

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0901513520](#)  
**Status:** **Active**  
**Overview:** [cgrid\\_sl\\_products](#)  
**Description:** 2.54mm (.100") Pitch C-Grid III™ PC Board Connector, Dual Row, Vertical, 20 Circuits

**Documents:**

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

**General**

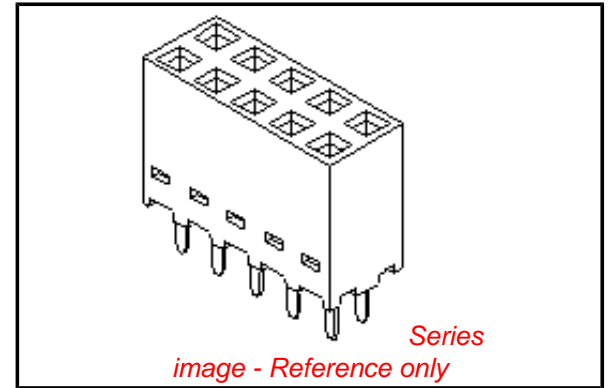
Product Family	PCB Receptacles
Series	<a href="#">90151</a>
Application	Board-to-Board
Overview	<a href="#">cgrid_sl_products</a>
Product Name	C-Grid III™

**Physical**

Circuits (Loaded)	20
Circuits (maximum)	20
Color - Resin	Black
Durability (mating cycles max)	500
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	2
Orientation	Vertical
PC Tail Length (in)	0.102 In
PC Tail Length (mm)	2.60 mm
PCB Locator	No
PCB Retention	None
PCB Thickness Recommended (in)	0.031 In, 0.067 In
PCB Thickness Recommended (mm)	1.20 mm, 1.70 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)	5
Plating min: Mating (µm)	0.125
Plating min: Termination (µin)	160
Plating min: Termination (µm)	4
Polarized to Mating Part	No
Polarized to PCB	No
Stackable	Yes
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-55°C to +125°C
Termination Interface: Style	Through Hole

**Electrical**

Current - Maximum per Contact	3A
Grounding to PCB	No



**EU RoHS**

**ELV and RoHS  
Compliant**  
**REACH SVHC  
Contains SVHC: No**  
**Halogen-Free  
Status**

**China RoHS**



**Need more information on product  
environmental compliance?**

Email [productcompliance@molex.com](mailto: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**

[90151Series](#)

**Mates With**

0.64mm (.025") square pins

Voltage - Maximum

350V AC/DC

**Solder Process Data**

Lead-free Process Capability

Wave Capable (TH only)

**Material Info**

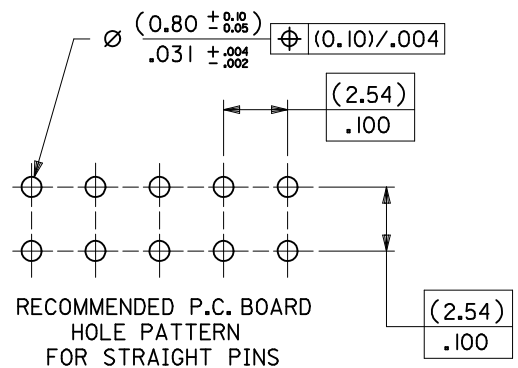
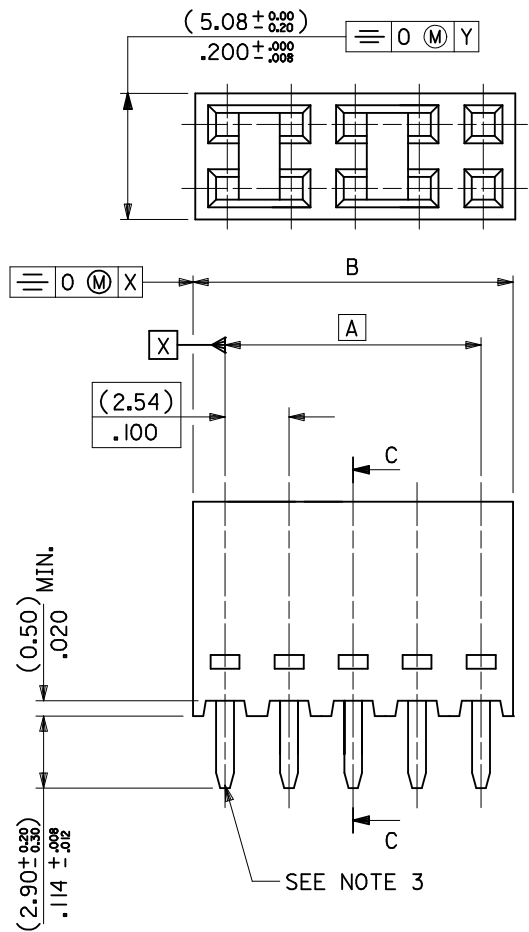
**Reference - Drawing Numbers**

