

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0901522250

Status:

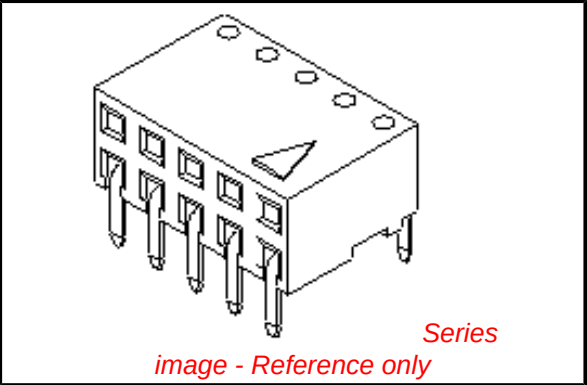
Active

Overview:

cgrid_sl_products

Description:

2.54mm (.100") Pitch C-Grid III™ PC Board Connector, Dual Row, Right Angle, Straight PCB Pins 0.38μm (15μ") Gold (Au) Selective, 50 Circuits



Documents:

3D Model

Drawing (PDF)

RoHS Certificate of Compliance (PDF)

General	
Product Family	PCB Receptacles
Series	90152
Application	Board-to-Board
Overview	cgrid_sl_products
Product Name	C-Grid III™

Physical	
Circuits (Loaded)	50
Color - Resin	Black
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)	0.062 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)	15.2
Plating min: Mating (μm)	0.38
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	
Lead-free Process Capability	Wave Capable (TH only)

Material Info

EU RoHS

ELV and RoHS

Compliant

REACH SVHC

Not Reviewed

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

90152Series

Mates With

90122 , 90131

Reference - Drawing Numbers

Sales Drawing

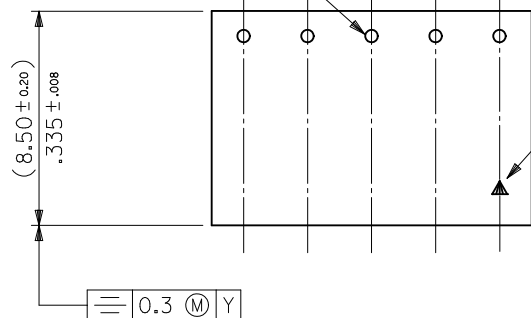
SDA-90152

This document was generated on 05/24/2010

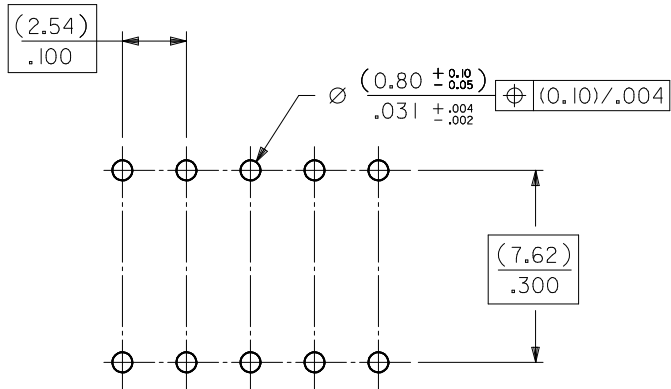
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

