

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

**Part Number:** [0901471207](#)  
**Status:** **Active**  
**Overview:** [cgrid\\_sl\\_products](#)  
**Description:** 2.54mm (.100") Pitch C-Grid® PC Board Connector, Single Row, Vertical, 7 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®

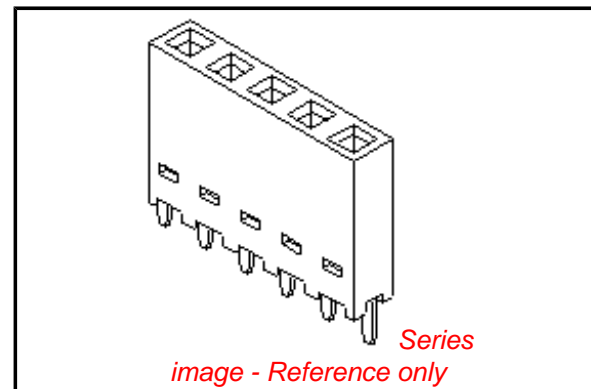
**Physical**

Circuits (Loaded) 7  
 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 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 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) 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**



**EU RoHS**

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

**China RoHS**



**Not Halogen-Free**

**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**

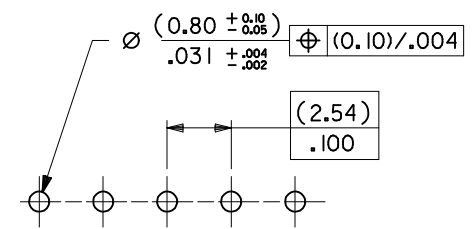
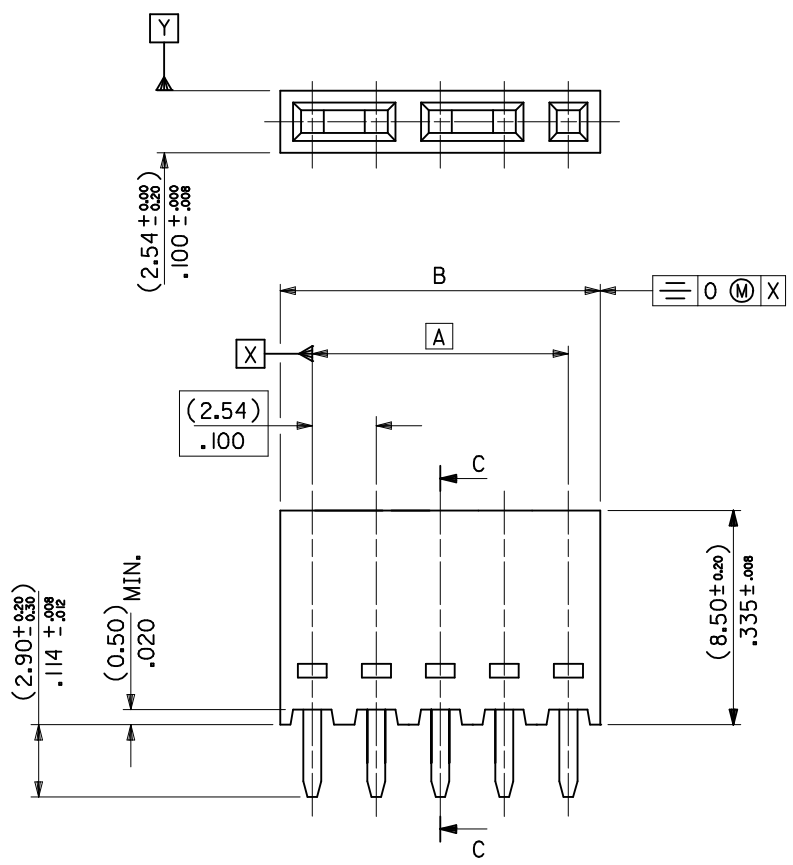
**Reference - Drawing Numbers**

Sales Drawing

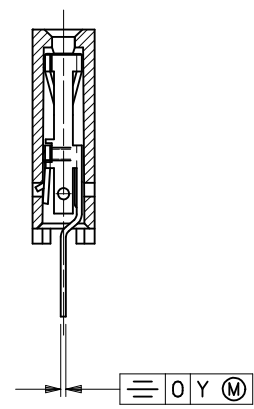
SDA-90147

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 2008/12/08 DRWN: BMAGUIRE 2008/12/08 CHKD: 2008/12/08 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	
		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			

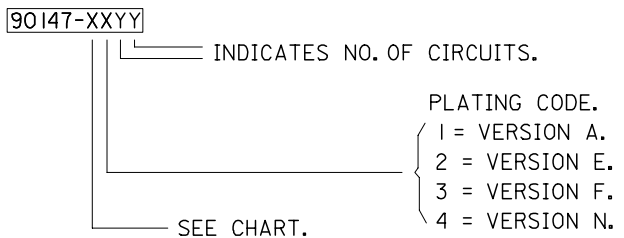
PART NO'S - STRAIGHT PINS	NO. OF CKTS	DIM. "A"	DIM. "B" (±.000)±.002	QTY. PER TUBE
90147-1X02	2	( 2.54 ) .100	( 5.08 ) .200	105
↑ 03	3	( 5.08 ) .200	( 7.62 ) .300	72
04	4	( 7.62 ) .300	( 10.16 ) .400	52
05	5	( 10.16 ) .400	( 12.70 ) .500	44
06	6	( 12.70 ) .500	( 15.24 ) .600	36
07	7	( 15.24 ) .600	( 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 EWI CZ 2007/04/25 CHKD: DORJARTY 2007/04/25 APPR: DENNEHY 2007/04/27	QUALITY SYMBOLS ▽=0 ▽=0
AA	REV

GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM/IN	SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- ANGULAR ± 2 °	DRAWN BY DB	DATE 1986/12/28	TITLE C-GRID III SINGLE ROW VERTICAL P.C. BOARD CONNECTOR	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	APPROVED BY JDENNEHY	DATE 2005/07/07	MATERIAL NO. SEE CHART	DOCUMENT NO. SDA-90147
			SHEET NO. 2 OF 2	
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