

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0901522218

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, 18 Circuits

Documents:

3D Model

Drawing (PDF)

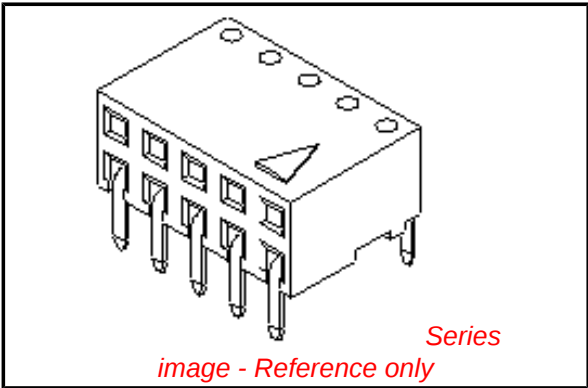
RoHS Certificate of Compliance (PDF)

General	
Product Family	PCB Receptacles
Series	90152
Application	Board-to-Board
Overview	cgrid_sl_products
Product Name	C-Grid III™
Physical	
Circuits (Loaded)	18
Circuits (maximum)	18
Color - Resin	Black
Durability (mating cycles max)	100
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)	15.2
Plating min: Mating (μm)	0.38
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



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

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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F

E

D

C

B

A

F

E

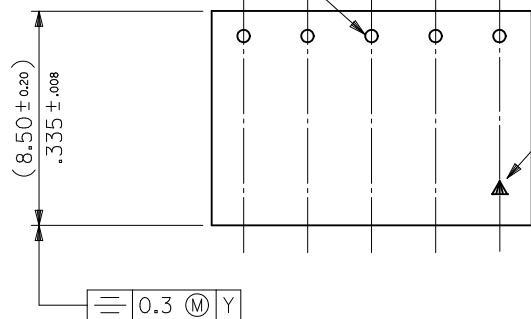
D

C

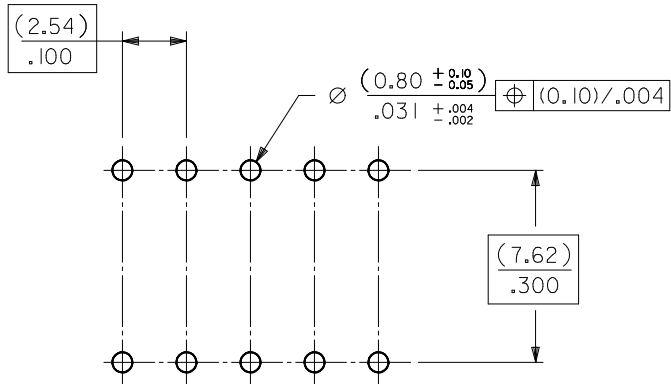
B

A

TERMINAL RETENTION FEATURE



SEE NOTE 4

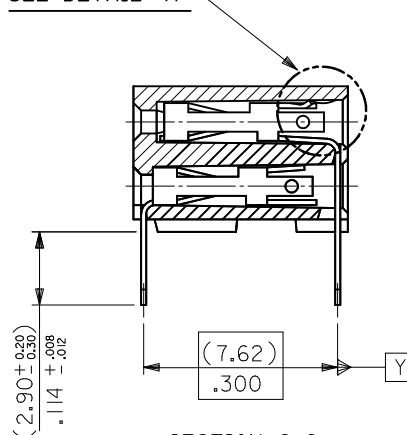


RECOMMENDED P.C. BOARD
HOLE PATTERN

NOTES

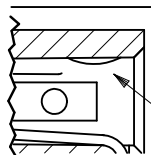
- 1) CONTACT-PLATED PHOSPHOR BRONZE.
- 2) HOUSING-15% GLASS FILLED POLYESTER. COLOUR-BLACK.
- 3) COMPATABLE WITH PCB HOLE PATTERN.
- 4) THIS MARK INDICATES CIRCUIT NO.1.
- 5) FOR (0.635)/.025 SQ. MALE PINS THE LENGTH MUST BE (5.65)/.222 MIN & (7.00)/.276 MAX. TO ENSURE GOOD CONNECTION WITH CONTACT.
- 6) PRODUCT SPECIFICATION: PS-99020-0001
- 7) RECOMMENDED PCB THICKNESS 1.6MM

SEE DETAIL "A"



