

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0901481130](#)
Status: **Active**
Overview: [cgrid_sl_products](#)
Description: 2.54mm (.100") Pitch C-Grid® PC Board Connector, Single Row, Right Angle, 1.0µm (40µ") Tin (Sn), 30 Circuits

Documents:

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

Agency Certification

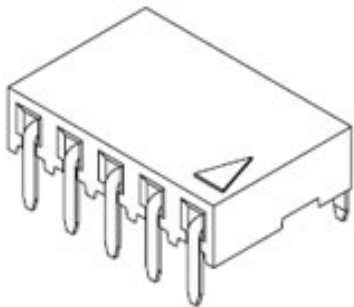
CSA LR19980
UL E29179

General

Product Family PCB Receptacles
Series [90148](#)
Application Board-to-Board
Overview [cgrid_sl_products](#)
Product Name C-Grid®

Physical

Circuits (Loaded) 30
Circuits (maximum) 30
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 Right Angle
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
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 Yes
Polarized to PCB No
Stackable No
Surface Mount Compatible (SMC) No



Series

image - Reference only

EU RoHS

**ELV and RoHS
Compliant**

REACH SVHC

Not Reviewed

Halogen-Free

Status

Not Reviewed

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

[90148Series](#)

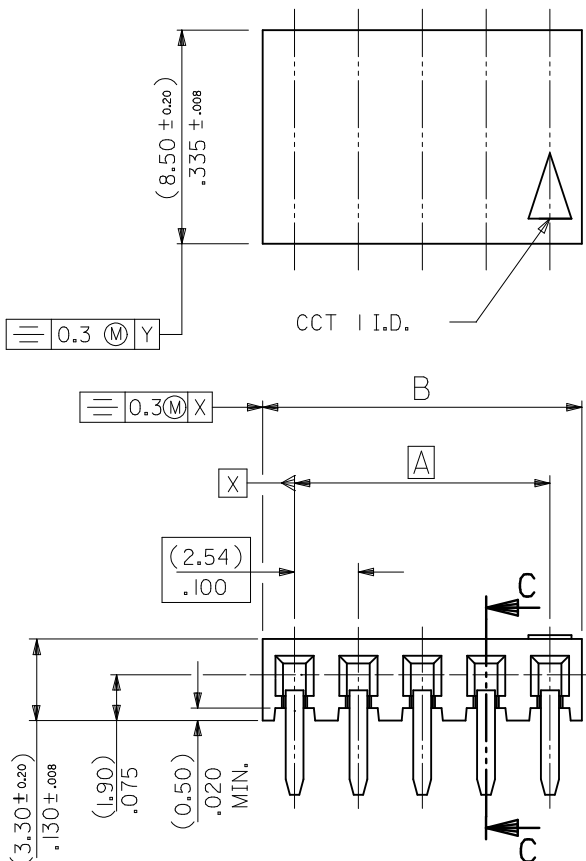
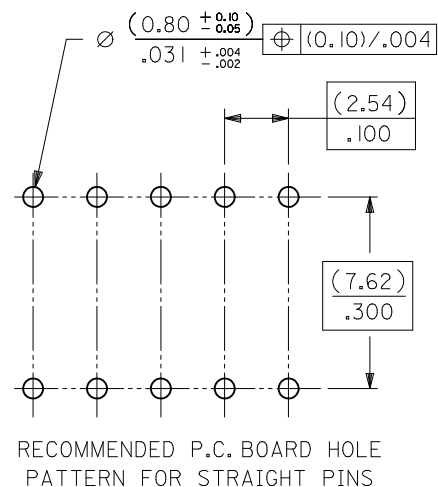
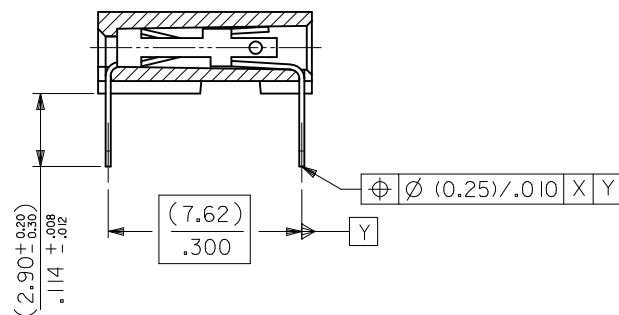
Mates With

