

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0901301314

Status:

Active

Overview:

cgrid_iii

Description:

2.54mm (.100") Pitch C-Grid III™ Header, Dual Row, Vertical, Shrouded, Fully Loaded, 14 Circuits, Black, 0.76µm (30µ") Gold (Au) Selective Plating

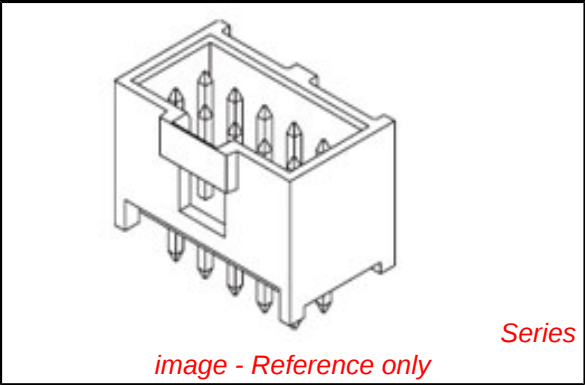
Documents:

3D Model

RoHS Certificate of Compliance (PDF)

Drawing (PDF)

General	
Product Family	PCB Headers
Series	90130
Application	Wire-to-Board
Overview	cgrid_iii
Product Name	C-Grid III™
Physical	
Breakaway	No
Circuits (Loaded)	14
Circuits (maximum)	14
Color - Resin	Black
Durability (mating cycles max)	200
First Mate / Last Break	No
Glow-Wire Compliant	No
Guide to Mating Part	No
Keying to Mating Part	None
Lock to Mating Part	Yes
Material - Metal	Brass
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	Polyester
Number of Rows	2
Orientation	Vertical
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	Tray
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)	30.48
Plating min: Mating (µm)	0.762
Plating min: Termination (µin)	120
Plating min: Termination (µm)	3
Polarized to Mating Part	Yes
Polarized to PCB	No
Shrouded	Closed Ends
Stackable	No
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-55°C to +125°C
Termination Interface: Style	Through Hole



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

90130Series

Mates With

90142 C-Grid III™ Crimp Housing

Electrical

Current - Maximum per Contact	3A
Voltage - Maximum	350V AC/DC

Solder Process Data

Duration at Max. Process Temperature (seconds)	5
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

Material Info

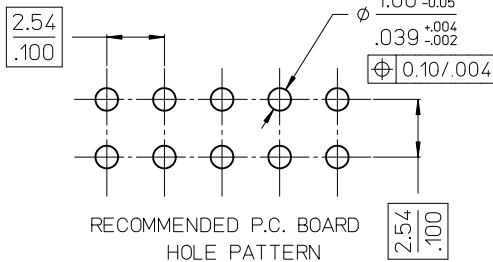
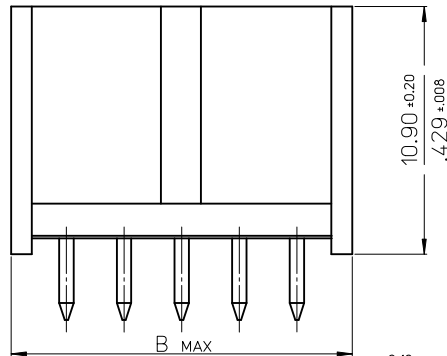
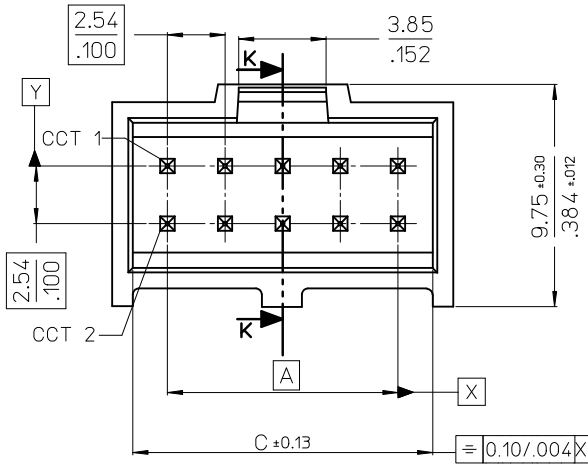
Reference - Drawing Numbers

Packaging Specification	PK-90130-001, PK-91814-005
Sales Drawing	SDA-90130

This document was generated on 05/25/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

