

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0901481202](#)
Status: **Active**
Overview: [cgrid_sl_products](#)
Description: 2.54mm (.100") Pitch C-Grid® PC Board Connector, Single Row, Right Angle, 0.38µm (15µ") Gold (Au) Selective, 2 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)	2
Circuits (maximum)	2
Color - Resin	Black
Durability (mating cycles max)	100
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)	15.2
Plating min: Mating (µm)	0.38
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

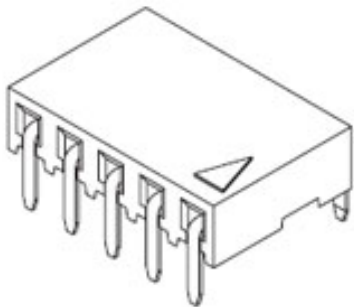


image - Reference only

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.

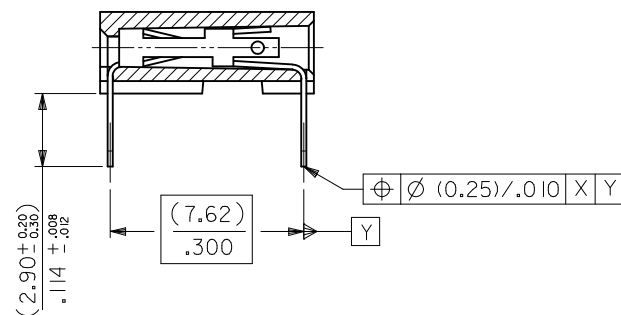
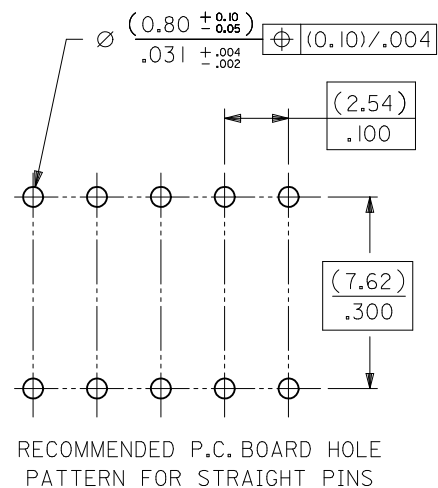
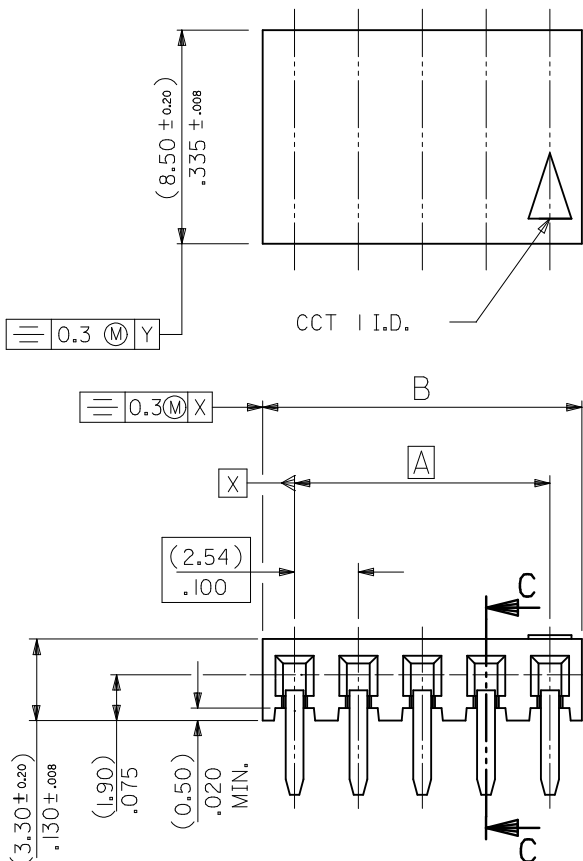
Search Parts in this Series
[90148Series](#)