Sales Drawing

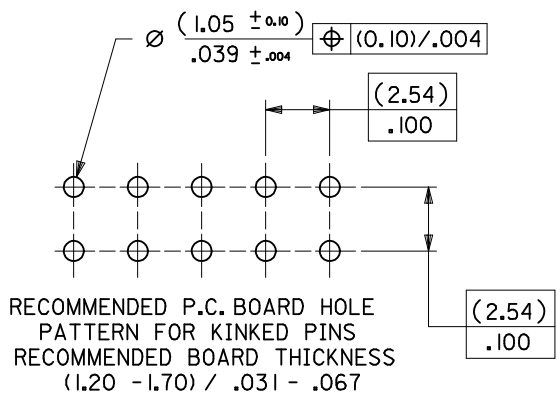
SDA-90151

This document was generated on 05/24/2010

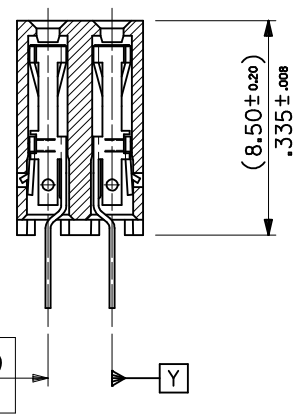
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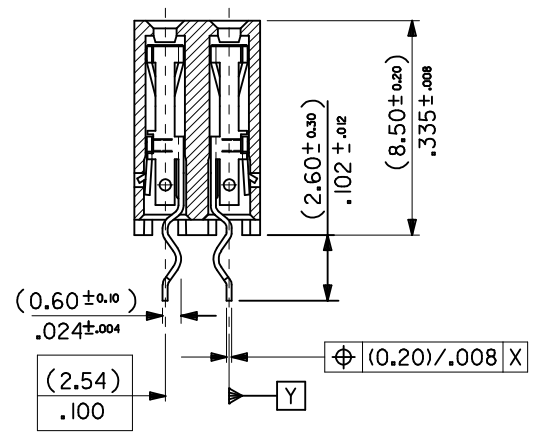
RECOMMENDED P.C. BOARD HOLE PATTERN FOR STRAIGHT PINS



RECOMMENDED P.C. BOARD HOLE PATTERN FOR KINKED PINS  
RECOMMENDED BOARD THICKNESS (1.20 - 1.70) / .031 - .067



SECTION C-C



SECTION C-C

NOTES

- 1) CONTACT-PLATED PHOSPHOR BRONZE.
- 2) HOUSING-15% GLASS FILLED POLYESTER. COLOUR-BLACK.
- 3) COMPATIBLE WITH PCB HOLE PATTERN.
- 4) 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.

6	AF
5	AD
4	AD
3	AD
2	AG
1	AH

ADD INSET FOR GATE EC NO: E2009-0250 DRWN: BMAGUIRE 2008/12/08 CHKD: 2008/12/08 APPR: BMAGUIRE 2008/12/08	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.05 ± --- 1 PLACE ± 0.10 ± ---	mm INCH ± --- ± --- ± 0.05 ± --- ± 0.10 ± ---	DRAWN BY DB	DATE 21/07/86	TITLE C-GRID III DUAL ROW VERTICAL P.C. BOARD CONNECTOR			
		ANGULAR ± ---°		CHECKED BY	DATE	MOLEX INCORPORATED			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY	DATE	MATERIAL NO. SEE CHART	DOCUMENT NO. SDA-90151	SHEET NO. 1 OF 5	

SEE CHART  
PART NO. SDA-90151  
DWG. NO.

