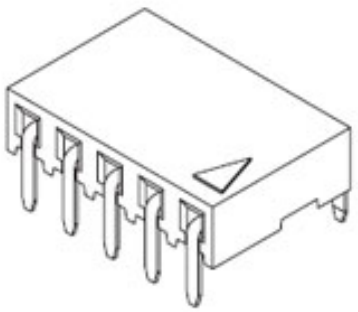
This document was generated on 05/22/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: 0901481116
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, 16 Circuits



Series image - Reference only

Documents:
3D Model
Drawing (PDF)
RoHS Certificate of Compliance (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 III™

Physical

Circuits (Loaded)	16
Circuits (maximum)	16
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	Vertical
PC Tail Length (in)	0.114 In
PC Tail Length (mm)	2.90 mm
PCB Locator	No
PCB Retention	N/A
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

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

Lead-free Process Capability	Wave Capable (TH only)

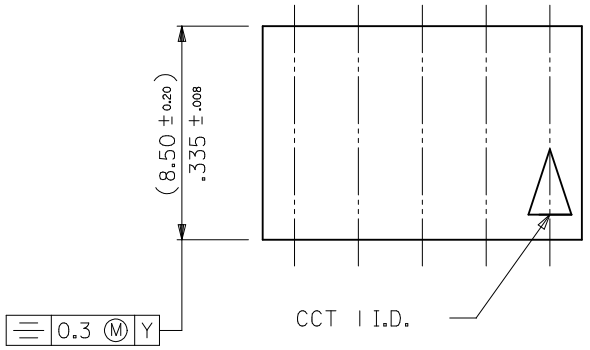
Material Info

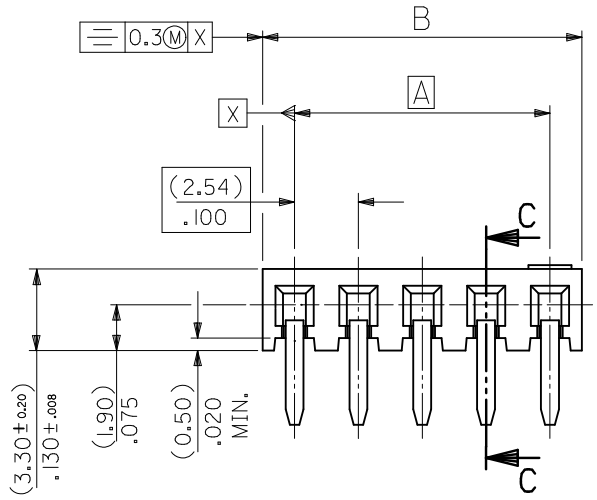
Reference - Drawing Numbers

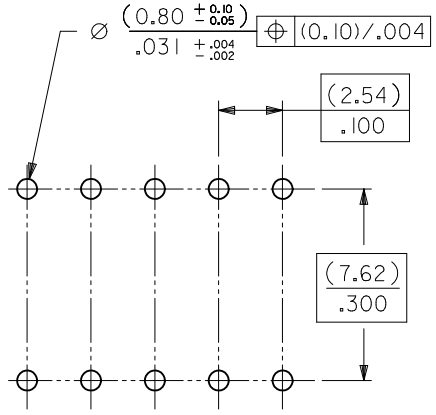
Sales Drawing	SDA-90148

This document was generated on 05/22/2010

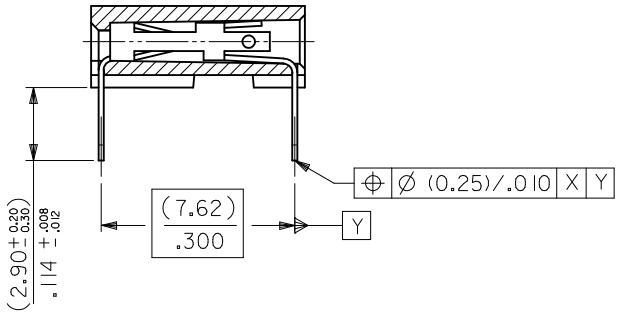
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION







RECOMMENDED P.C. BOARD HOLE PATTERN FOR STRAIGHT PINS



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 2010/05/26
EC NO: S2010-0968 2010/06/04
DRWN:SKANG CH'KD:ATSEE 2010/06/05
APPR:MLONG
DESCRIPTION
REV
AK

QUALITY SYMBOLS
FA=0
FC=0
FP=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.15	± ---
1 PLACE	± ---	± ---
ANGULAR ± 2 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: DB DATE: 1987/07/14
CHECKED BY: D.MORIARTY DATE: 2005/03/02
APPROVED BY: J.DENNEHY DATE: 2010/06/04

TITLE: C-GRID III SINGLE ROW HORIZONTAL P.C BOARD CONN.

MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SDA-90148
SHEET NO.: 1 OF 3
SIZE: A3

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. $B^{(\pm 0.30)}_{+.012}$	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

- XX — INDICATES NO. OF CIRCUITS
- Y — PLATING CODE
  - 1 = VERSION A
  - 2 = VERSION E
  - 3 = VERSION F
- XX — 1 = STRAIGHT PINS POLYESTER
  - 9 = STRAIGHT PINS POLYESTER
  - 4 = STRAIGHT PINS NYLON 46

UPDATE TOL.SYMMETRY
EC NO: S2010-0968
DRWN:SKANG 2010/05/26
CH'KD:ATSEE 2010/06/04
APPR:MLONG 2010/06/05
DESCRIPTION
AK
REV

QUALITY SYMBOLS
FA=0
FC=0
FP=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.15	± ---
1 PLACE	± ---	± ---

ANGULAR ± 2 °

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: DB DATE: 1987/07/14
CHECKED BY: D.MORIARTY DATE: 2005/03/02
APPROVED BY: J.DENNEHY DATE: 2010/06/04
MATERIAL NO.: SEE TABLE

TITLE: C-GRID III SINGLE ROW HORIZONTAL P.C BOARD CONN.
MOLEX INCORPORATED
DOCUMENT NO.: SDA-90148
SHEET NO.: 2 OF 3
SIZE: A3

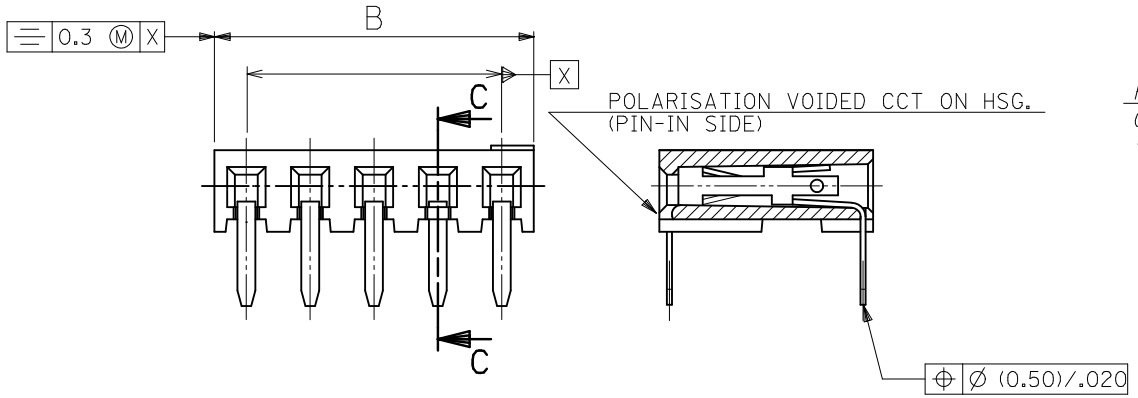
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

PART NO.	POLARISED CCT NO.	NO. OF CKTS.	DIM. A	DIM. B $(^{+0}_{-0.30})$ $^{+.0}_{-.012}$	NO. PER TUBE
90148-3X01	2	3	(5.08) .200	(7.62) .300	72

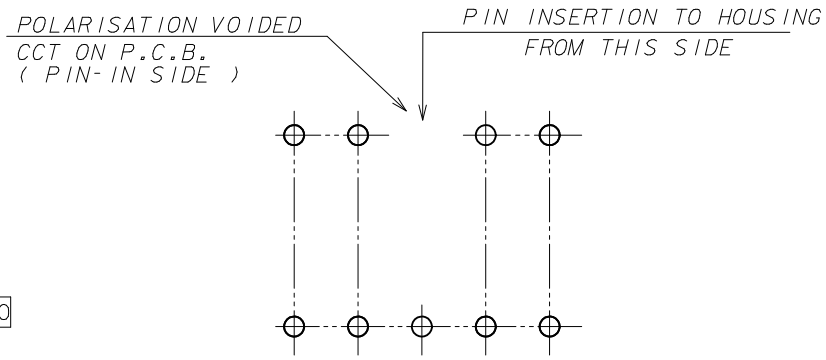
NON-STANDARD PRODUCTS

90148-XXYY

- 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



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.

UPDATE TOL.SYMMETRY
EC NO: S2010-0968 2010/05/26
DRWN:SKANG 2010/06/04
CH'KD:ATSEE 2010/06/05
APPR:ML ONG
DESCRIPTION
AK
REV

QUALITY SYMBOLS
F_A=0
F_C=0
F_P=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.15	± ---
1 PLACE	± ---	± ---
ANGULAR ± 2 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: DB DATE: 1987/07/14
CHECKED BY: D.MORIARTY DATE: 2005/03/02
APPROVED BY: J.DENNEHY DATE: 2010/06/04
MATERIAL NO.: SEE TABLE

TITLE: C-GRID III SINGLE ROW HORIZONTAL P.C BOARD CONN.
MOLEX INCORPORATED
DOCUMENT NO.: SDA-90148
SHEET NO.: 3 OF 3
SIZE: A3

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. $B^{(\pm 0.30)}_{\pm .012}$	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

- XX — INDICATES NO. OF CIRCUITS
- Y — PLATING CODE
  - 1 = VERSION A
  - 2 = VERSION E
  - 3 = VERSION F
- XX —
  - 1 = STRAIGHT PINS POLYESTER
  - 9 = STRAIGHT PINS POLYESTER
  - 4 = STRAIGHT PINS NYLON 46

ADD NEW P/N 2007/03/29
EC NO: E2007-0823 2007/03/29
DRWN: DBYRNES 2007/04/04
CHKD:
APPR: EOMAHONY
DESCRIPTION
AJ
REV

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± ---	± ---
1 PLACE	± ---	± ---
ANGULAR ±---°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: ---
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: DB DATE: 1987/07/14
CHECKED BY: D.MORIARTY DATE:
APPROVED BY: J.DENNEHY DATE:
MATERIAL NO.: SEE CHART

TITLE: C-GRID III SINGLE ROW HORIZONTAL P.C. BOARD CONNECTOR
molex MOLEX INCORPORATED
DOCUMENT NO.: SDA-90148
SHEET NO.: 2 OF 3
SIZE: A3

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