

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

**Part Number:** [0901522304](#)  
**Status:** **Active**  
**Overview:** [cgrid\\_sl\\_products](#)  
**Description:** 2.54mm (.100") Pitch C-Grid III™ PC Board Connector, Dual Row, Right Angle, Straight PCB Pins 0.76µm (29µ") Gold (Au) Selective, 4 Circuits

**Documents:**

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

**General**

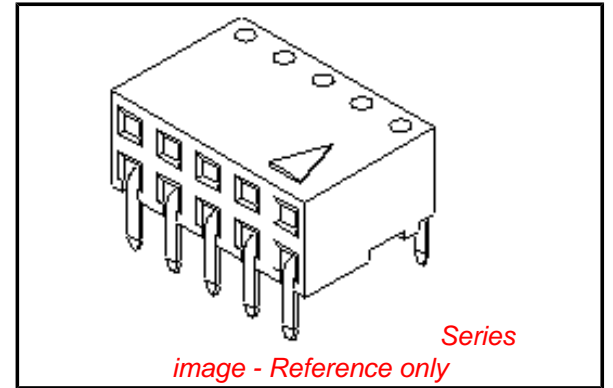
Product Family	PCB Receptacles
Series	<a href="#">90152</a>
Application	Board-to-Board
Overview	<a href="#">cgrid_sl_products</a>
Product Name	C-Grid III™

**Physical**

Circuits (Loaded)	4
Circuits (maximum)	4
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	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)	30.4
Plating min: Mating (µm)	0.76
Plating min: Termination (µin)	120
Plating min: Termination (µm)	3
Polarized to Mating Part	Yes
Polarized to PCB	No
Stackable	No
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-55°C to +125°C
Termination Interface: Style	Through Hole

**Electrical**

Current - Maximum per Contact	3A
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**EU RoHS**

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

**China RoHS**



**Not Reviewed**

**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**

[90152Series](#)

**Mates With**

[90122](#) , [90131](#)

Grounding to PCB  
Voltage - Maximum

No  
350V AC/DC

**Material Info**

**Reference - Drawing Numbers**

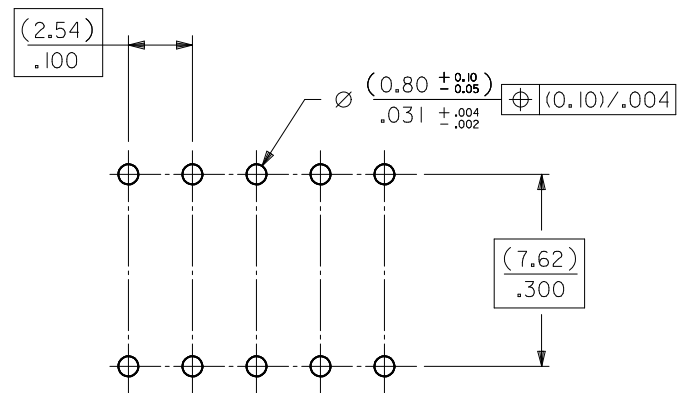
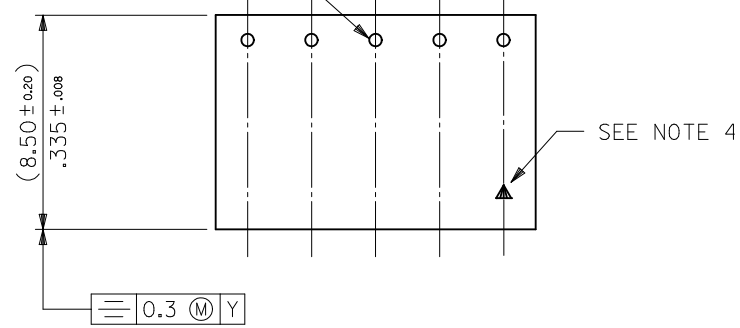
Sales Drawing