SECTION C-C

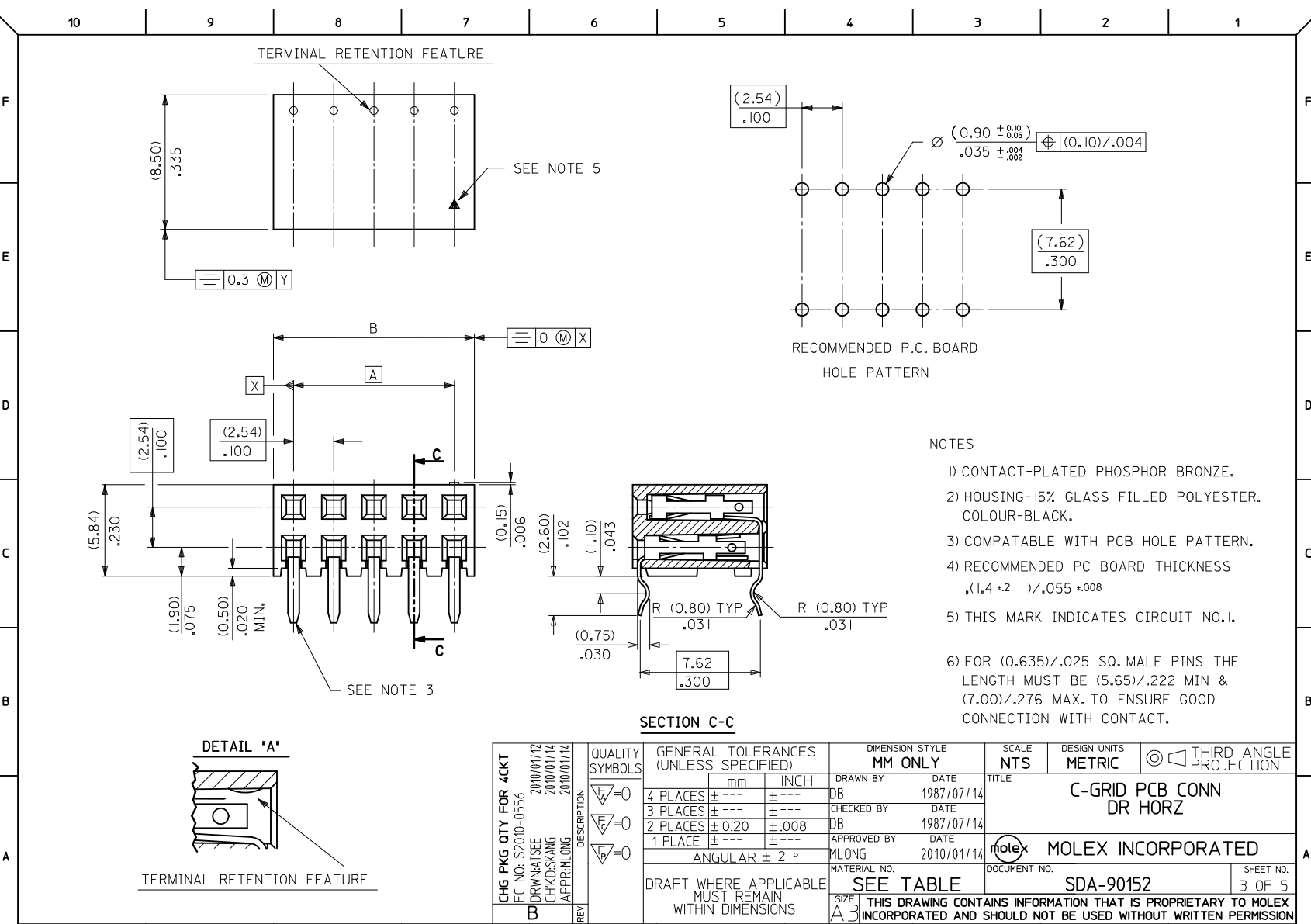
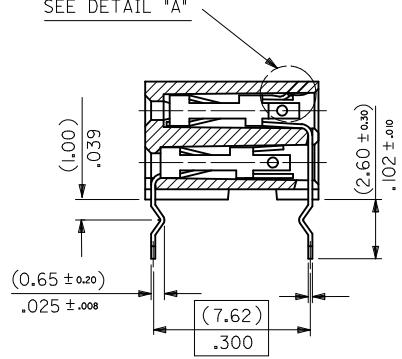
DETAIL "A"



