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Part Number: [0901471120](#)
Status: **Active**
Overview: [cgrid_sl_products](#)
Description: 2.54mm (.100") Pitch C-Grid® PC Board Connector, Single Row, Vertical, 20 Circuits, Tin (Sn) Plating

Documents:

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

Agency Certification

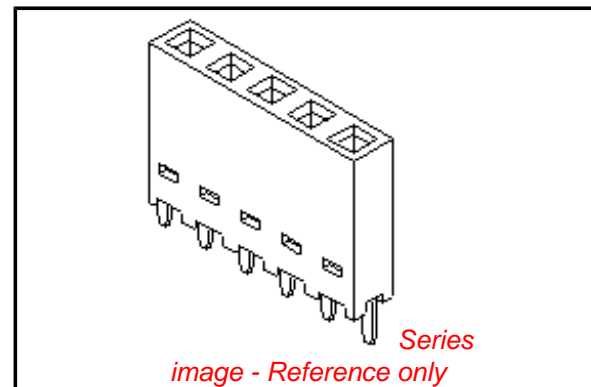
CSA LR19980
 UL E29179

General

Product Family PCB Receptacles
 Series [90147](#)
 Application Board-to-Board
 Overview [cgrid_sl_products](#)
 Product Name C-Grid®

Physical

Circuits (Loaded) 20
 Circuits (maximum) 20
 Color - Resin Black
 Durability (mating cycles max) 30
 Flammability 94V-0
 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 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 Yes
 PCB Thickness Recommended (in) 0.063 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
 Pitch - Term. Interface (in) 0.100 In
 Pitch - Term. Interface (mm) 2.54 mm
 Plating min: Mating (µin) 40
 Plating min: Mating (µm) 1.00
 Plating min: Termination (µin) 40
 Plating min: Termination (µm) 1.00
 Polarized to Mating Part No
 Polarized to PCB No
 Stackable No
 Surface Mount Compatible (SMC) No



EU RoHS

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

China RoHS



Need more information on product environmental compliance?

Email 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

[90147Series](#)

Mates With

[90120](#) , [90121](#)

Use With

[90120](#) , [90121](#)

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 AC/DC

Solder Process Data

Lead-free Process Capability Wave Capable (TH only)

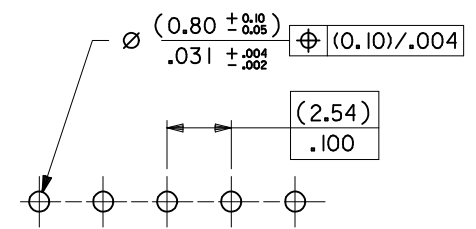
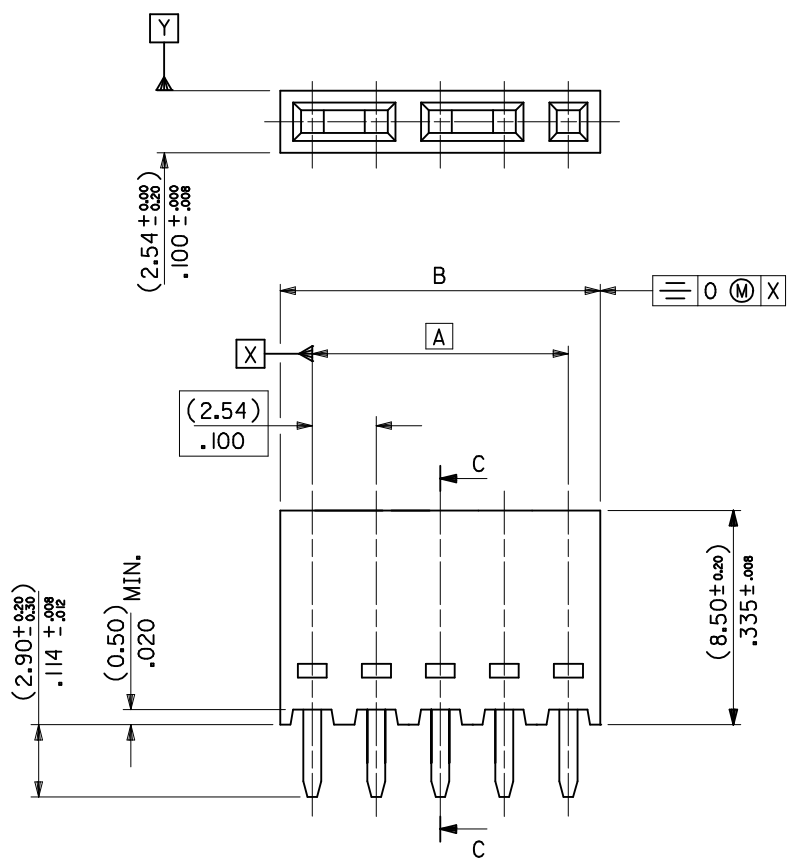
Material Info

Reference - Drawing Numbers

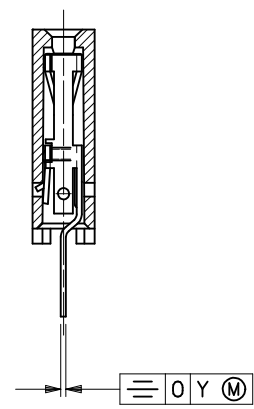
Sales Drawing SDA-90147

This document was generated on 05/22/2010

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RECOMMENDED P.C. BOARD
HOLE PATTERN
FOR STRAIGHT PINS.



SECTION C-C SHOWING
STRAIGHT PINS.