10 9 8 7 6 5 4 3 2 1

TERMINAL RETENTION FEATURE



SEE NOTE 4

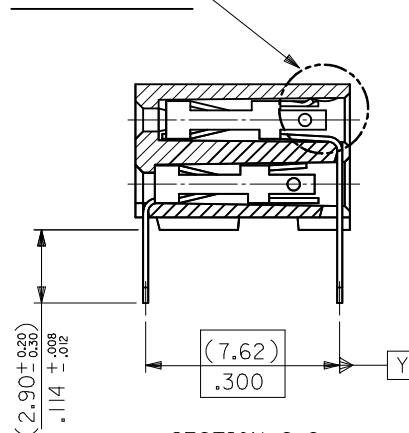


RECOMMENDED P.C. BOARD
HOLE PATTERN

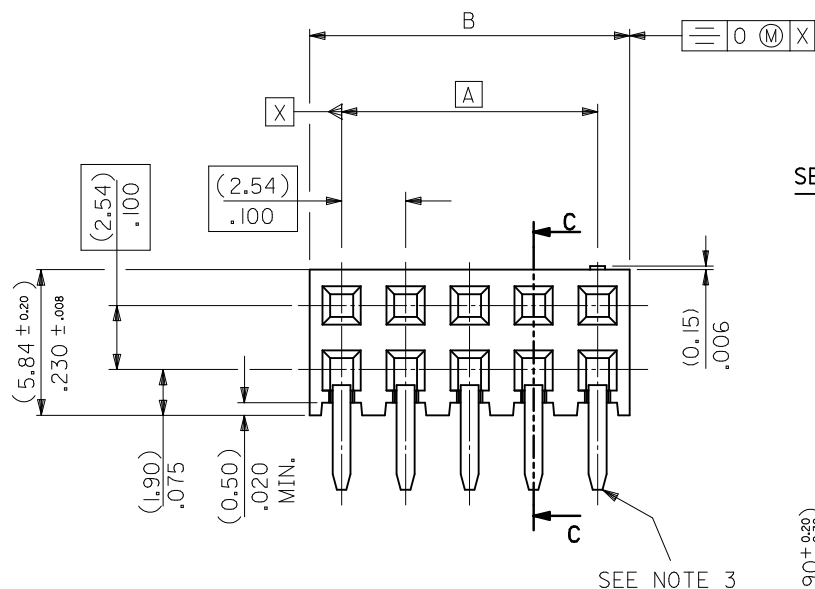
NOTES

- 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"

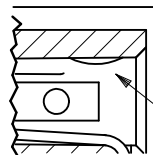


SECTION C-C



SEE NOTE 3

DETAIL "A"

