

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0901483101](#)
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), 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) 3
Circuits (maximum) 3
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) 0.063 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

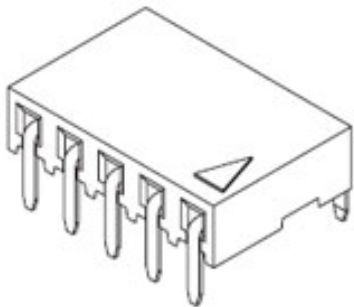


image - Reference only

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.

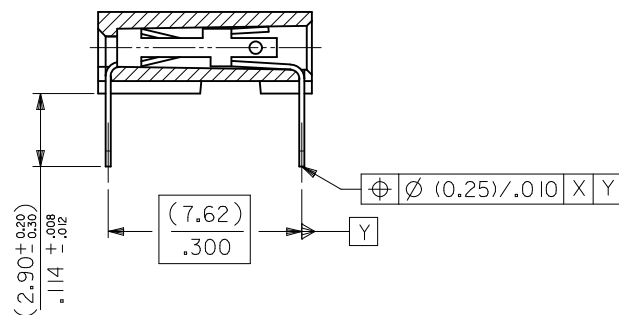
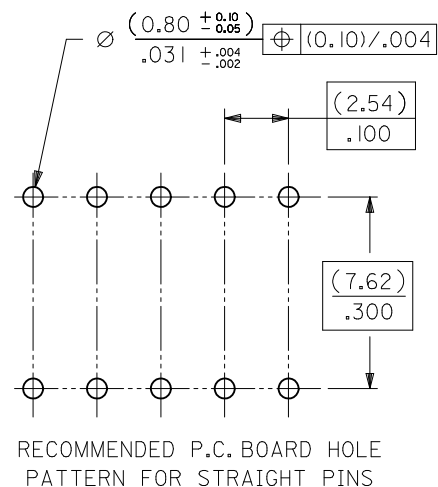
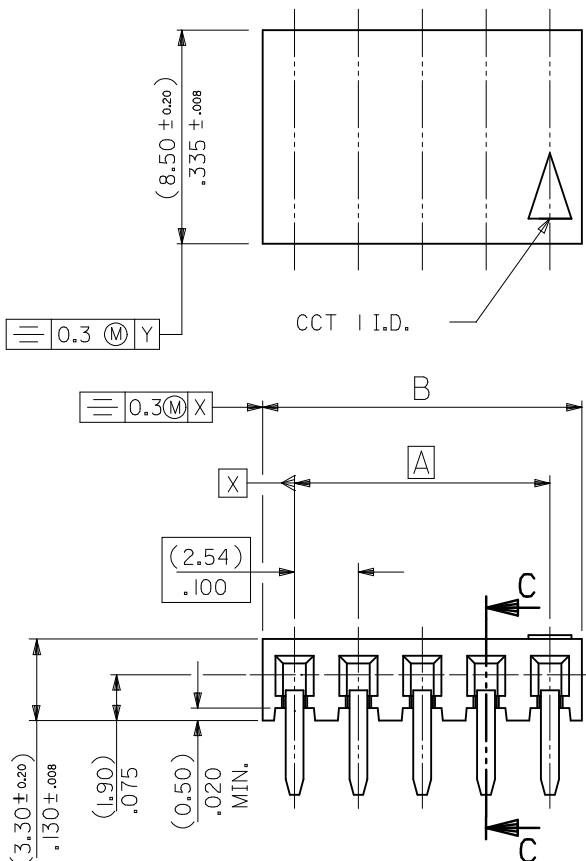
Search Parts in this Series
[90148Series](#)

Mates With
C-Grid III™ Header [90120](#) , [90121](#)

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	
Duration at Max. Process Temperature (seconds)	40
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	260
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

- 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 2010/05/26 CHKD:ATSEE 2010/06/04 APPR:MLONG 2010/06/05	DESCRIPTION	QUALITY SYMBOLS FA=0 FG=0 FP=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	TITLE C-GRID III SINGLE ROW HORIZONTAL P.C BOARD CONN. MOLEX MOLEX INCORPORATED	
				mm	INCH	DRAWN BY DB	DATE 1987/07/14	DOCUMENT NO. SDA-90148			SHEET NO. 1 OF 3
			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.					
			1 PLACE	± ---	± ---	SIZE A3					
AK	REV		ANGULAR ± 2 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		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 ^(+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	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. 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	± ---			DOCUMENT NO. SDA-90148	SHEET NO. 2 OF 3	
			1 PLACE	± ---	± ---					
AK	REV		ANGULAR ± 2 °		MATERIAL NO.					
			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

