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Part Number: [0901471302](#)
Status: **Active**
Overview: [cgrid_sl_products](#)
Description: 2.54mm (.100") Pitch C-Grid® PC Board Connector, Single Row, Vertical, 2 Circuits

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

Agency Certification

CSA LR19980
UL E29179

General

Product Family PCB Receptacles
Series [90147](#)
Application Board-to-Board
Overview [cgrid_sl_products](#)
Product Name C-Grid®

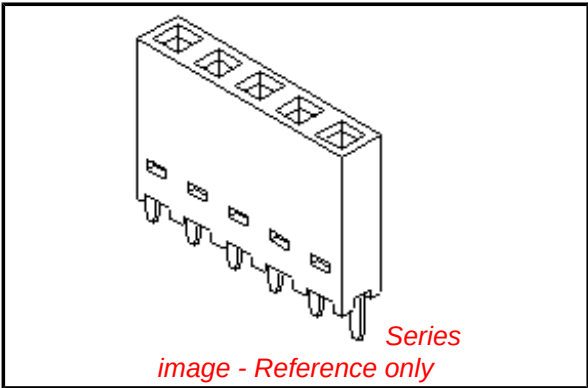
Physical

Circuits (Loaded) 2
Color - Resin Black
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 Vertical
PC Tail Length (in) 0.114 In
PC Tail Length (mm) 2.90 mm
PCB Locator No
PCB Retention Yes
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
Plating min: Mating (µin) 30.4
Plating min: Mating (µm) 0.76
Plating min: Termination (µin) 120
Plating min: Termination (µm) 3
Polarized to PCB No
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

Solder Process Data



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
[90147Series](#)

Mates With
[90120](#) , [90121](#)

Use With
[90120](#) , [90121](#)

Lead-free Process Capability

Wave Capable (TH only)

Material Info

Reference - Drawing Numbers

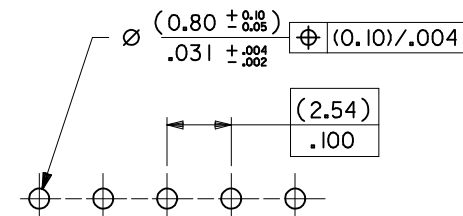
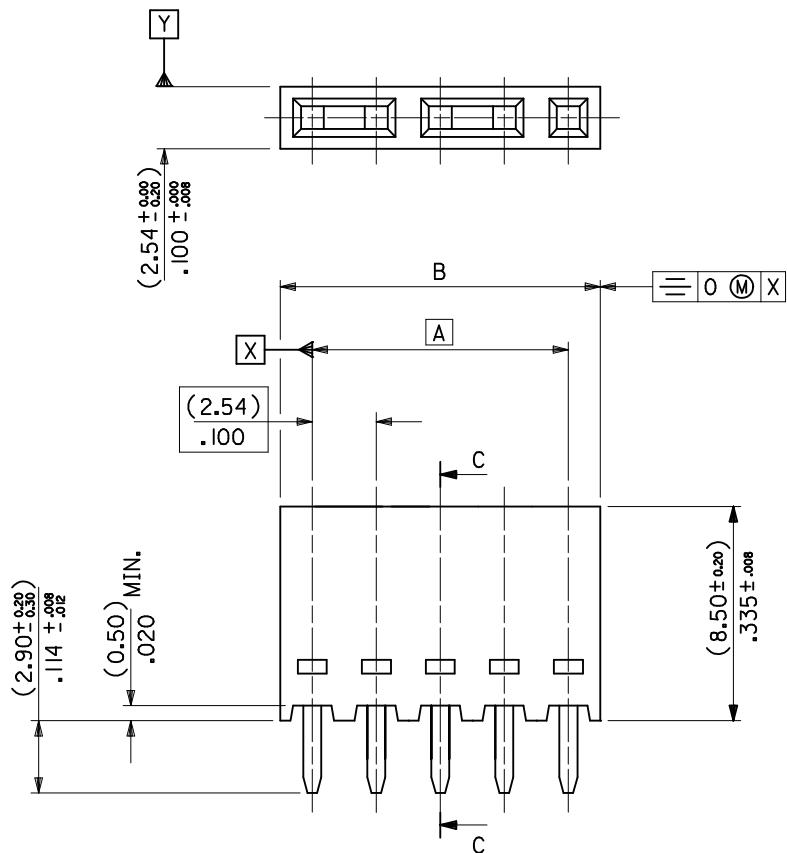
Sales Drawing