SDA-90152

This document was generated on 05/24/2010

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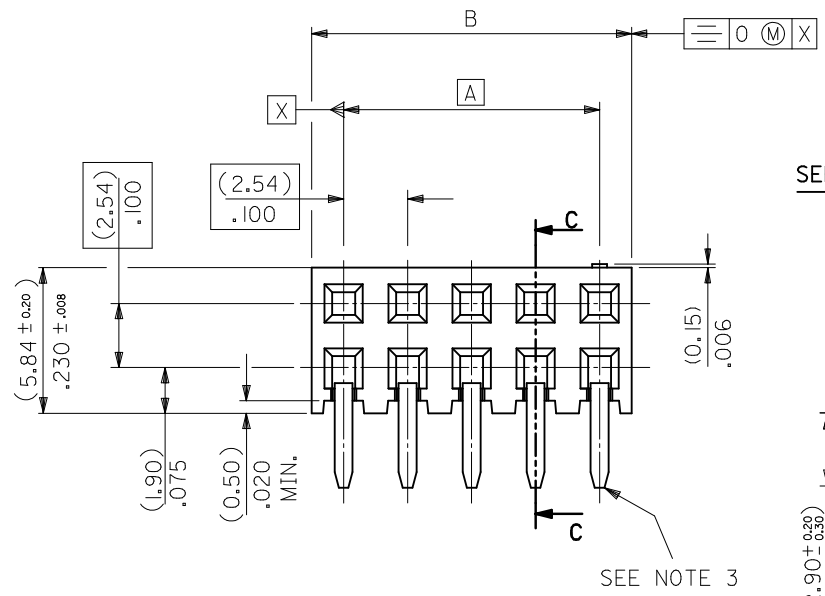
TERMINAL RETENTION FEATURE



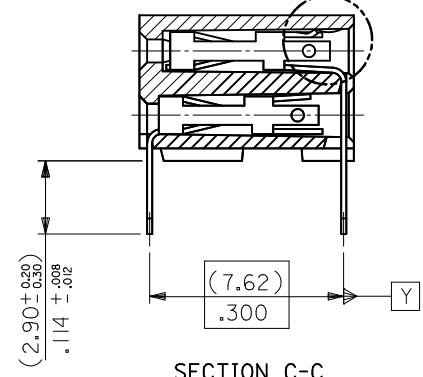
RECOMMENDED P.C. BOARD HOLE PATTERN

NOTES

- 1) CONTACT-PLATED PHOSPHOR BRONZE.
- 2) HOUSING-15% GLASS FILLED POLYESTER. COLOUR-BLACK.
- 3) COMPATABLE WITH PCB HOLE PATTERN.
- 4) THIS MARK INDICATES CIRCUIT NO.1.
- 5) 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) PRODUCT SPECIFICATION: PS-99020-0001
- 7) RECOMMENDED PCB THICKNESS 1.6MM

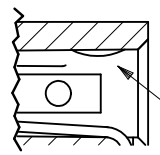


SEE DETAIL "A"



SECTION C-C

DETAIL "A"



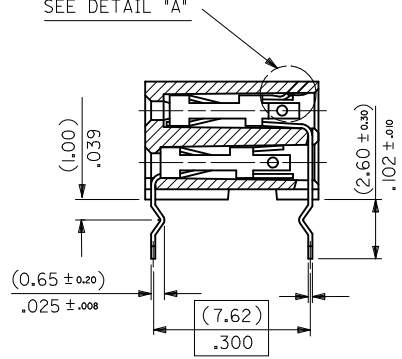
TERMINAL RETENTION FEATURE

CHG PKG QTY FOR 4CKT EC NO: S2010-0556 DRWN:ATSEE 2010/01/12 CHKD:SKANG 2010/01/14 APPR:MLONG 2010/01/14	QUALITY SYMBOLS $F_{\Delta} = 0$ $F_{\square} = 0$ $F_{\nabla} = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± .008 1 PLACE ± --- ± --- ANGULAR ± 2 °	mm INCH DRAWN BY DATE DB 1987/07/14 CHECKED BY DATE DB 1987/07/14 APPROVED BY DATE MLONG 2010/01/14	TITLE C-GRID PCB CONN DR HORZ	MATERIAL NO. SDA-90152 DOCUMENT NO.		SHEET NO. 1 OF 5	
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						

