

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0901481332](#)
Status: **Active**
Overview: [cgrid_sl_products](#)
Description: 2.54mm (.100") Pitch C-Grid® PC Board Connector, Single Row, Right Angle, 0.8µm (30µ") Gold (Au) Selective, 32 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) 32
Circuits (maximum) 32
Color - Resin Black
Durability (mating cycles max) 500
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 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) 30.4
Plating min: Mating (µm) 0.76
Plating min: Termination (µin) 120
Plating min: Termination (µm) 3
Polarized to Mating Part Yes
Polarized to PCB No
Stackable No
Temperature Range - Operating -55°C to +125°C

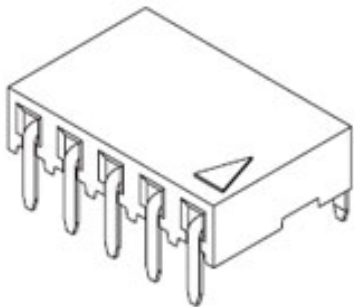


image - Reference only

Series

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
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](#)

Termination Interface: Style

Through Hole

Electrical

Current - Maximum per Contact

3A

Grounding to PCB

No

Voltage - Maximum

350V AC/DC

Material Info

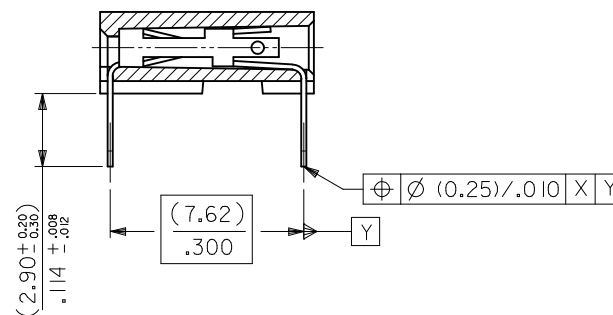
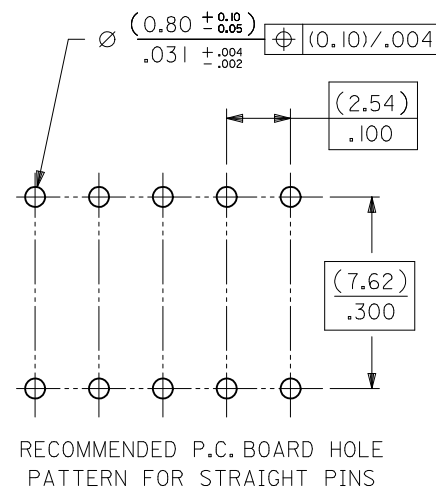
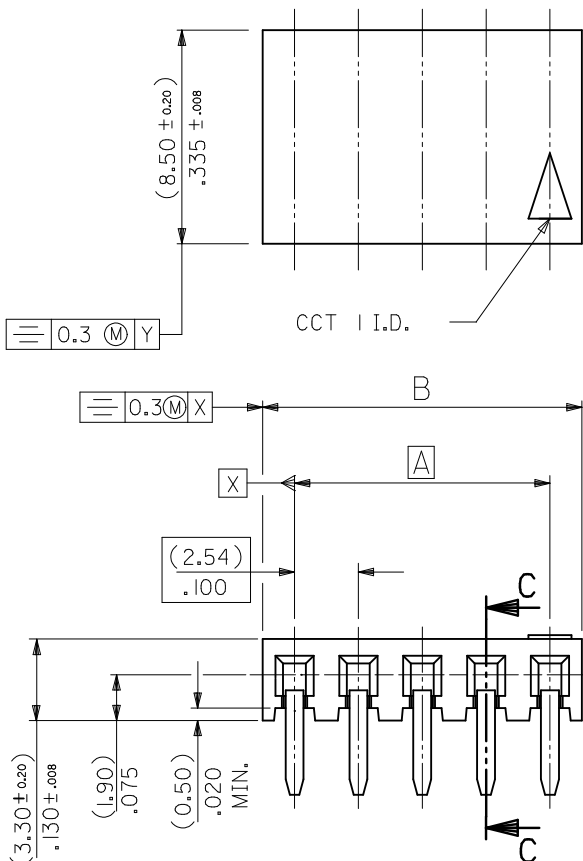
Reference - Drawing Numbers

Sales Drawing

SDA-90148

This document was generated on 05/24/2010

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SECTION C-C SHOWING
STRAIGHT PINS

NOTES

- 1) CONTACT-PLATED PHOSPHOR BRONZE.
(SEE SHEET 2)
- 2) HOUSING
POLYESTER (PBT), 15% GLASS FILL, UL94-V0.
COLOR: BLACK.
ALSO
POLYAMIDE (PA4/6), 30% GLASS FILL, UL94-V0.
COLOR: NATURAL.
- 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