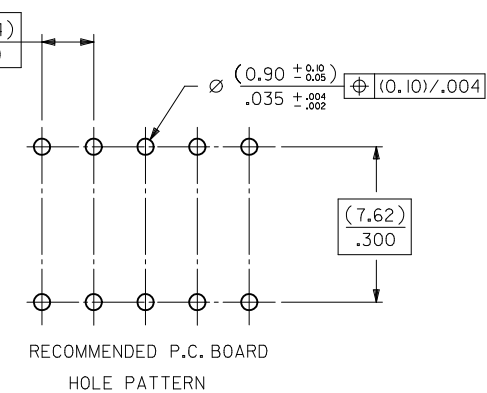
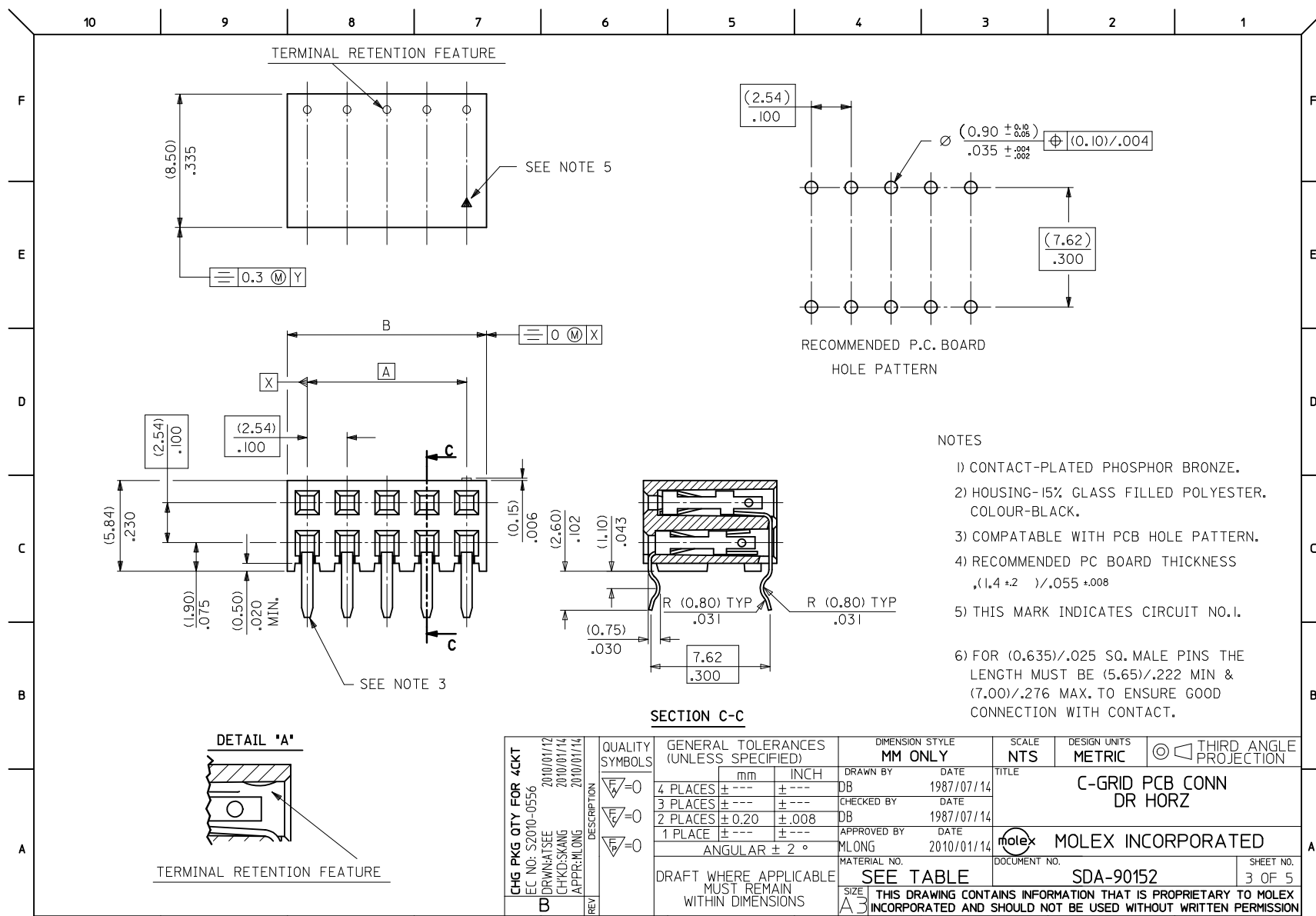
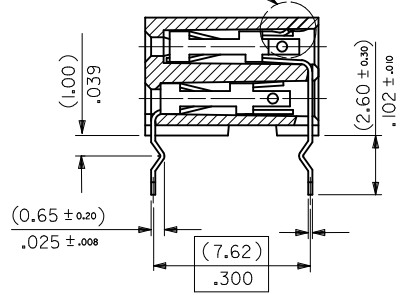