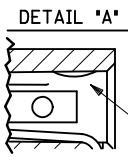
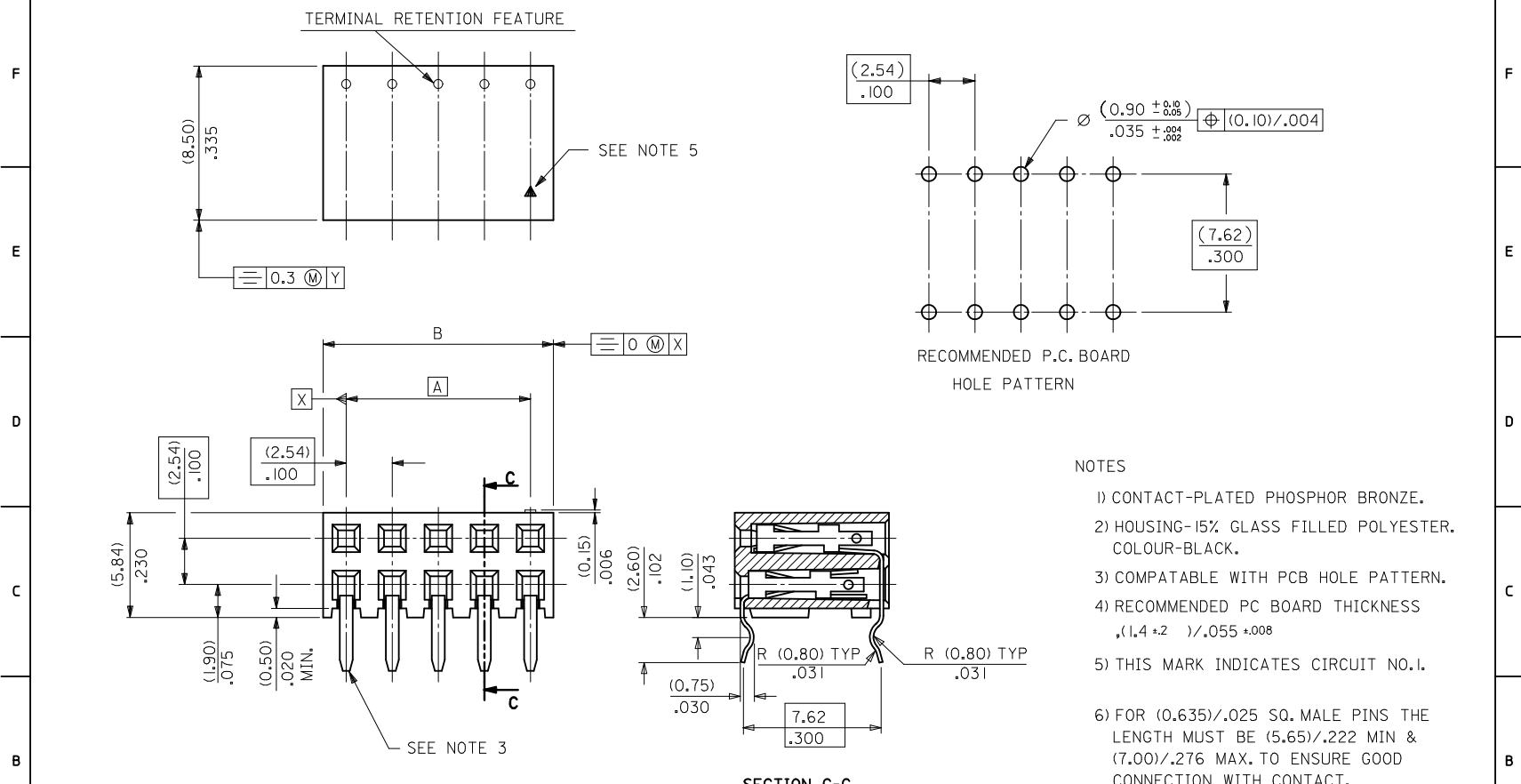
	10	9	8	7	6	5	4	3	2	1
	PART NO.	CKT	DIM. A	DIM. B (+0.00 -0.30 -0.00 -0.12)	PCS/ TUBE					
F	90152-XX04	4	(2.54) .100	(5.08) .200	109	PLATING VERSION A PRE-PLATED HOT DIP TIN 1.0 TO 2.5 microns (.00004" TO .00010").				
	06	6	(5.08) .200	(7.62) .300	73					
	08	8	(7.62) .300	(10.16) .400	55					
	10	10	(10.16) .400	(12.70) .500	44					
	12	12	(12.70) .500	(15.24) .600	36					
	14	14	(15.24) .600	(17.78) .700	31					
	16	16	(17.78) .700	(20.32) .800	27	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).				
E	18	18	(20.32) .800	(22.86) .900	24					
	20	20	(22.86) .900	(25.40) 1.000	22					
	22	22			20					
	24	24	(27.94) 1.100	(30.48) 1.200	18					
	26	26	(30.48) 1.200	(33.02) 1.300	16	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).				
	28	28			14					
	30	30	(35.56) 1.400	(38.10) 1.500	14					
	32	32			13					