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 FA=0 FC=0 FP=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		mm	INCH			DRAWN BY DATE		TITLE 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 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				
B		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										

[illegible]

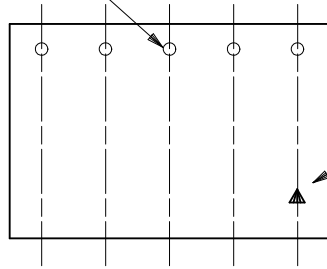


- NOTES
- 1) CONTACT-PLATED PHOSPHOR BRONZE.
 - 2) HOUSING-15% GLASS FILLED POLYESTER, COLOUR-BLACK.
 - 3) COMPATABLE WITH PCB HOLE PATTERN.
 - 4) RECOMMENDED PC BOARD THICKNESS
(1.4 ± .2) / .055 ± .008
 - 5) THIS MARK INDICATES CIRCUIT NO.1.
 - 6) FOR (0.635) / .025 SO. MALE PINS THE LENGTH MUST BE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

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		QUALITY SYMBOLS F_A=0 F_B=0 F_C=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table><tr><td></td><td>mm</td><td>INCH</td></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 °			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. SIZE A3	SCALE NTS	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION
	mm	INCH																							
4 PLACES	± ---	± ---																							
3 PLACES	± ---	± ---																							
2 PLACES	± 0.20	± .008																							
1 PLACE	± ---	± ---																							
ANGULAR ± 2 °																									
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			TITLE C-GRID PCB CONN DR HORZ																						
			 MOLEX INCORPORATED																						
			SEE TABLE		DOCUMENT NO. SDA-90152		SHEET NO. 3 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 +0.00 -0.12)		PCS/ TUBE													
F	90152-XX04	4	(2.54)	.100	(5.08)	.200	109	PLATING VERSION A												F
	06	6	(5.08)	.200	(7.62)	.300	73	PRE-PLATED HOT DIP TIN												
	08	8	(7.62)	.300	(10.16)	.400	55	1.0 TO 2.5 microns (.00004" TO .00010").												
	10	10	(10.16)	.400	(12.70)	.500	44	PLATING VERSION E												
	12	12	(12.70)	.500	(15.24)	.600	36	1.27 TO 1.78 microns (.00005" TO .00007") NICKEL												
E	14	14	(15.24)	.600	(17.78)	.700	31	OVERALL, 0.38 TO 0.64 microns (.000015" TO .000025")												E
	16	16	(17.78)	.700	(20.32)	.800	27	GOLD ON CONTACT AREA (OVER NICKEL).												
	18	18	(20.32)	.800	(22.86)	.900	24	3 TO 5 microns (.00012" TO .00020") TIN												
	20	20	(22.86)	.900	(25.40)	1.000	22	ON SOLDER TAILS (OVER NICKEL).												
	22	22					20	PLATING VERSION F.												
D	24	24	(27.94)	1.100	(30.48)	1.200	18	1.27 TO 1.78 microns (.00005" TO .00007") NICKEL												D
	26	26	(30.48)	1.200	(33.02)	1.300	16	OVERALL, 0.76 TO 1.0 microns (.00003" TO .00004")												
	28	28					14	GOLD ON CONTACT AREA (OVER NICKEL).												
	30	30	(35.56)	1.400	(38.10)	1.500	14	3 TO 5 microns (.00012" TO .00020") TIN												
	32	32					13	ON SOLDER TAILS (OVER NICKEL).												
C	34	34	(40.64)	1.600	(43.18)	1.700	12	PLATING VERSION G.												C
	36	36	(43.18)	1.700	(45.72)	1.800	12	1.27 TO 1.78 microns (.00005" TO .00007") NICKEL												
	38	38	(45.72)	1.800	(48.26)	1.900	11	OVERALL, 0.125 TO 0.20 microns (.000005" TO .0000079")												
	40	40	(48.26)	1.900	(50.80)	2.000	11	GOLD ON CONTACT AREA (OVER NICKEL).												
	42	42					10	3 TO 5 microns (.00012" TO .00020") TIN												
B	44	44	(53.34)	2.100	(55.88)	2.200	10	ON SOLDER TAILS (OVER NICKEL).												B
	46	46					10	90152-XXXX INDICATES NO. OF CIRCUITS. PLATING CODE. 31 = VERSION A. 32 = VERSION E. 33 = VERSION F. 35 = VERSION G.												
	48	48				9														
	50	50	(60.96)	2.400	(63.50)	2.500	8													
	A	52	52																	
54		54					8	MOLEX INCORPORATED												
56		56	(68.58)	2.700	(71.12)	2.800	7	SDA-90152												
58		58					7	SHEET NO. 4 OF 5												
60		60	(73.66)	2.900	(76.20)	3.000	7	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												
	62	62					6													
	90152-XX64	64	(78.74)	3.100	(81.28)	3.200	5													