C-Grid III™ Header [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)
Process Temperature max. C	260
Material Info	
Reference - Drawing Numbers	
Sales Drawing	SDA-90148

This document was generated on 05/22/2010

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SECTION C-C SHOWING
STRAIGHT PINS

NOTES

- CONTACT-PLATED PHOSPHOR BRONZE.
(SEE SHEET 2)
- HOUSING
POLYESTER (PBT), 15% GLASS FILL, UL94-V0.
COLOR: BLACK.
ALSO
POLYAMIDE (PA4/6), 30% GLASS FILL, UL94-V0.
COLOR: NATURAL.
- 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.
- PRODUCT SPECIFICATION: PS-99020-0001
- PCB THICKNESS 1.6MM

UPDATE TOL.SYMMETRY EC NO: S2010-0968 DRWN:SKANG CHKD:ATSEE APPR:MLONG AK	DESCRIPTION	QUALITY SYMBOLS <div>FA=0</div> <div>FG=0</div> <div>FP=0</div>	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
				mm	INCH	DRAWN BY DB	DATE 1987/07/14	TITLE C-GRID III SINGLE ROW HORIZONTAL P.C BOARD CONN.				
			4 PLACES	± ---	± ---	CHECKED BY D.MORIARTY	DATE 2005/03/02					
			3 PLACES	± ---	± ---	APPROVED BY J.DENNEHY	DATE 2010/06/04	MOLEX INCORPORATED				
			2 PLACES	± 0.15	± ---	MATERIAL NO.						
			1 PLACE	± ---	± ---	SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					SEE TABLE		SDA-90148		1 OF 3			

F

E

D

C

B

A

PART NO's - STRAIGHT PINS		PART NO.	NO OF CKTS.	DIM. A	DIM. B ^(+0.30) _{-0.02}	NO. PER TUBE
STANDARD	CUSTOMER SPECIFIC					
90148-1X02		90148-4X02	2	(2.54) .100	(5.08) .200	105
↑ 03	↑	↑ 03	3	(5.08) .200	(7.62) .300	72
04	↓	04	4	(7.62) .300	(10.16) .400	52
05		05	5	(10.16) .400	(12.70) .500	44
06	90148-9X06	06	6	(12.70) .500	(15.24) .600	36
07	↑	07	7	(15.24) .600	(17.78) .700	30
08		08	8	(17.78) .700	(20.32) .800	26
09		09	9	(20.32) .800	(22.86) .900	24
10		10	10	(22.86) .900	(25.40) 1.000	22
11		11	11	(25.40) 1.000	(27.94) 1.100	18
12		12	12	(27.94) 1.100	(30.48) 1.200	18
13		13	13			16
14		14	14	(33.02) 1.300	(35.56) 1.400	14
15		15	15	(35.56) 1.400	(38.10) 1.500	14
16		16	16			13
17		17	17			12
18		18	18	(43.18) 1.700	(45.72) 1.800	12
19		19	19	(45.72) 1.800	(48.26) 1.900	12
20		20	20	(48.26) 1.900	(50.80) 2.000	11
21		21	21			10
22		22	22			10
23		23	23			10
24		24	24			9
25		25	25	(60.96) 2.400	(63.50) 2.500	8
26		26	26	(63.50) 2.500	(66.04) 2.600	8
27		27	27			8
28		28	28			7
29		29	29			7
30		30	30	(73.66) 2.900	(76.20) 3.000	7
↓ 31	↓	↓ 31	31			7
90148-1X32		90148-4X32	32	(78.74) 3.100	(81.28) 3.200	6

PLATING VERSION A

PRE-PLATED HOT DIP TIN
1.0 TO 2.5 microns (.00004" TO .00010").

PLATING VERSION E

1.27 TO 1.78 microns (.00005" TO .00007") NICKEL
OVERALL, 0.38 TO 0.64 microns (.000015" TO .000025")
GOLD ON CONTACT AREA (OVER NICKEL).
3 TO 5 microns (.00012" TO .00020") TIN
ON SOLDER TAILS (OVER NICKEL).