	34	34	(40.64) 1.600	(43.18) 1.700	12	PLATING VERSION G 1.27 TO 1.78 microns (.00005" TO .00007") NICKEL OVERALL, 0.125 TO 0.20 microns (.000005" TO .0000079") GOLD ON CONTACT AREA (OVER NICKEL). 3 TO 5 microns (.00012" TO .00020") TIN ON SOLDER TAILS (OVER NICKEL).				
D	36	36	(43.18) 1.700	(45.72) 1.800	12					
	38	38	(45.72) 1.800	(48.26) 1.900	11					
	40	40	(48.26) 1.900	(50.80) 2.000	11					
	42	42			10	90152 - X X Y Y INDICATES NO. OF CIRCUITS { PLATING CODE. 21 = VERSION A 22 = VERSION E 23 = VERSION F 25 = VERSION G				
	44	44	(53.34) 2.100	(55.88) 2.200	10					
	46	46			10					
	48	48			9					
	50	50	(60.96) 2.400	(63.50) 2.500	8	90152 - X X Y Y INDICATES NO. OF CIRCUITS { PLATING CODE. 21 = VERSION A 22 = VERSION E 23 = VERSION F 25 = VERSION G				
C	52	52			8					
	54	54			8					
	56	56	(68.58) 2.700	(71.12) 2.800	7					
	58	58			7	90152 - X X Y Y INDICATES NO. OF CIRCUITS { PLATING CODE. 21 = VERSION A 22 = VERSION E 23 = VERSION F 25 = VERSION G				
	60	60	(73.66) 2.900	(76.20) 3.000	7					
	62	62			6					
B	90152-XX64	64	(78.74) 3.100	(81.28) 3.200	5					