TERMINAL RETENTION FEATURE

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

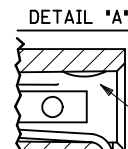
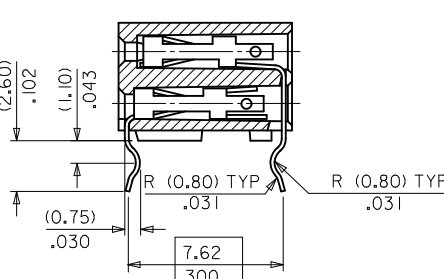
	10		9		8		7		6		5		4		3		2		1		
	PART NO.	CKT	DIM. A		DIM. B (+0.00 -0.30 -0.12)		PCS/ TUBE	PLATING VERSION A													
F	90152-XX04	4	(2.54)	.100	(5.08)	.200	109	PRE-PLATED HOT DIP TIN												F	
	06	6	(5.08)	.200	(7.62)	.300	73	1.0 TO 2.5 microns (.00004" TO .00010").													
	08	8	(7.62)	.300	(10.16)	.400	55	PLATING VERSION E													
	10	10	(10.16)	.400	(12.70)	.500	44	1.27 TO 1.78 microns (.00005" TO .00007") NICKEL													
	12	12	(12.70)	.500	(15.24)	.600	36	OVERALL, 0.38 TO 0.64 microns (.000015" TO .000025")													
E	14	14	(15.24)	.600	(17.78)	.700	31	GOLD ON CONTACT AREA (OVER NICKEL).												E	
	16	16	(17.78)	.700	(20.32)	.800	27	3 TO 5 microns (.00012" TO .00020") TIN													
	18	18	(20.32)	.800	(22.86)	.900	24	ON SOLDER TAILS (OVER NICKEL).													
	20	20	(22.86)	.900	(25.40)	1.000	22	PLATING VERSION F													
	22	22					20	1.27 TO 1.78 microns (.00005" TO .00007") NICKEL													
D	24	24	(27.94)	1.100	(30.48)	1.200	18	OVERALL, 0.76 TO 1.0 microns (.00003" TO .00004")												D	
	26	26	(30.48)	1.200	(33.02)	1.300	16	GOLD ON CONTACT AREA (OVER NICKEL).													
	28	28					14	3 TO 5 microns (.00012" TO .00020") TIN													
	30	30	(35.56)	1.400	(38.10)	1.500	14	ON SOLDER TAILS (OVER NICKEL).													
	32	32					13	PLATING VERSION G													
C	34	34	(40.64)	1.600	(43.18)	1.700	12	1.27 TO 1.78 microns (.00005" TO .00007") NICKEL												C	
	36	36	(43.18)	1.700	(45.72)	1.800	12	OVERALL, 0.125 TO 0.20 microns (.000005" TO .000007")													
	38	38	(45.72)	1.800	(48.26)	1.900	11	GOLD ON CONTACT AREA (OVER NICKEL).													
	40	40	(48.26)	1.900	(50.80)	2.000	11	3 TO 5 microns (.00012" TO .00020") TIN													
	42	42					10	ON SOLDER TAILS (OVER NICKEL).													
B	44	44	(53.34)	2.100	(55.88)	2.200	10	90152 - X X Y Y												B	
	46	46					10	INDICATES NO. OF CIRCUITS PLATING CODE. 21 = VERSION A 22 = VERSION E 23 = VERSION F 25 = VERSION G													
	48	48					9														
	50	50	(60.96)	2.400	(63.50)	2.500	8														
	52	52					8														
A	54	54					8	STANDARD PRODUCTS												A	
	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														
CHG PKG QTY FOR 4CKT EC NO: S2010-0556 2010/01/12 DRWN:ATSEE 2010/01/14 CHKD:SKANG 2010/01/14 APPR:MLONG								QUALITY SYMBOLS ▽_A=0 ▽_C=0 ▽_P=0		GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± .008 1 PLACE ± --- ± --- ANGULAR ± 2 °		DIMENSION STYLE MM ONLY DRAWN BY DATE DB 1987/07/14 CHECKED BY DATE DB 1987/07/14 APPROVED BY DATE MLONG 2010/01/14 MATERIAL NO. SEE TABLE		SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION		C-GRID PCB CONN DR HORZ		moLEX MOLEX INCORPORATED DOCUMENT NO. SDA-90152 SHEET NO. 2 OF 5		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
tb_frame_A3_P_AM_T Rev. F 2009/06/18								9	8	7	6	5	4	3	2	1					

SEE DETAIL "A"



- NOTES
- 1) CONTACT-PLATED PHOSPHOR BRONZE.
 - 2) HOUSING-15% GLASS FILLED POLYESTER, COLOUR-BLACK.
 - 3) COMPATABLE WITH PCB HOLE PATTERN.
 - 4) RECOMMENDED PC BOARD THICKNESS
(1.4 ± .2) / .055 ± .008
 - 5) THIS MARK INDICATES CIRCUIT NO.1.
 - 6) FOR (0.635) / .025 SO. MALE PINS THE LENGTH MUST BE (5.65) / .222 MIN & (7.00) / .276 MAX. TO ENSURE GOOD CONNECTION WITH CONTACT.