VERSION FULLY LOADED



NOTES

1.MATERIAL:-

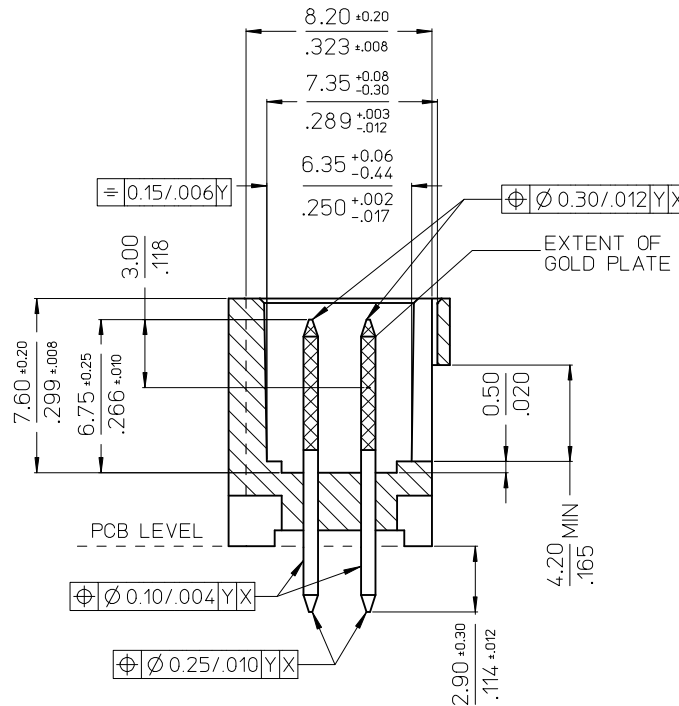
- PIN:- (0.635)/.025 SQ. BRASS WIRE.
- HOUSING:- 15% GLASS FILLED POLYESTER
- UL 94 V-0 COLOUR BLACK

2.FOR PLATING VERSIONS AND VOID VERSIONS SEE SHEET 2.

3.MEASUREMENT POINT FOR MINIMUM PLATING THICKNESS.

4.FOR PRODUCT SPEC SEE PS-99020-0001

5.RECOMMENDED PCB THICKNESS: 1.6mm



No. OF CKTS	DIM A	DIM B	DIM C
6	(5.08) / .200	(9.96) / .392	(8.12) / .320
8	(7.62) / .300	(12.50) / .492	(10.66) / .420
10	(10.16) / .400	(15.04) / .592	(13.20) / .520
12	(12.70) / .500	(17.58) / .692	(15.74) / .620
14	(15.24) / .600	(20.12) / .792	(18.28) / .720
16	(17.78) / .700	(22.66) / .892	(20.82) / .820
18	(20.32) / .800	(25.20) / .992	(23.36) / .920
20	(22.86) / .900	(27.74) / 1.092	(25.90) / 1.020
22	(25.40) / 1.000	(30.28) / 1.192	(28.44) / 1.120
24	(27.94) / 1.100	(32.82) / 1.292	(30.98) / 1.220
26	(30.48) / 1.200	(35.36) / 1.392	(33.52) / 1.320
28	(33.02) / 1.300	(37.90) / 1.492	(36.06) / 1.420
30	(35.56) / 1.400	(40.44) / 1.592	(38.60) / 1.520
32	(38.10) / 1.500	(42.98) / 1.692	(41.15) / 1.620
34	(40.64) / 1.600	(45.52) / 1.792	(43.68) / 1.720
36	(43.18) / 1.700	(48.06) / 1.892	(46.22) / 1.820
38	(45.72) / 1.800	(50.60) / 1.992	(48.76) / 1.920
40	(48.26) / 1.900	(53.14) / 2.092	(51.30) / 2.020
42	(50.80) / 2.000	(55.68) / 2.192	(53.84) / 2.120
44	(53.34) / 2.100	(58.22) / 2.292	(56.38) / 2.220
46	(55.88) / 2.200	(60.76) / 2.392	(58.92) / 2.320
48	(58.42) / 2.300	(63.30) / 2.492	(61.46) / 2.420
50	(60.96) / 2.400	(65.84) / 2.592	(64.00) / 2.520
52	(63.50) / 2.500	(68.38) / 2.692	(66.54) / 2.620
54	(66.04) / 2.600	(70.92) / 2.792	(69.08) / 2.720
56	(68.58) / 2.700	(73.46) / 2.892	(71.62) / 2.820
58	(71.12) / 2.800	(76.00) / 2.992	(74.16) / 2.920
60	(73.66) / 2.900	(78.54) / 3.092	(76.70) / 3.020
62	(76.20) / 3.000	(81.08) / 3.192	(79.24) / 3.120
64	(78.74) / 3.100	(83.62) / 3.292	(81.78) / 3.220
66	(81.28) / 3.200	(86.16) / 3.392	(84.32) / 3.320
68	(83.82) / 3.300	(88.70) / 3.492	(86.86) / 3.420