STANDARD PRODUCTS

CHG PKG QTY FOR 4CKT EC NO: S2010-0556 DRWINATSEE 2010/01/12 CHKD:SKANG 2010/01/14 APPR:MLONG 2010/01/14	QUALITY SYMBOLS F <sub>A</sub> = 0 F <sub>C</sub> = 0 F <sub>P</sub> = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION																	
		<table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.20</td> <td>± .008</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td colspan="3">ANGULAR ± 2 °</td> </tr> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.20	± .008	1 PLACE	± ---	± ---	ANGULAR ± 2 °			DRAWN BY DATE DB 1987/07/14	TITLE C-GRID PCB CONN DR HORZ	MOLEX INCORPORATED
			mm	INCH																			
4 PLACES	± ---	± ---																					
3 PLACES	± ---	± ---																					
2 PLACES	± 0.20	± .008																					
1 PLACE	± ---	± ---																					
ANGULAR ± 2 °																							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	CHECKED BY DATE DB 1987/07/14	APPROVED BY DATE MLONG 2010/01/14																					
		MATERIAL NO. SEE TABLE	DOCUMENT NO. SDA-90152	SHEET NO. 2 OF 5																			



10 9 8 7 6 5 4 3 2 1



CHG PKG QTY FOR 4CKT EC NO: S2010-0556 DRAWN BY: 2010/01/12 CHKD-SKANG 2010/01/14 APPR-MLONG 2010/01/14	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	4 PLACES ± --- ± ---	MM ONLY	NTS	METRIC	☉
	▽=0	3 PLACES ± --- ± ---	DRAWN BY DATE			
	▽=0	2 PLACES ± 0.20 ± .008	CHECKED BY DATE			
		1 PLACE ± --- ± ---	DRAWN BY DATE			
		ANGULAR ± 2°	APPROVED BY DATE			
			MLONG 2010/01/14			
			MATERIAL NO.			

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	SIZE A3
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

TITLE C-GRID PCB CONN DR HORZ		MOLEX INCORPORATED	
DOCUMENT NO. SDA-90152		SHEET NO. 3 OF 5	

9 8 7 6 5 4 3 2 1

PART NO.	CKT	DIM. A	DIM. B (+0.00 -0.30) +0.00 -0.12		PCS/ TUBE
90152-XX04	4	(2.54) .100	(5.08)	.200	109
06	6	(5.08) .200	(7.62)	.300	73
08	8	(7.62) .300	(10.16)	.400	55
10	10	(10.16) .400	(12.70)	.500	44
12	12	(12.70) .500	(15.24)	.600	36
14	14	(15.24) .600	(17.78)	.700	31
16	16	(17.78) .700	(20.32)	.800	27
18	18	(20.32) .800	(22.86)	.900	24
20	20	(22.86) .900	(25.40)	1.000	22
22	22				20
24	24	(27.94) 1.100	(30.48)	1.200	18
26	26	(30.48) 1.200	(33.02)	1.300	16
28	28				14
30	30	(35.56) 1.400	(38.10)	1.500	14
32	32				13
34	34	(40.64) 1.600	(43.18)	1.700	12
36	36	(43.18) 1.700	(45.72)	1.800	12
38	38	(45.72) 1.800	(48.26)	1.900	11
40	40	(48.26) 1.900	(50.80)	2.000	11
42	42				10
44	44	(53.34) 2.100	(55.88)	2.200	10
46	46				10
48	48				9
50	50	(60.96) 2.400	(63.50)	2.500	8
52	52				8
54	54				8
56	56	(68.58) 2.700	(71.12)	2.800	7
58	58				7
60	60	(73.66) 2.900	(76.20)	3.000	7
62	62				6
90152-XX64	64	(78.74) 3.100	(81.28)	3.200	5

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).


PLATING VERSION G.

1.27 TO 1.78 microns (.00005" TO .00007") NICKEL  
OVERALL, 0.125 TO 0.20 microns (.000005" TO .0000079")  
GOLD ON CONTACT AREA (OVER NICKEL).  
3 TO 5 microns (.00012" TO .00020") TIN  
ON SOLDER TAILS (OVER NICKEL).

90152-XXXX

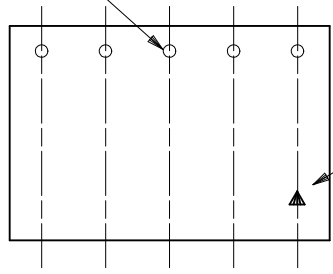
INDICATES NO. OF CIRCUITS.

PLATING CODE.  
31 = VERSION A.  
32 = VERSION E.  
33 = VERSION F.  
35 = VERSION G.