SDA-90147

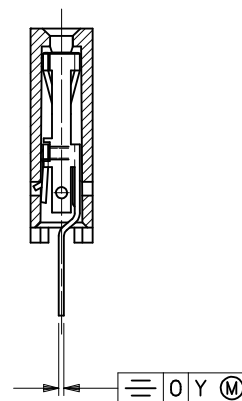
This document was generated on 05/22/2010

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10 9 8 7 6 5 4 3 2 1



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



SECTION C-C SHOWING
STRAIGHT PINS.

NOTES:

- 1) CONTACT-PLATED PHOSPHOR BRONZE.
- 2) HOUSING-15% GLASS FILLED POLYESTER.
COLOUR: BLACK.
- 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

ADDED GATE AREA EC NO: E2009-0250 2008/12/08 DRWN:BMAGUIRE 2008/12/08 CHKD: 2008/12/08 APPR:BMAGUIRE 2008/12/08 AC	REV	DESCRIPTION	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE 1:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION				
				mm	INCH	DRAWN BY	DATE	TITLE C-GRID III, SINGLE ROW VERTICAL P.C. BOARD CONNECTOR ASSEMBLY.	DOCUMENT NO. SDA-90147		SHEET NO. 1 OF 2			
						4 PLACES	± ---					± ---	DB	1987/07/14
						3 PLACES	± ---					± ---	CHECKED BY	DATE
						2 PLACES	± ---					± ---	JDENNEHY	2005/07/07
				1 PLACE	± ---	± ---	APPROVED BY	DATE	MOLEX INCORPORATED					
				ANGULAR ± 2 °		JDENNEHY	2005/07/07							
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE SHEET 2								
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			
F	PART NO'S - STRAIGHT PINS		NO.OF CKTS	DIM." A"	DIM." B" (± 0.00) ± 0.02	QTY. PER TUBE	PLATING VERSION A						
	STANDARD	CUSTOMER SPECIFIC					PRE-PLATED HOT DIP TIN 1.0 TO 2.5 μ m (.000040" TO .000100").						
	90147-1X02		2	(2.54) .100	(5.08) .200	105	PLATING VERSION E						
	03		3	(5.08) .200	(7.62) .300	72	1.27 TO 1.78 μ m (.000050" TO .000070") NICKEL						
	04		4	(7.62) .300	(10.16) .400	52	OVERALL, 0.38 TO 0.64 μ m (.000015" TO .000025")						
	05	90147-9105	5	(10.16) .400	(12.70) .500	44	GOLD ON CONTACT AREA (OVER NICKEL).						
	06		6	(12.70) .500	(15.24) .600	36	3 TO 5 μ m (.000120" TO .000200") TIN						
	07		7	(15.24) .600	(17.78) .700	30	ON SOLDER TAILS (OVER NICKEL).						
	08		8	(17.78) .700	(20.32) .800	26	PLATING VERSION F.						
	09		9	(20.32) .800	(22.86) .900	22	1.27 TO 1.78 μ m (.000050" TO .000070") NICKEL						
	10		10	(22.86) .900	(25.40) 1.000	22	OVERALL, 0.76 TO 1.0 μ m (.000030" TO .000040")						
	11		11	(25.40) 1.000	(27.94) 1.100	20	GOLD ON CONTACT AREA (OVER NICKEL).						
	12		12	(27.94) 1.100	(30.48) 1.200	18	3 TO 5 μ m (.000120" TO .000200") TIN						
	13		13	(30.48) 1.200	(33.02) 1.300	16	ON SOLDER TAILS (OVER NICKEL).						
	14		14	(33.02) 1.300	(35.56) 1.400	14	PLATING VERSION N.						