RE-POSITION DIM B		QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION	
EC NO: S2010-0811		DESCRIPTION		mm		MM/IN		NTS		METRIC			
2010/03/25		DRAWN:SKANG		3 PLACES		DATE		DATE		DATE		DATE	
2010/03/31		CHKD:ATSEE		2 PLACES		DATE		DATE		DATE		DATE	
2010/03/31		APPR:MLONG		1 PLACE		DATE		DATE		DATE		DATE	
				ANGULAR		±1/2°							
				DRAFT WHERE APPLICABLE		MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		DOCUMENT NO.		SHEET NO.	
B1		REV		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				
	NO OF CKTS	HSG CKT SIZE	PART NUMBER			NOTES: 1. FOR ASSY SEE SHEET 1. 2. FOR PLATING DETAILS SEE SDES-99000-0003								
			PLATING TYPE A	PLATING TYPE E	PLATING TYPE F									
F	6	6	90130-X106	90130-X206	90130-X306	90130 - * * * * INDICATES CIRCUIT HOUSING SIZE (EXCEPTION ON VOIDED OPTION - SEE TABLE FOR HOUSING CIRCUIT SIZE) PLATING 1 - TYPE A 2 - TYPE E 3 - TYPE F 4 - TYPE G STYLE# - STRAIGHT ASSY - 1. VERSION FULLY LOADED BLACK 8. VERSION WITH VOIDS								
	8	8	X108	X208	X308									
	10	10	X110	X210	X310									
	12	12	X112	X212	X312									
	14	14	X114	X214	X314									
	16	16	X116	X216	X316									
	18	18	X118	X218	X318									
	20	20	X120	X220	X320									
E	22	22	X122	X222	X322									
	24	24	X124	X224	X324									
	26	26	X126	X226	X326									
	28	28	X128	X228	X328									
	30	30	X130	X230	X330									
	32	32	X132	X232	X332									
	34	34	X134	X234	X334									
	36	36	X136	X236	X336									
D	38	38	X138	X238	X338									
	40	40	X140	X240	X340									
	42	42	X142	X242	X342									
	44	44	X144	X244	X344									
	46	46	X146	X246	X346									
	48	48	X148	X248	X348									
	50	50	X150	X250	X350									
	52	52	X152	X252	X352									
C	54	54	X154	X254	X354									
	56	56	X156	X256	X356									
	58	58	X158	X258	X358									
	60	60	X160	X260	X360									
	62	62	X162	X262	X362									
	64	64	X164	X264	X364									
	66	66	X166	X266	X366									
	68	68	90130-X168	90130-X268	90130-X368									
B	VERSION FULLY LOADED										B			
A	RE-POSITION DIM B EC NO: S2010-0811 DRWN:SKANG CHKD:ATSEE APPR:MLONG B1			DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	C-GRID III DUAL ROW STRAIGHT SHROUDED HEADER MOLEX MOLEX INCORPORATED	SHEET NO. 2 OF 4
						mm INCH		MM/IN		NTS	METRIC			
						4 PLACES ± --- ± ---		DRAWN BY DATE		TITLE				
						3 PLACES ± --- ± .004		KS 1988/08/23						
						2 PLACES ± 0.10 ± ---		CHECKED BY DATE						
						1 PLACE ± --- ± ---		ATSEE 2010/02/11						
						ANGULAR ± 1/2°		APPROVED BY DATE						
						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MLONG 2010/02/19						
						SIZE		MATERIAL NO.		DOCUMENT NO.				
						A3		SEE TABLE		SDA-90130				
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION														
tb_frame_A3_P_AM_T	9	8	7	6	5	4	3	2	1					

DIMENSION STYLE MM/IN

DRAWN BY KS

DATE 1988/08/23

CHECKED BY ATSEE

DATE 2010/02/11

APPROVED BY MLONG

DATE 2010/02/19

MATERIAL NO.