<b>CHG PKG QTY FOR 4CKT</b> EC NO: S2010-0556 DRWN:ATSEE 2010/01/12 CHKD:SKANG 2010/01/14 APPR:MLONG 2010/01/14 REV DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>		SCALE <b>NTS</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION	
	$\nabla_A=0$	<b>4 PLACES</b>	mm INCH	<b>DRAWN BY</b>	DATE	<b>C-GRID PCB CONN DR HORZ</b>   <b>MOLEX INCORPORATED</b> MATERIAL NO. SDA-90152 SHEET NO. 4 OF 5			
	$\nabla_C=0$	<b>3 PLACES</b>	± --- ± ---	<b>CHECKED BY</b>	DATE				
	$\nabla_B=0$	<b>2 PLACES</b>	± 0.20 ± .008	<b>APPROVED BY</b>	DATE				
		<b>1 PLACE</b>	± --- ± ---	<b>MLONG</b>	2010/01/14				
		ANGULAR ± 2 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE			

PART NUMBER	CKT. SIZE	PIN VOID	KINKED PINS	NO. PER TUBE
90152-6234	2 X 17	21	NONE	12
90152-5242	2 X 21	5	NONE	10
90152-7130	2 X 15	NONE	1,2 & 29,30	14

TERMINAL RETENTION FEATURE



SEE NOTE 2.

NOTES

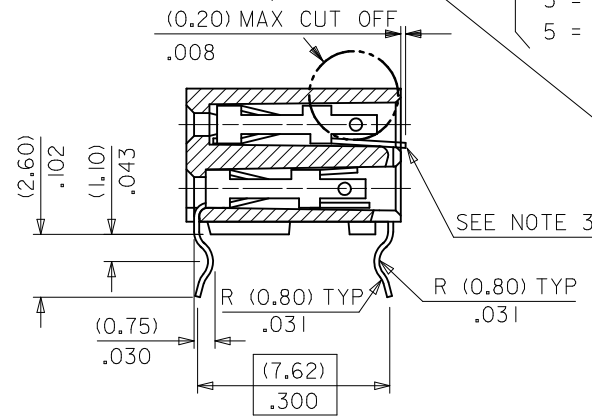
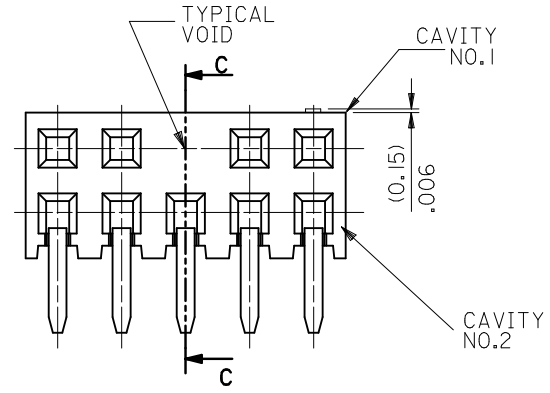
- 1) FOR DIMENSIONS SEE SHEET 1.
- 2) THIS MARK INDICATES CIRCUIT NO.1.
- 3) SOLDER TAIL OF TERMINAL IN VOIDED CAVITY MUST BE CROPPED AS SHOWN OR TERMINAL REMOVED.

90152-XXYY

INDICATES NO. OF CIRCUITS.  
 PLATING CODE.  
 1 = VERSION A.  
 2 = VERSION E.  
 3 = VERSION F.  
 5 = VERSION G.

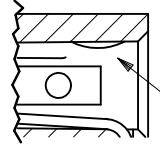
OPTIONS  
 2 = REGULAR  
 3 = KINKED  
 5 = VOIDS  
 6 = KINKS & VOIDS  
 7 = SELECTIVE KINKS

SEE DETAIL "A"



SECTION C-C

DETAIL "A"



TERMINAL RETENTION FEATURE

CHG PKG QTY FOR 4CKT EC NO: S2010-0556 DRWN:ATSEE 2010/01/12 CHKD:SKANG 2010/01/14 APPR:MLONG 2010/01/14	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		$F_A=0$ $F_C=0$ $F_P=0$	mm	INCH	MM ONLY		NTS	METRIC		
B	REV		4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE		
			3 PLACES	± ---	± ---	DB	1987/07/14	C-GRID PCB CONN DR HORZ		
			2 PLACES	± 0.20	± .008	CHECKED BY	DATE	MOLEX INCORPORATED		
			1 PLACE	± ---	± ---	APPROVED BY	DATE	DOCUMENT NO.		
			ANGULAR ± 2 °		MLONG		2010/01/14	SDA-90152		
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		SEE TABLE		SHEET NO.	
					SIZE		A3		5 OF 5	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										