SECTION C-C



TERMINAL RETENTION FEATURE

CHG PKG QTY FOR 4CKT EC NO: S2010-0556 DRWNAT/SEE 2010/01/12 CHKD:SKANG 2010/01/14 APPR:MLONG 2010/01/14 REV	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
		$\nabla_F=0$ $\nabla_E=0$ $\nabla_B=0$		mm	INCH	DRAWN BY	DATE	C-GRID PCB CONN DR HORZ				
			4 PLACES	± .006	± .0004	DB	1987/07/14					
			3 PLACES	± .008	± .0005	CHECKED BY	DATE					
			2 PLACES	± .010	± .0007	DB	1987/07/14					
	1 PLACE	± .015	± .0010	APPROVED BY	DATE	MOLEX INCORPORATED						
ANGULAR ± 2 °		MLONG	2010/01/14									
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				MATERIAL NO.	DOCUMENT NO.		SHEET NO. 3 OF 5					
				SEE TABLE		SDA-90152						
				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"). 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).												
	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													
E	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													
D	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													
C	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													
B	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													
A	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													
								90152-XXXX INDICATES NO. OF CIRCUITS. PLATING CODE. 31 = VERSION A. 32 = VERSION E. 33 = VERSION F. 35 = VERSION G.												
CHG PKG QTY FOR 4CKT EC NO: S2010-0556 DRWN:ATSE 2010/01/12 CHKD:SKANG 2010/01/14 APPR:MLONG 2010/01/14 B								QUALITY SYMBOLS F=0 F=0 F=0 GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± .008 1 PLACE ± --- ± --- ANGULAR ± 2 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS DIMENSION STYLE MM ONLY SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION C-GRID PCB CONN DR HORZ MOLEX MOLEX INCORPORATED MATERIAL NO. SDA-90152 SHEET NO. 4 OF 5 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												
tb_frame_A3_P_AM_T Rev. F 2009/06/18		9	8	7	6	5	4	3	2	1										

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

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.

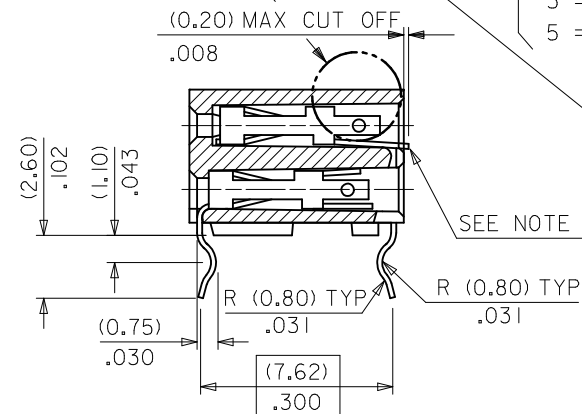
PLATING CODE.

- 1 = VERSION A.
- 2 = VERSION E.
- 3 = VERSION F.
- 5 = VERSION G.

OPTIONS

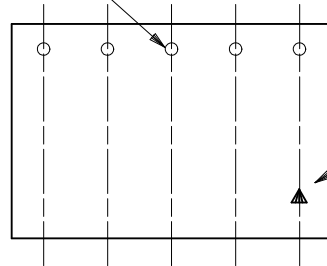
- 2 = REGULAR
- 3 = KINKED
- 5 = VOIDS
- 6 = KINKS & VOIDS
- 7 = SELECTIVE KINKS

SEE DETAIL "A"