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
Solder Process Data	
Lead-free Process Capability	Wave Capable (TH only)
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 2010/05/26 2010/06/04 2010/06/05	DESCRIPTION	QUALITY SYMBOLS F_A=0 F_B=0 F_P=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	DATE			
			3 PLACES	± ---	± ---	D. MORIARTY	2005/03/02			
			2 PLACES	± 0.15	± ---	APPROVED BY	DATE			
			1 PLACE	± ---	± ---	J. DENNEHY	2010/06/04	 MOLEX INCORPORATED		
			ANGULAR ± 2 °		MATERIAL NO.		DOCUMENT NO.		SHEET NO. 1 OF 3	
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SDA-90148			
					SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
AK	REV									

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	
				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.		DOCUMENT NO.	SHEET NO.		
				1 PLACE ± ---	± ---	SEE TABLE		SDA-90148	2 OF 3		
				ANGULAR ± 2 °							
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		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

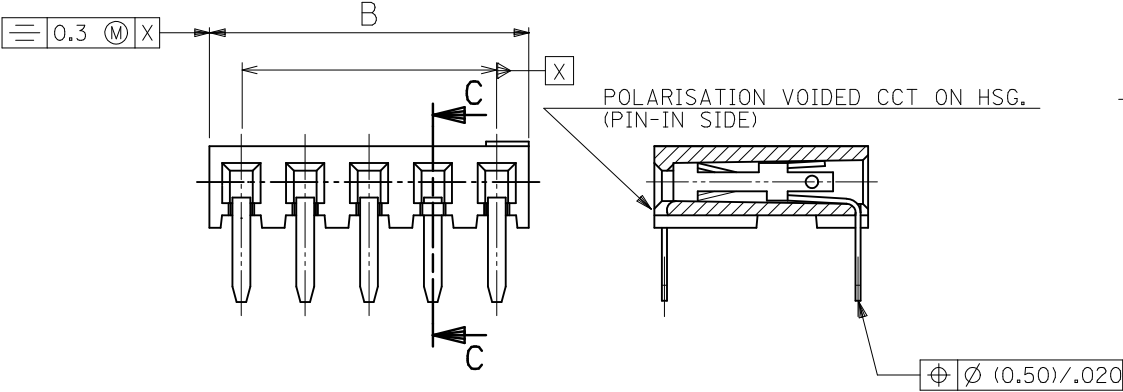
NON-STANDARD PRODUCTS

90148-XXXX

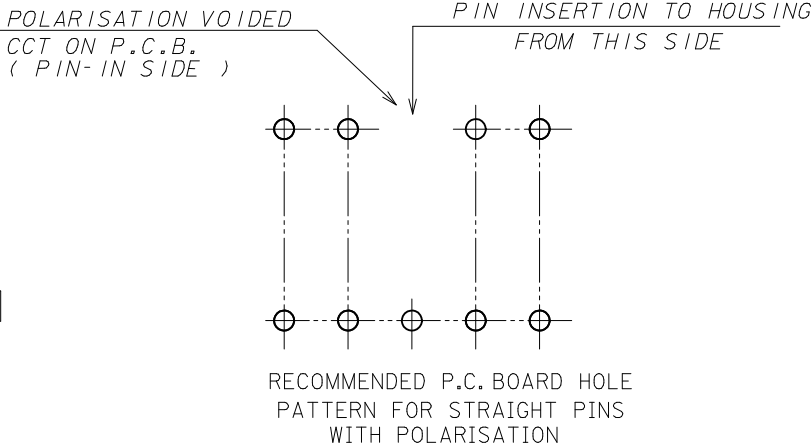
OPTION NUMBER
(NOT RELATING TO CCT SIZE OR OTHERWISE)

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 DRWN:SKANG CHKD:ATSEE APPR:WLONG	DESCRIPTION	QUALITY SYMBOLS F_A=0 F_G=0 F_P=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.			
						CHECKED BY D.MORIARTY	DATE 2005/03/02				
						APPROVED BY J.DENNEHY	DATE 2010/06/04	 MOLEX INCORPORATED			
						MATERIAL NO.					
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE TABLE		SDA-90148		3 OF 3	
						SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
AK	REV										

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
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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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3 TO 5 microns (.00012" TO .00020") TIN
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OVERALL, 0.76 TO 1.0 microns (.00003" TO .00004")
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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	
						THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					