PART NO. STRAIGHT PINS	PART NO. KINKED PINS	NO.OF CKTS.	DIM." A"	DIM." B" ( $\pm 0.00$ ): $\pm 0.02$	QTY. PER TUBE
90151-2X04	90151-3X04	4	( 2.54 ) .100	( 5.08 ) .200	105
▲ ▲ 06	▲ ▲ 06	6	( 5.08 ) .200	( 7.62 ) .300	72
08	08	8	( 7.62 ) .300	(10.16) .400	52
10	10	10	(10.16) .400	(12.70) .500	44
12	12	12	(12.70) .500	(15.24) .600	36
14	14	14	(15.24) .600	(17.78) .700	30
16	16	16	(17.78) .700	(20.32) .800	26
18	18	18	(20.32) .800	(22.86) .900	24
20	20	20	(22.86) .900	(25.40) 1.000	22
22	22	22	(25.40) 1.000	(27.94) 1.100	20
24	24	24	(27.94) 1.100	(30.48) 1.200	18
26	26	26	(30.48) 1.200	(33.02) 1.300	16
28	28	28	(33.02) 1.300	(35.56) 1.400	14
30	30	30	(35.56) 1.400	(38.10) 1.500	14
32	32	32	(38.10) 1.500	(40.64) 1.600	13
34	34	34	(40.64) 1.600	(43.18) 1.700	12
36	36	36	(43.18) 1.700	(45.72) 1.800	12
38	38	38	(45.72) 1.800	(48.26) 1.900	11
40	40	40	(48.26) 1.900	(50.80) 2.000	11
42	42	42	(50.80) 2.000	(53.34) 2.100	11
44	44	44	(53.34) 2.100	(55.88) 2.200	10
46	46	46	(55.88) 2.200	(58.42) 2.300	10
48	48	48	(58.42) 2.300	(60.96) 2.400	9
50	50	50	(60.96) 2.400	(63.50) 2.500	8
52	52	52	(63.50) 2.500	(66.04) 2.600	8
54	54	54	(66.04) 2.600	(68.58) 2.700	8
56	56	56	(68.58) 2.700	(71.12) 2.800	7
58	58	58	(71.12) 2.800	(73.66) 2.900	7
60	60	60	(73.66) 2.900	(76.20) 3.000	7
▼ ▼ 62	▼ ▼ 62	62	(76.20) 3.000	(78.74) 3.100	7
90151-2X64	90151-3X64	64	(78.74) 3.100	(81.28) 3.200	6

PLATING VERSION A

PRE-PLATED HOT DIP TIN  
1.0 TO 2.5 um (.000040" TO .000100").

PLATING VERSION E

1.27 TO 1.78 um (.000050" TO .000070") NICKEL  
OVERALL, 0.38 TO 0.64 um (.000015" TO .000025")  
GOLD ON CONTACT AREA (OVER NICKEL).  
3 TO 5 um (.000120" TO .000200") TIN  
ON SOLDER TAILS (OVER NICKEL).

PLATING VERSION F.

1.27 TO 1.78 um (.000050" TO .000070") NICKEL  
OVERALL, 0.76 TO 1.0 um (.000030" TO .000040")  
GOLD ON CONTACT AREA (OVER NICKEL).  
3 TO 5 um (.000120" TO .000200") TIN  
ON SOLDER TAILS (OVER NICKEL).

PLATING VERSION G.

1.27 TO 1.78 um (.000050" TO .000070") NICKEL  
OVERALL, 0.125 um MIN. (.000005" MIN.) GOLD FLASH  
ON CONTACT AREA (OVER NICKEL).  
3 TO 5 um (.000120" TO .000200") TIN  
ON SOLDER TAILS (OVER NICKEL).

PLATING VERSION N.

1.27 TO 1.78 um (.000050" TO .000070") NICKEL  
OVERALL, 0.76 TO 2.6 um (.000030" TO .000100")  
GOLD ON CONTACT AREA (OVER NICKEL).  
4 um (.000120") MINIMUM TIN  
ON SOLDER TAILS (OVER NICKEL).

**STANDARD PRODUCTS**

90151-XXYY

INDICATES NO. OF CIRCUITS.

- PLATING CODE.  
1 = VERSION A.  
2 = VERSION E.  
3 = VERSION F.  
4 = VERSION N.  
5 = VERSION G.

SEE CHART

FOR PREVIOUS  
DRAWING ISSUES  
SEE MRI.

LEAD FREE CONVERSION  
NEW BORDER ADDED  
Ec NO. E2004-0610  
DRAWN: PSHEAHAN 06/01/2004  
CHK:  
APPR:  
AH  
REV

DESCRIPTION  
MAJOR  
CRITICAL  
C

QUALITY SYMBOLS  
GENERAL TOLERANCES:  
(UNLESS SPECIFIED)  
SCALE  
DESIGN UNITS  
THIRD ANGLE PROJECTION  
DRAWN BY & DATE  
CHECKED BY & DATE  
APPROVED BY & DATE  
ANGULAR: ± °  
DRAFT WHERE APPLICABLE MUST  
REMAIN WITHIN DIMENSIONS

mm INCH  
mm ONLY  
mm INCH  
INCH mm  
mm ONLY  
DRAWN BY & DATE  
DB 14/ 7/87  
CHECKED BY & DATE  
APPROVED BY & DATE  
CAD FILENAME SA90151X2 DGN

TITLE:  
C-GRID III  
DUAL ROW VERTICAL  
P.C. BOARD CONNECTOR  
MOLEX INCORPORATED  
MATERIAL NO.  
DRAWING NO.  
SHEET NO.  
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