UPDATE TOL. SYMMETRY EC NO: S2010-0968 DRWN:SKANG CHKD:ATSEE APPR:MLONG 2010/05/26 2010/06/04 2010/06/05	DESCRIPTION	QUALITY SYMBOLS FA=0 FB=0 FC=0 FD=0	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						
			2 PLACES	± 0.15	± ---								
			1 PLACE	± ---	± ---			MOLEX INCORPORATED					
			ANGULAR ± 2 °		MATERIAL NO.	DOCUMENT NO.	SHEET NO. 1 OF 3						
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SDA-90148						
			AK	REV		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

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	QUALITY SYMBOLS F _A =0 F _G =0 F _P =0	DESCRIPTION REV	AK	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
						DRAWN BY DATE		TITLE			
						DB 1987/07/14		C-GRID III SINGLE ROW			
						CHECKED BY DATE		HORIZONTAL			
						D.MORIARTY 2005/03/02		P.C BOARD CONN.			
						APPROVED BY DATE		MOLEX INCORPORATED			
		J.DENNEHY 2010/06/04		DOCUMENT NO.		SDA-90148		SHEET NO. 2 OF 3			
		ANGULAR ± 2 °		MATERIAL NO.							
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE							
				SIZE A3		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

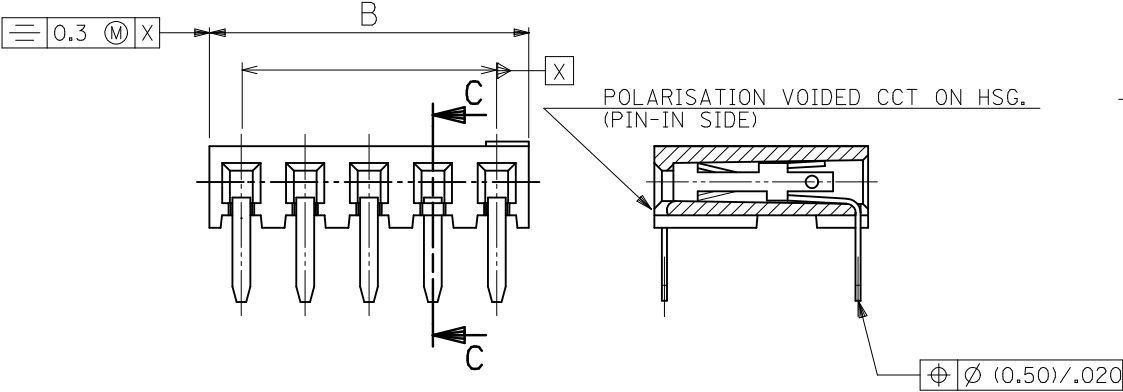
NON-STANDARD PRODUCTS

90148-XXXX

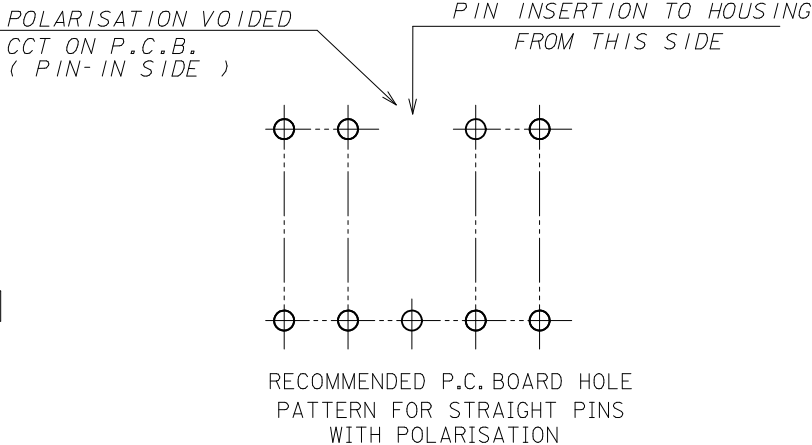
OPTION NUMBER
(NOT RELATING TO CCT SIZE OR OTHERWISE)

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	2010/05/26	2010/06/04	2010/06/05	DESCRIPTION	REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
										MM ONLY		NTS	METRIC		
										DRAWN BY	DATE	TITLE			
										DB	1987/07/14	C-GRID III SINGLE ROW			
										CHECKED BY	DATE	HORIZONTAL			
										D.MORIARTY	2005/03/02	P.C BOARD CONN.			
										APPROVED BY	DATE	MOLEX INCORPORATED			
										J.DENNEHY	2010/06/04	MOLEX			
										MATERIAL NO.	DOCUMENT NO.	SDA-90148		SHEET NO.	
										SEE TABLE			3 OF 3		
		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
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
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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
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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

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1.0 TO 2.5 microns (.00004" TO .00010").

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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-XXXX

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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	
AJ		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							