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Part Number: [0901471212](#)
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®

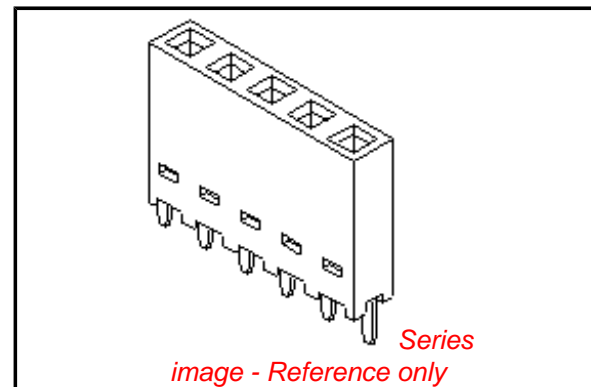
Physical

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 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
 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](#)

Duration at Max. Process Temperature (seconds)	5
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	230

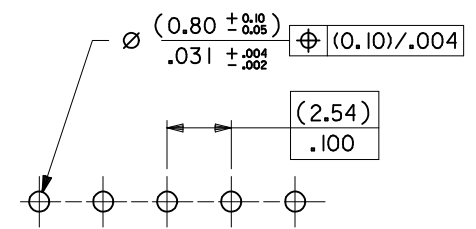
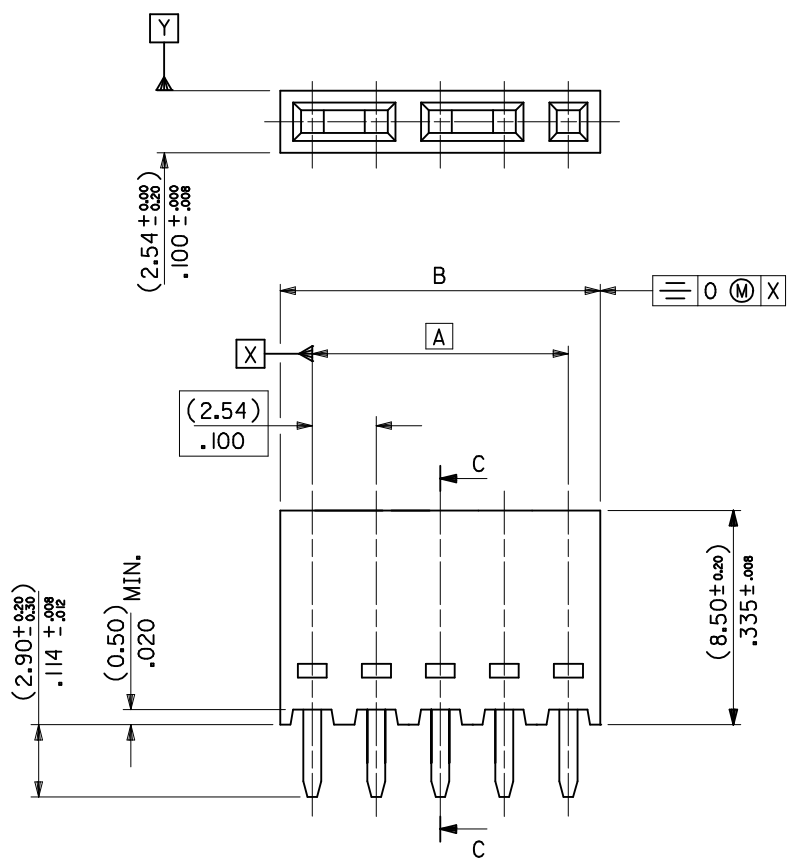
Material Info

Reference - Drawing Numbers

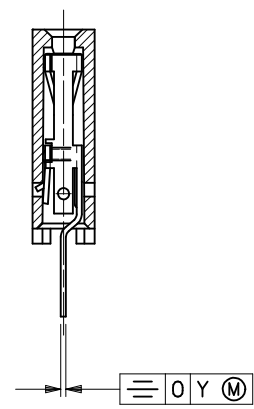
Sales Drawing	SDA-90147
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This document was generated on 05/22/2010

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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
		$\nabla = 0$ $\nabla C = 0$	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			

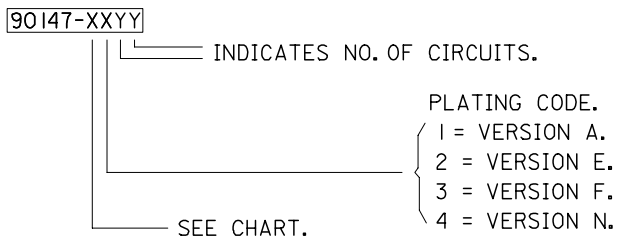
PART NO'S - STRAIGHT PINS		NO. OF CKTS	DIM. "A"	DIM. "B" (±.000)±.002	QTY. PER TUBE
STANDARD	CUSTOMER SPECIFIC				
90147-1X02		2	(2.54) .100	(5.08) .200	105
↑ 03		3	(5.08) .200	(7.62) .300	72
04		4	(7.62) .300	(10.16) .400	52
05	90147-9105	5	(10.16) .400	(12.70) .500	44
06		6	(12.70) .500	(15.24) .600	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 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	± .0002
3 PLACES	± .005	± .0002
2 PLACES	± .005	± .0002
1 PLACE	± .005	± .0002

ANGULAR ± 2 °

DRAFT WHERE APPLICABLE
MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE
MM/IN

SCALE
5:1

DESIGN UNITS
METRIC

THIRD ANGLE PROJECTION

DRAWN BY
DB

DATE
1986/12/28

CHECKED BY
JDENNEHY

DATE
2005/07/07

APPROVED BY
JDENNEHY

DATE
2005/07/07

MATERIAL NO.

DOCUMENT NO.
SDA-90147

SHEET NO.
2 OF 2

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

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