

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

**Part Number:** [0901471112](#)  
**Status:** **Active**  
**Overview:** [cgrid\\_sl\\_products](#)  
**Description:** 2.54mm (.100") Pitch C-Grid® PC Board Connector, Single Row, Vertical, 12 Circuits

**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®

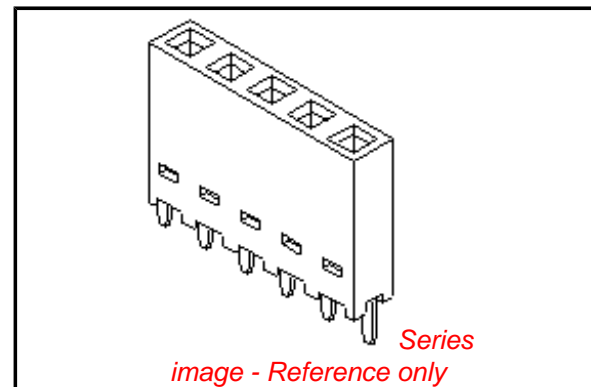
**Physical**

Circuits (Loaded) 12  
 Color - Resin Black  
 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) 0.062 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) 40  
 Plating min: Mating (µm) 1.00  
 Plating min: Termination (µin) 40  
 Plating min: Termination (µm) 1.00  
 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**



**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**

[90147Series](#)

**Mates With**

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

**Use With**

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

Lead-free Process Capability

Wave Capable (TH only)

**Material Info**

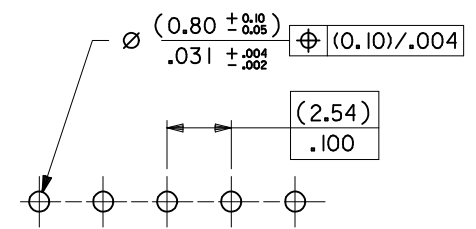
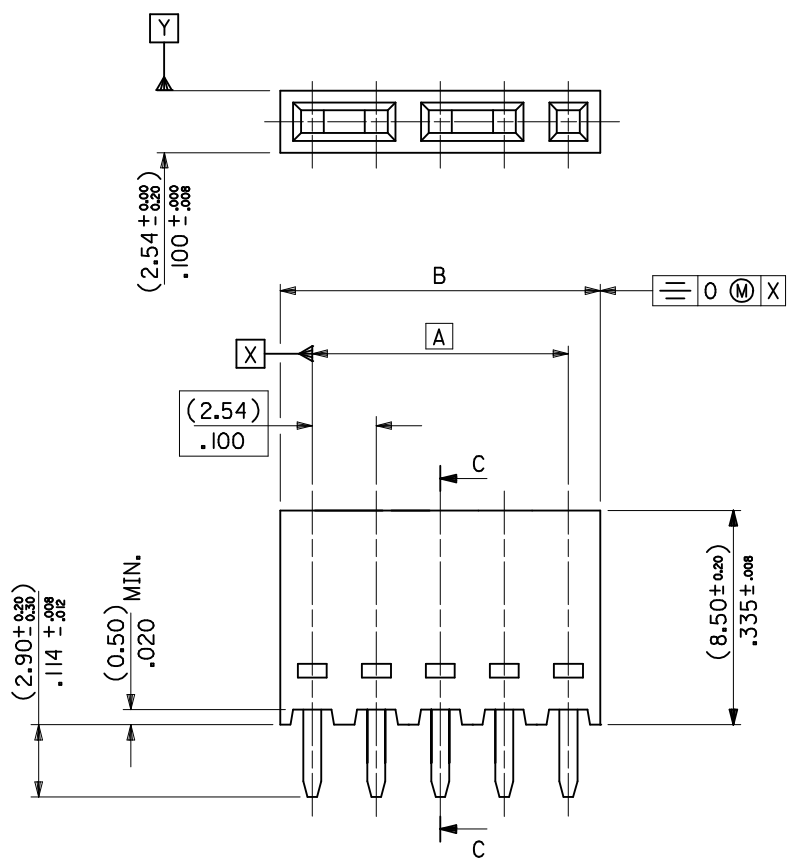
**Reference - Drawing Numbers**

Sales Drawing

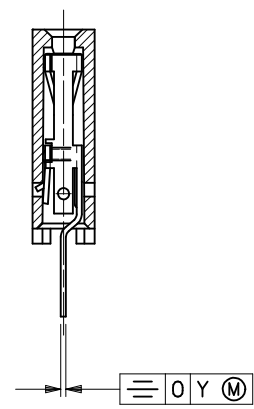
SDA-90147

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

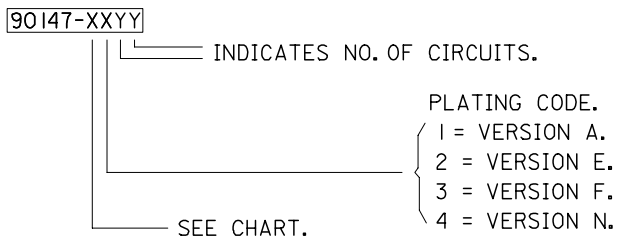
PART NO'S - STRAIGHT PINS		NO. OF CKTS	DIM. "A"	DIM. "B" (±.000)±.002	QTY. PER TUBE
STANDARD	CUSTOMER SPECIFIC				
90147-1X02		2	( 2.54 ) .100	( 5.08 ) .200	105
↑ 03		3	( 5.08 ) .200	( 7.62 ) .300	72
04		4	( 7.62 ) .300	( 10.16 ) .400	52
05	90147-9105	5	( 10.16 ) .400	( 12.70 ) .500	44
06		6	( 12.70 ) .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
90147-1X32		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 EWI CZ 2007/04/25  
CHKD: DMORJARTY 2007/04/25  
APPR: DENNEHY 2007/04/27

QUALITY SYMBOLS  
▽=0  
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± .005	± .0004
3 PLACES	± .005	± .0004
2 PLACES	± .005	± .0004
1 PLACE	± .005	± .0004

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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