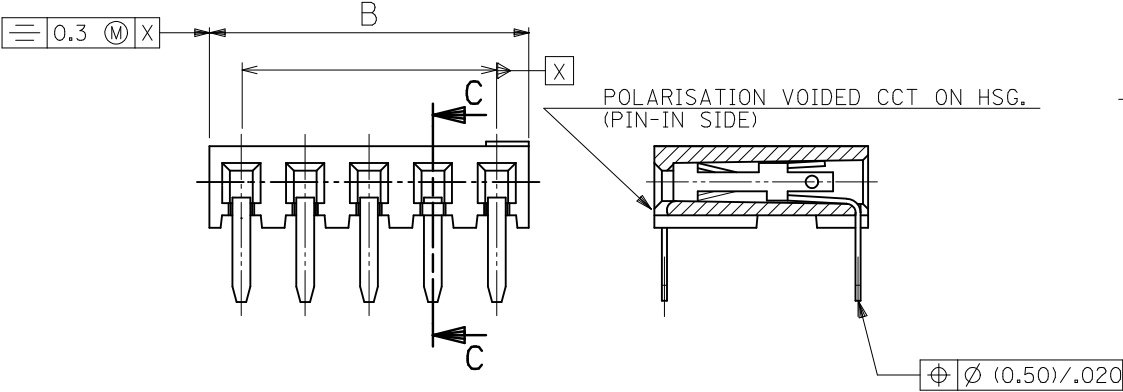
NON-STANDARD PRODUCTS

90148-XXXX

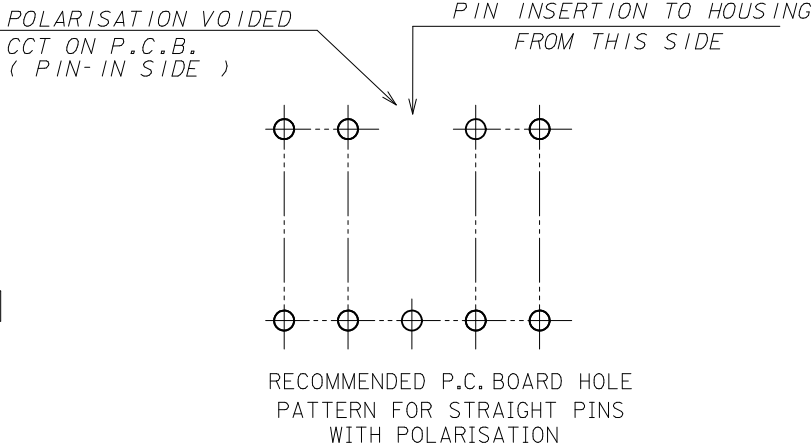
OPTION NUMBER
(NOT RELATING TO CCT SIZE OR OTHERWISE)

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.

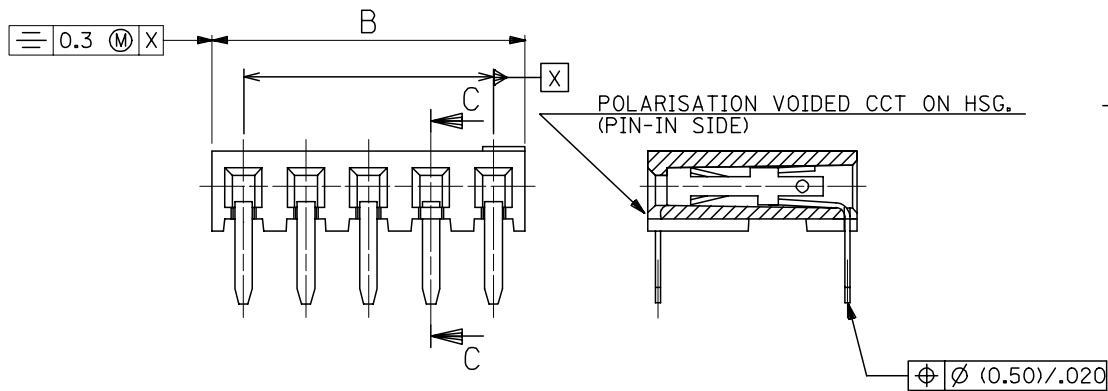
UPDATE TOL.SYMMETRY EC NO: S2010-0968 DRWN:SKANG CHKD:ATSEE APPR:MLONG AK	REV	DESCRIPTION 2010/05/26 2010/06/04 2010/06/05	QUALITY SYMBOLS F_A=0 F_G=0 F_P=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION		
					mm	INCH	DRAWN BY DB	DATE 1987/07/14	TITLE C-GRID III SINGLE ROW HORIZONTAL P.C BOARD CONN. 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			MOLEX INCORPORATED	
				ANGULAR ± 2 °			MATERIAL NO.		DOCUMENT NO.		SHEET NO. 3 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							

10 9 8 7 6 5 4 3 2 1

NON-STANDARD PRODUCTS

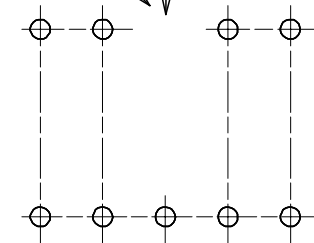
PART NO.	POLARISED CCT NO.	NO. OF CKTS.	DIM. A	DIM. B	$\begin{matrix} \pm 0.30 \\ \pm 0.12 \end{matrix}$	NO. PER TUBE
90148-3X01	2	3	(5.08) .200	(7.62) .300		72

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

POLARISATION VOIDED
CCT ON P.C.B.
(PIN-IN SIDE)
PIN INSERTION TO HOUSING
FROM THIS SIDE



RECOMMENDED P.C. BOARD HOLE
PATTERN FOR STRAIGHT PINS
WITH POLARISATION

NOTES

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

UPDATED BORDER EC NO: E2007-0823 DRWN:DBYRNES CHKD: APPR:EOMAHONY 2007/03/29 2007/03/29 2007/04/04	QUALITY SYMBOLS ▽=0 ▽C=0	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
					DRAWN BY BGB		DATE 1992/10/29		TITLE NON-STANDARD C-GRID III SINGLE ROW HORIZONTAL P.C. BOARD CONNECTOR		
					CHECKED BY		DATE				
					APPROVED BY		DATE				
			1 PLACE ± --- ± ---		MATERIAL NO.		DOCUMENT NO.		SHEET NO.		
			ANGULAR ± 2 °		SEE CHART		SDA-90148		3 OF 3		
AE	REV		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				

9 8 7 6 5 4 3 2 1