NOTES:

- 1) CONTACT-PLATED PHOSPHOR BRONZE.
- 2) HOUSING-15% GLASS FILLED POLYESTER. COLOUR: BLACK.
- 3) 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.
- 4) PRODUCT SPECIFICATION: PS-99020-0001
- 5) PCB THICKNESS 1.6MM

| | | | | | | | | |
|--|--------------------|--|---|---------------------------|---------------------|--------------|---|---|
| ADDED GATE AREA EC NO: E2009-0250 2008/12/08 DRWN: BMAGUIRE 2008/12/08 CHKD: APPR: BMAGUIRE 2008/12/08 | DESCRIPTION REV | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION | |
| | | $\nabla = 0$ $\nabla C = 0$ | mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- ANGULAR ± 2 ° | MM/IN | 1:1 | METRIC | DB 1987/07/14 JDENNEHY 2005/07/07 JDENNEHY 2005/07/07 | TITLE C-GRID III, SINGLE ROW VERTICAL P.C. BOARD CONNECTOR ASSEMBLY. MOLEX INCORPORATED |
| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | SEE SHEET 2 | MATERIAL NO. SDA-90147 | SHEET NO. 1 OF 2 | | | |
| | | SIZE A3 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | |

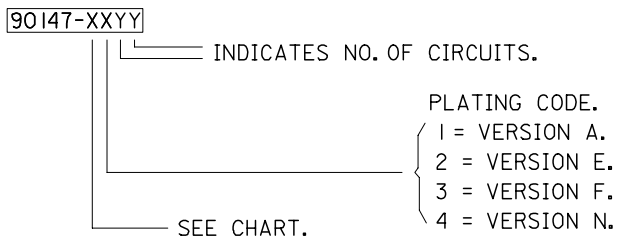
| PART NO'S - STRAIGHT PINS | | NO. OF CKTS | DIM. "A" | DIM. "B" (±.000)±.002 | QTY. PER TUBE |
|---------------------------|-------------------|-------------|-----------------|--------------------------|---------------|
| STANDARD | CUSTOMER SPECIFIC | | | | |
| 90147-1X02 | | 2 | (2.54) .100 | (5.08) .200 | 105 |
| ↑ 03 | | 3 | (5.08) .200 | (7.62) .300 | 72 |
| 04 | | 4 | (7.62) .300 | (10.16) .400 | 52 |
| 05 | 90147-9105 | 5 | (10.16) .400 | (12.70) .500 | 44 |
| 06 | | 6 | (12.70) .500 | (15.24) .600 | 36 |
| 07 | | 7 | (15.24) .600 | (17.78) .700 | 30 |
| 08 | | 8 | (17.78) .700 | (20.32) .800 | 26 |
| 09 | | 9 | (20.32) .800 | (22.86) .900 | 22 |
| 10 | | 10 | (22.86) .900 | (25.40) 1.000 | 22 |
| 11 | | 11 | (25.40) 1.000 | (27.94) 1.100 | 20 |
| 12 | | 12 | (27.94) 1.100 | (30.48) 1.200 | 18 |
| 13 | | 13 | (30.48) 1.200 | (33.02) 1.300 | 16 |
| 14 | | 14 | (33.02) 1.300 | (35.56) 1.400 | 14 |
| 15 | | 15 | (35.56) 1.400 | (38.10) 1.500 | 14 |
| 16 | | 16 | (38.10) 1.500 | (40.64) 1.600 | 13 |
| 17 | | 17 | (40.64) 1.600 | (43.18) 1.700 | 13 |
| 18 | | 18 | (43.18) 1.700 | (45.72) 1.800 | 12 |
| 19 | | 19 | (45.72) 1.800 | (48.26) 1.900 | 12 |
| 20 | | 20 | (48.26) 1.900 | (50.80) 2.000 | 11 |
| 21 | | 21 | (50.80) 2.000 | (53.34) 2.100 | 11 |
| 22 | | 22 | (53.34) 2.100 | (55.88) 2.200 | 10 |
| 23 | | 23 | (55.88) 2.200 | (58.42) 2.300 | 9 |
| 24 | | 24 | (58.42) 2.300 | (60.96) 2.400 | 9 |
| 25 | | 25 | (60.96) 2.400 | (63.50) 2.500 | 8 |
| 26 | | 26 | (63.50) 2.500 | (66.04) 2.600 | 8 |
| 27 | | 27 | (66.04) 2.600 | (68.58) 2.700 | 8 |
| 28 | | 28 | (68.58) 2.700 | (71.12) 2.800 | 7 |
| 29 | | 29 | (71.12) 2.800 | (73.66) 2.900 | 7 |
| 30 | | 30 | (73.66) 2.900 | (76.20) 3.000 | 7 |
| ↓ 31 | | 31 | (76.20) 3.000 | (78.74) 3.100 | 7 |
| 90147-1X 32 | | 32 | (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 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

REMOVE KINK OPT
EC NO: E2007-0787
DRWN: WASZKI EMI CZ 2007/04/25
CHKD: DMORARTY 2007/04/25
APPR: DENNEHY 2007/04/27

QUALITY SYMBOLS
▽=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|----------|-------|-------|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± --- | ± --- |
| 1 PLACE | ± --- | ± --- |

ANGULAR ± 2 °

DRAFT WHERE APPLICABLE
MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE
MM/IN

DRAWN BY DATE
DB 1986/12/28

CHECKED BY DATE
JDENNEHY 2005/07/07

APPROVED BY DATE
JDENNEHY 2005/07/07

MATERIAL NO.

SIZE
A3

SCALE
5:1

DESIGN UNITS
METRIC

THIRD ANGLE PROJECTION

TITLE
C-GRID III SINGLE ROW
VERTICAL P.C. BOARD
CONNECTOR

MOLEX INCORPORATED

DOCUMENT NO.
SDA-90147

SHEET NO.
2 OF 2

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