SEE CHART  
SDA-90152

PART NO.	NO. OF CKTS.	DIM. A		DIM. B (+0.00 0.30 +0.000 -0.012)		NO. PER TUBE
90152-XX04	4	( 2.54 )	.100	( 5.08 )	.200	110
↑ ↑ 06	6	( 5.08 )	.200	( 7.62 )	.300	73
	08	( 7.62 )	.300	(10.16)	.400	55
	10	(10.16)	.400	(12.70)	.500	44
	12	(12.70)	.500	(15.24)	.600	36
	14	(15.24)	.600	(17.78)	.700	31
	16	(17.78)	.700	(20.32)	.800	27
	18	(20.32)	.800	(22.86)	.900	24
	20	(22.86)	.900	(25.40)	1.000	22
	22					20
	24	(27.94)	1.100	(30.48)	1.200	18
	26	(30.48)	1.200	(33.02)	1.300	16
	28					14
	30	(35.56)	1.400	(38.10)	1.500	14
	32					13
	34	(40.64)	1.600	(43.18)	1.700	12
	36	(43.18)	1.700	(45.72)	1.800	12
	38	(45.72)	1.800	(48.26)	1.900	11
	40	(48.26)	1.900	(50.80)	2.000	11
	42					10
	44	(53.34)	2.100	(55.88)	2.200	10
	46					10
	48					9
	50	(60.96)	2.400	(63.50)	2.500	8
	52					8
	54					8
	56	(68.58)	2.700	(71.12)	2.800	7
	58					7
	60	(73.66)	2.900	(76.20)	3.000	7
↓ ↓ 62	62					6
90152-XX64	64	(78.74)	3.100	(81.28)	3.200	5

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).

PLATING VERSION G.

1.27 TO 1.78 microns (.00005" TO .00007") NICKEL  
OVERALL, 0.125 TO 0.20 microns (.000005" TO .0000079")  
GOLD ON CONTACT AREA (OVER NICKEL).  
3 TO 5 microns (.00012" TO .00020") TIN  
ON SOLDER TAILS (OVER NICKEL).

90152-XXYY

INDICATES NO. OF CIRCUITS.

PLATING CODE.  
21 = VERSION A.  
22 = VERSION E.  
23 = VERSION F.  
25 = VERSION G.

STANDARD PRODUCTS

FOR PREVIOUS DRAWING ISSUES SEE MRI.

LEAD FREE CONVERSION NEW BORDERS ADDED Cg NO. E2004-0610 DRWN: PSHEAHAN 08/01/2004 CHK: APPR: AD	QUALITY SYMBOLS MAJOR $\blacktriangledown$ CRITICAL $\blacktriangledown$	GENERAL TOLERANCES: (UNLESS SPECIFIED) mm      INCH 4 PLACES $\pm 0.$ $\pm$ 3 PLACES $\pm 0.$ $\pm$ 2 PLACES $\pm 0.$ $\pm$ 1 PLACE $\pm 0.$ $\pm$		SCALE 5:1 DRAWN BY & DATE DB 14/7/87 CHECKED BY & DATE APPROVED BY & DATE	DESIGN UNITS <input checked="" type="checkbox"/> mm <input type="checkbox"/> INCH THIRD ANGLE PROJECTION	DIMENSIONS: <input type="checkbox"/> mm <input type="checkbox"/> INCH <input type="checkbox"/> mm ONLY <input type="checkbox"/> INCH <input type="checkbox"/> mm	SHT REV REVISE ON CAD ONLY	
	REV	DESCRIPTION	ANGULAR: $\pm$ °	CAD FILENAME    s90152x2 DGN	TITLE: C-GRID III DUAL ROW HORIZONTAL P.C. BOARD CONNECTOR			
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				MOLEX MOLEX INCORPORATED	MATERIAL NO. SEE CHART	DRAWING NO. SDA-90152	SHEET NO. 20F
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.							
							SIZE B	