TERMINAL RETENTION FEATURE



SEE NOTE 2.

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.

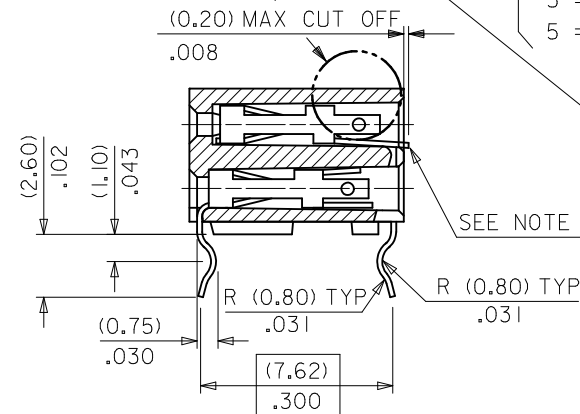
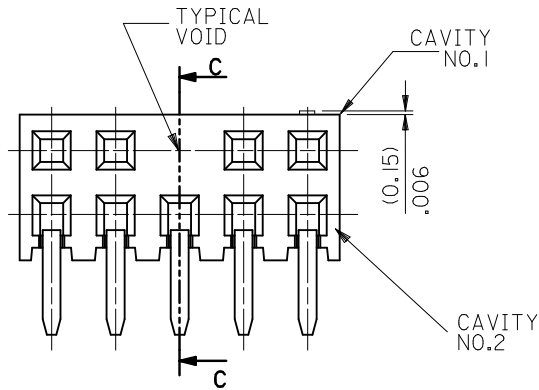
PLATING CODE.

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

OPTIONS

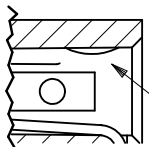
- 2 = REGULAR
- 3 = KINKED
- 5 = VOIDS
- 6 = KINKS & VOIDS
- 7 = SELECTIVE KINKS

SEE DETAIL "A"



SECTION C-C

DETAIL "A"



TERMINAL RETENTION FEATURE

CHG PKG QTY FOR 4CKT				2010/01/12		2010/01/14		DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)				DIMENSION STYLE				SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION			
EC NO: S2010-0556				2010/01/12		2010/01/14				mm				INCH				MM ONLY		NTS		METRIC			
DRWN:ATSEE				2010/01/12		2010/01/14				4 PLACES ± --- ± ---				DRAWN BY				DATE		TITLE					
CHKD:SKANG				2010/01/12		2010/01/14				3 PLACES ± --- ± ---				CHECKED BY				DATE							
APPR:MLONG				2010/01/12		2010/01/14				2 PLACES ± 0.20 ± .008				DB				1987/07/14							
										1 PLACE ± --- ± ---				APPROVED BY				DATE							
										ANGULAR ± 2 °				MLONG				2010/01/14							
														MATERIAL NO.				DOCUMENT NO.							
														SEE TABLE				SDA-90152							
																		SHEET NO.							
																5 OF 5									
B				REV																					

SEE CHART

PART NO.

SDA-90152

DWG. NO.

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).

90152-XXXX

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 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	REV		4 PLACES	±0.	±.	DRAWN BY & DATE DB 14/ 7/87		TITLE: C-GRID III DUAL ROW HORIZONTAL P.C. BOARD CONNECTOR			REVISE ON CAD ONLY		
			3 PLACES	±0.	±.	CHECKED BY & DATE							
			2 PLACES	±0.	±.	APPROVED BY & DATE		MOLEX INCORPORATED					
		ANGULAR: ± 0		CAD FILENAME		S90152x2 DGN	MATERIAL NO. SEE CHART	DRAWING NO. SDA-90152		SHEET NO. 20F			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.						SIZE B	