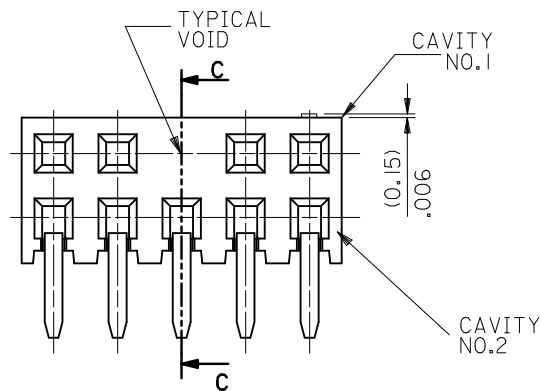


SECTION C-C

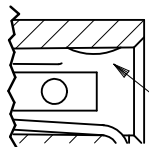
TERMINAL RETENTION FEATURE



SEE NOTE 2.



DETAIL "A"



TERMINAL RETENTION FEATURE

CHG PKG QTY FOR 4CKT EC NO: S2010-0556 DRWNATSEE 2010/01/12 CHKD:SKANG 2010/01/14 APPR:MLONG 2010/01/14	DESCRIPTION REV	QUALITY SYMBOLS F_A=0 F_C=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 PCB CONN DR HORZ	
			4 PLACES	± ---	± ---	CHECKED BY DB	DATE 1987/07/14		
			3 PLACES	± ---	± ---				
			2 PLACES	± 0.20	± .008	APPROVED BY MLONG	DATE 2010/01/14	MOLEX MOLEX INCORPORATED	
			1 PLACE	± ---	± ---				
ANGULAR ± 2 °		MATERIAL NO. SEE TABLE		DOCUMENT NO. SDA-90152		SHEET NO. 5 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					

SEE CHART

PART NO.

SDA-90152

DWG. NO.

F

E

D

C

B

A

PART NO.	NO.OF CKTS.	DIM. A		DIM. B ^{(+0.00 0.30 + .000 -.012}		NO. PER TUBE
90152-XX04	4	(2.54)	.100	(5.08)	.200	110
▲▲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

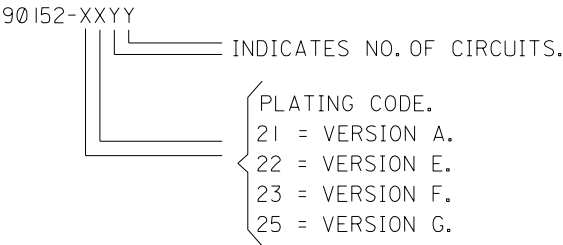
1.27 TO 1.78 microns (.00005" TO .00007") NICKEL
OVERALL, 0.38 TO 0.64 microns (.000015" TO .000025")
GOLD ON CONTACT AREA (OVER NICKEL).
3 TO 5 microns (.00012" TO .00020") TIN
ON SOLDER TAILS (OVER NICKEL).

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).



STANDARD PRODUCTS

FOR PREVIOUS
DRAWING ISSUES
SEE MRI.

LEAD FREE CONVERSION NEW BORDER ADDED EC NO. E2004-0610 DRAWN: PSHEAHAN 08/01/2004 CHK: APPR:		QUALITY SYMBOLS MAJOR CRITICAL	GENERAL TOLERANCES: (UNLESS SPECIFIED)	SCALE 5:1	DESIGN UNITS ☒ mm ☐ INCH	THIRD ANGLE PROJECTION	DIMENSIONS: ☐ mm ☐ INCH ☐ mm ONLY			SHT	REV		
AD							DRAWN BY & DATE DB 14/ 7/87			REVISE ON CAD ONLY			
REV		DESCRIPTION	4 PLACES ±0.	mm	INCH	TITLE: C-GRID III DUAL ROW HORIZONTAL P.C. BOARD CONNECTOR		MOLEX INCORPORATED					
			3 PLACES ±0.			APPROVED BY & DATE							
			2 PLACES ±0.			CAD FILENAME		MATERIAL NO.		DRAWING NO.			
			1 PLACE ±0.			S90152x2 DGN		SEE CHART		SDA-90152			
			ANGULAR: ± 0			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.		SHEET NO.		20F			
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS							SIZE B			