	15		15	(35.56) 1.400	(38.10) 1.500	14	1.27 TO 1.78 μ m (.000050" TO .000070") NICKEL						
	16		16	(38.10) 1.500	(40.64) 1.600	13	OVERALL, 0.76 TO 2.6 μ m (.000030" TO .000100")						
	17		17	(40.64) 1.600	(43.18) 1.700	13	GOLD ON CONTACT AREA (OVER NICKEL).						
	18		18	(43.18) 1.700	(45.72) 1.800	12	4 μ m (.000120") MINIMUM TIN						
	19		19	(45.72) 1.800	(48.26) 1.900	12	ON SOLDER TAILS (OVER NICKEL).						
	20		20	(48.26) 1.900	(50.80) 2.000	11	PLATING CODE.						
	21		21	(50.80) 2.000	(53.34) 2.100	11	1 = VERSION A.						
	22		22	(53.34) 2.100	(55.88) 2.200	10	2 = VERSION E.						
	23		23	(55.88) 2.200	(58.42) 2.300	9	3 = VERSION F.						
	24		24	(58.42) 2.300	(60.96) 2.400	9	4 = VERSION N.						
	25		25	(60.96) 2.400	(63.50) 2.500	8	SEE CHART.						
	26		26	(63.50) 2.500	(66.04) 2.600	8							
	27		27	(66.04) 2.600	(68.58) 2.700	8							
	28		28	(68.58) 2.700	(71.12) 2.800	7							
	29		29	(71.12) 2.800	(73.66) 2.900	7							
	30		30	(73.66) 2.900	(76.20) 3.000	7							
	31		31	(76.20) 3.000	(78.74) 3.100	7							
	90147-1X 32		32	(78.74) 3.100	(81.28) 3.200	6							
B													
A	STANDARD PRODUCTS												
	REMOVE KINK OPT EC NO: E2007-0787 DRAWN: WASZKI LEWICZ 2007/04/25 CHKD: JONOR ARTY 2007/04/25 APPR: JDENNEHY 2007/04/27 AA												
QUALITY SYMBOLS =0 =0						GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- ANGULAR ± 2 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DIMENSION STYLE MM/IN DRAWN BY DATE DB 1986/12/28 CHECKED BY DATE JDENNEHY 2005/07/07 APPROVED BY DATE JDENNEHY 2005/07/07 MATERIAL NO. SIZE A3		SCALE 5:1 TITLE C-GRID III SINGLE ROW VERTICAL P.C. BOARD CONNECTOR MOLEX INCORPORATED DOCUMENT NO. SDA-90147		DESIGN UNITS METRIC THIRD ANGLE PROJECTION SHEET NO. 2 OF 2	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION													

STANDARD PRODUCTS

REMOVE KINK OPT EC NO: E2007-0787 DRWN:DMASZK/EMI C7 2007/04/25 CHKD:DMOR/ARTY 2007/04/25 APPR: DENNEHY 2007/04/27	QUALITY SYMBOLS ▽=0 ▽=0	DESCRIPTION REV	AA

GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	mm	INCH	DRAWN BY	DATE	C-GRID III SINGLE ROW VERTICAL P.C. BOARD CONNECTOR		
4 PLACES	± ---	± ---	DB	1986/12/28			
3 PLACES	± ---	± ---	CHECKED BY	DATE			
2 PLACES	± ---	± ---	JDENNEHY	2005/07/07			
1 PLACE	± ---	± ---	APPROVED BY	DATE	MOLEX INCORPORATED		
ANGULAR ± 2 °		JDENNEHY	2005/07/07				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NO.		DOCUMENT NO.		SHEET NO.
			SEE CHART		SDA-90147		2 OF 2
			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			