PLATING VERSION F.

1.27 TO 1.78 microns (.00005" TO .00007") NICKEL
OVERALL, 0.76 TO 1.0 microns (.00003" TO .00004")
GOLD ON CONTACT AREA (OVER NICKEL).
3 TO 5 microns (.00012" TO .00020") TIN
ON SOLDER TAILS (OVER NICKEL).

90148-XXYY

INDICATES NO. OF CIRCUITS

PLATING CODE

1 = VERSION A

2 = VERSION E

3 = VERSION F

1 = STRAIGHT PINS POLYESTER

9 = STRAIGHT PINS POLYESTER

4 = STRAIGHT PINS NYLON 46

UPDATE TOL.SYMMETRY EC NO: S2010-0968 2010/05/26 DRWN:SKANG CHKD:ATSEE 2010/06/04 APPR:MLONG 2010/06/05	DESCRIPTION REV	QUALITY SYMBOLS <div><div>F_A=0</div><div>F_G=0</div><div>F_P=0</div></div>	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	mm	INCH	DRAWN BY DB	DATE 1987/07/14	C-GRID III SINGLE ROW HORIZONTAL P.C BOARD CONN. MOLEX INCORPORATED			
				4 PLACES ± ---	± ---	CHECKED BY D.MORIARTY	DATE 2005/03/02				
				3 PLACES ± ---	± ---	APPROVED BY J.DENNEHY	DATE 2010/06/04				
				2 PLACES ± 0.15	± ---	MATERIAL NO. SEE TABLE		DOCUMENT NO. SDA-90148	SHEET NO. 2 OF 3		
				1 PLACE ± ---	± ---						
ANGULAR ± 2 °											

AK

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

PART NO.	POLARISED CCT NO.	NO.OF CKTS.	DIM. A	DIM. B	(± 0.30) (± 0.12)	NO. PER TUBE
90148-3X01	2	3	(5.08) .200	(7.62) .300		72

