | (25.40) 1.000                          | 22               |
| 22                           | 22                         | 22             | (25.40) 1.000 | (27.94) 1.100                          | 20               |
| 24                           | 24                         | 24             | (27.94) 1.100 | (30.48) 1.200                          | 18               |
| 26                           | 26                         | 26             | (30.48) 1.200 | (33.02) 1.300                          | 16               |
| 28                           | 28                         | 28             | (33.02) 1.300 | (35.56) 1.400                          | 14               |
| 30                           | 30                         | 30             | (35.56) 1.400 | (38.10) 1.500                          | 14               |
| 32                           | 32                         | 32             | (38.10) 1.500 | (40.64) 1.600                          | 13               |
| 34                           | 34                         | 34             | (40.64) 1.600 | (43.18) 1.700                          | 12               |
| 36                           | 36                         | 36             | (43.18) 1.700 | (45.72) 1.800                          | 12               |
| 38                           | 38                         | 38             | (45.72) 1.800 | (48.26) 1.900                          | 11               |
| 40                           | 40                         | 40             | (48.26) 1.900 | (50.80) 2.000                          | 11               |
| 42                           | 42                         | 42             | (50.80) 2.000 | (53.34) 2.100                          | 11               |
| 44                           | 44                         | 44             | (53.34) 2.100 | (55.88) 2.200                          | 10               |
| 46                           | 46                         | 46             | (55.88) 2.200 | (58.42) 2.300                          | 10               |
| 48                           | 48                         | 48             | (58.42) 2.300 | (60.96) 2.400                          | 9                |
| 50                           | 50                         | 50             | (60.96) 2.400 | (63.50) 2.500                          | 8                |
| 52                           | 52                         | 52             | (63.50) 2.500 | (66.04) 2.600                          | 8                |
| 54                           | 54                         | 54             | (66.04) 2.600 | (68.58) 2.700                          | 8                |
| 56                           | 56                         | 56             | (68.58) 2.700 | (71.12) 2.800                          | 7                |
| 58                           | 58                         | 58             | (71.12) 2.800 | (73.66) 2.900                          | 7                |
| 60                           | 60                         | 60             | (73.66) 2.900 | (76.20) 3.000                          | 7                |
| ▼ ▼ 62                       | ▼ ▼ 62                     | 62             | (76.20) 3.000 | (78.74) 3.100                          | 7                |
| 90151-2X64                   | 90151-3X64                 | 64             | (78.74) 3.100 | (81.28) 3.200                          | 6                |

PLATING VERSION A

PRE-PLATED HOT DIP TIN  
1.0 TO 2.5 um (.000040" TO .000100").

PLATING VERSION E

1.27 TO 1.78 um (.000050" TO .000070") NICKEL  
OVERALL, 0.38 TO 0.64 um (.000015" TO .000025")  
GOLD ON CONTACT AREA (OVER NICKEL).  
3 TO 5 um (.000120" TO .000200") TIN  
ON SOLDER TAILS (OVER NICKEL).

PLATING VERSION F.

1.27 TO 1.78 um (.000050" TO .000070") NICKEL  
OVERALL, 0.76 TO 1.0 um (.000030" TO .000040")  
GOLD ON CONTACT AREA (OVER NICKEL).  
3 TO 5 um (.000120" TO .000200") TIN  
ON SOLDER TAILS (OVER NICKEL).

PLATING VERSION G.

1.27 TO 1.78 um (.000050" TO .000070") NICKEL  
OVERALL, 0.125 um MIN. (.000005" MIN.) GOLD FLASH  
ON CONTACT AREA (OVER NICKEL).  
3 TO 5 um (.000120" TO .000200") TIN  
ON SOLDER TAILS (OVER NICKEL).

PLATING VERSION N.

1.27 TO 1.78 um (.000050" TO .000070") NICKEL  
OVERALL, 0.76 TO 2.6 um (.000030" TO .000100")  
GOLD ON CONTACT AREA (OVER NICKEL).  
4 um (.000120") MINIMUM TIN  
ON SOLDER TAILS (OVER NICKEL).

**STANDARD PRODUCTS**

90151-XXYY

INDICATES NO. OF CIRCUITS.

- PLATING CODE.  
1 = VERSION A.  
2 = VERSION E.  
3 = VERSION F.  
4 = VERSION N.  
5 = VERSION G.

SEE CHART

FOR PREVIOUS  
DRAWING ISSUES  
SEE MRI.

LEAD FREE CONVERSION  
NEW BORDER ADDED  
Ec NO. E2004-0610  
DRAWN: PSHEAHAN 06/01/2004  
CHK:  
APPR:  
AH

DESCRIPTION  
MAJOR  
CRITICAL  
REV

QUALITY SYMBOLS  
GENERAL TOLERANCES:  
(UNLESS SPECIFIED)  
SCALE  
DESIGN UNITS  
THIRD ANGLE PROJECTION  
DRAWN BY & DATE  
CHECKED BY & DATE  
APPROVED BY & DATE  
ANGULAR: ± °  
DRAFT WHERE APPLICABLE MUST  
REMAIN WITHIN DIMENSIONS

mm INCH  
mm ONLY  
DRAWN BY & DATE  
DB 14/ 7/87  
CHECKED BY & DATE  
APPROVED BY & DATE  
CAD FILENAME SA90151X2 DGN

DIMENSIONS:  
mm INCH  
mm ONLY  
SHT  
REV  
REVISE ON CAD ONLY  
TITLE:  
C-GRID III  
DUAL ROW VERTICAL  
P.C. BOARD CONNECTOR  
molex MOLEX INCORPORATED  
MATERIAL NO.  
DRAWING NO.  
SHEET NO.  
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