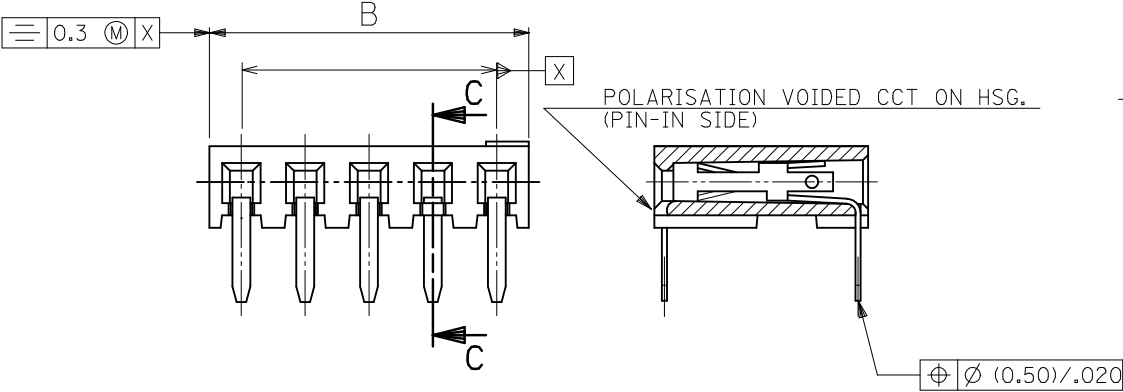
NON-STANDARD PRODUCTS

90148-XXXX

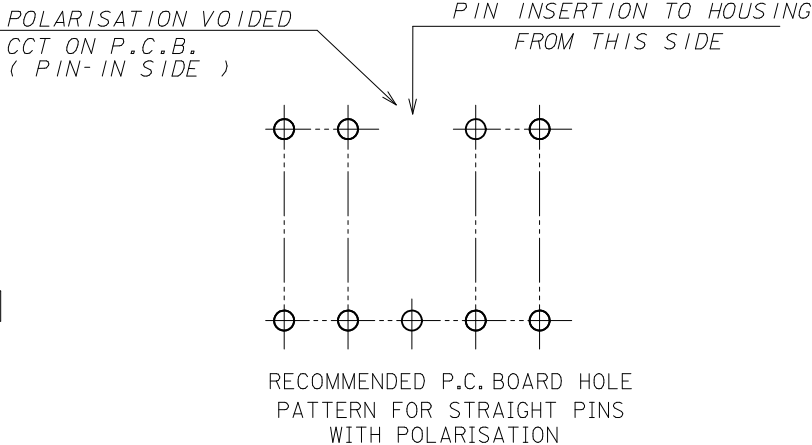
OPTION NUMBER
(NOT RELATING TO CCT SIZE OR OTHERWISE)

PLATING CODE (SEE SHEET 2)

3 = STRAIGHT PINS POLYESTER, POLARISED



SECTION C-C SHOWING POLARISED CCT



- NOTES
- 1) SEE SHEET 1 FOR ALL UNSPECIFIED DIMENSIONS AND NOTES.
- 2) PARTS NOT STACKABLE.

UPDATE TOL.SYMMETRY EC NO: S2010-0968 DRWN:SKANG CHKD:ATSEE APPR:WLONG	DESCRIPTION	QUALITY SYMBOLS <div>$F_A=0$</div> <div>$F_G=0$</div> <div>$F_P=0$</div>	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION
				mm	INCH	DRAWN BY DB	DATE 1987/07/14	TITLE C-GRID III SINGLE ROW HORIZONTAL P.C BOARD CONN. MOLEX INCORPORATED	
			4 PLACES	± ---	± ---	CHECKED BY	DATE		
			3 PLACES	± ---	± ---	D.MORIARTY	2005/03/02		
			2 PLACES	± 0.15	± ---	APPROVED BY	DATE		
			1 PLACE	± ---	± ---	J.DENNEHY	2010/06/04		
			ANGULAR ± 2 °		MATERIAL NO.		DOCUMENT NO.	SHEET NO.	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SDA-90148		3 OF 3			
AK	REV	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

PART NO's - STRAIGHT PINS		PART NO.	NO OF CKTS.	DIM. A	DIM. B $(\pm \frac{0.30}{32})$	NO. PER TUBE
STANDARD	CUSTOMER SPECIFIC					
90148-1X02		90148-4X02	2	(2.54) .100	(5.08) .200	105
↑ 03	↑	↑ 03	3	(5.08) .200	(7.62) .300	72
04	↓	04	4	(7.62) .300	(10.16) .400	52
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17		17	17			12
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19		19	19	(45.72) 1.800	(48.26) 1.900	12
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26		26	26	(63.50) 2.500	(66.04) 2.600	8
27		27	27			8
28		28	28			7
29		29	29			7
30		30	30	(73.66) 2.900	(76.20) 3.000	7
↓ 31	↓	↓ 31	31			7
90148-1X32		90148-4X32	32	(78.74) 3.100	(81.28) 3.200	6

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3 TO 5 microns (.00012" TO .00020") TIN
ON SOLDER TAILS (OVER NICKEL).

90148-XXXX

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9 = STRAIGHT PINS POLYESTER

4 = STRAIGHT PINS NYLON 46

ADD NEW P/N EC NO: E2007-0823 DRWN:DBYRNES CHKD: APPR:EOMAHONY 2007/03/29 2007/03/29 2007/04/04	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
		4 PLACES	± ---	INCH	± ---	DRAWN BY DB	DATE 1987/07/14	C-GRID III SINGLE ROW HORIZONTAL P.C. BOARD CONNECTOR			
		3 PLACES	± ---	± ---	± ---	CHECKED BY D.MORIARTY	DATE				
		2 PLACES	± ---	± ---	± ---	APPROVED BY J.DENNEHY	DATE	MOLEX INCORPORATED			
		1 PLACE	± ---	± ---	± ---	MATERIAL NO.		DOCUMENT NO.		SHEET NO.	
		ANGULAR ± ---°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		SDA-90148		2 OF 3	
						THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					