SEE TABLE

SCALE NTS

DESIGN UNITS METRIC

THIRD ANGLE PROJECTION

C-GRID III

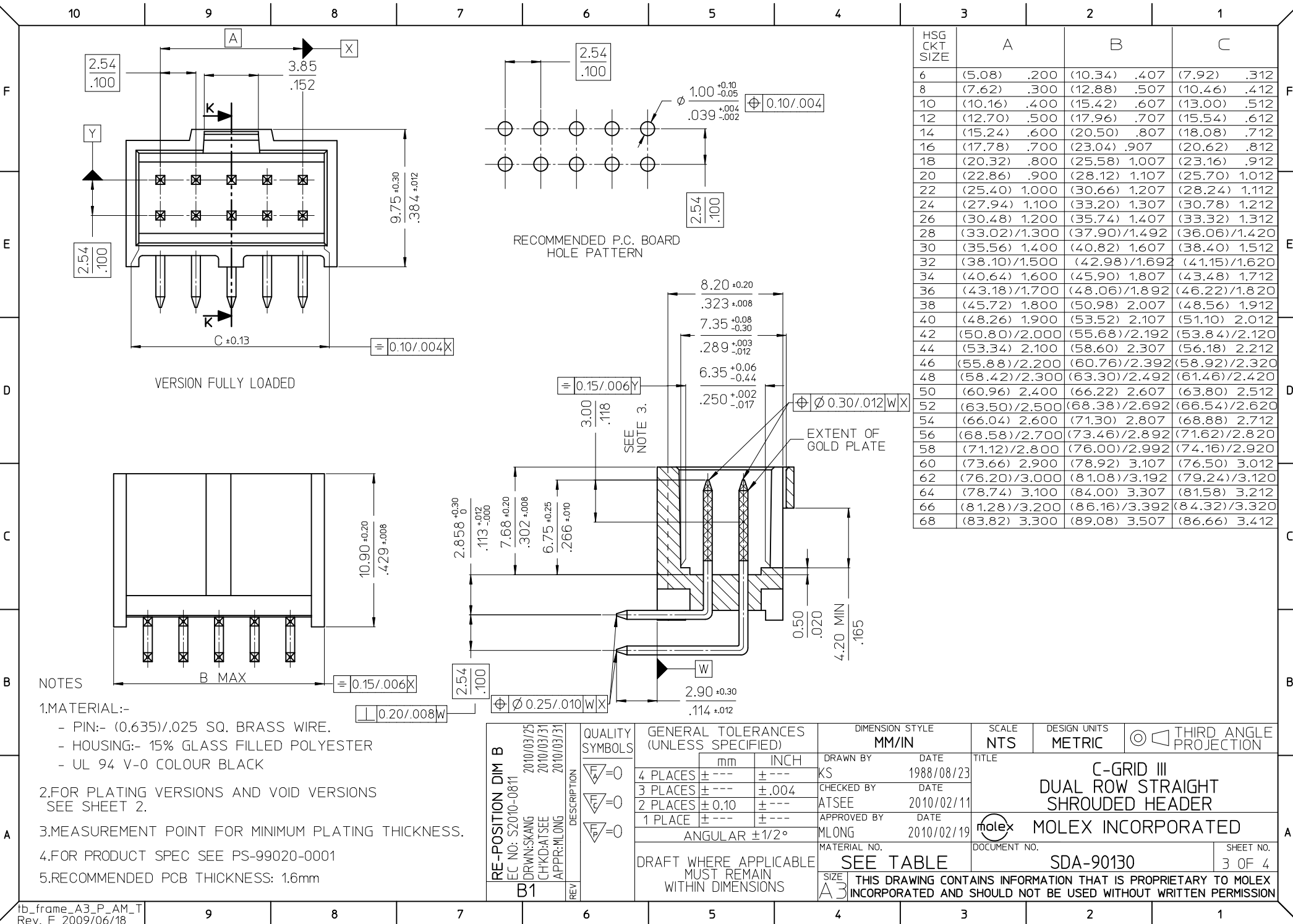
DUAL ROW STRAIGHT

SHROUDED HEADER

MOLEX INCORPORATED

SDA-90130

2 OF 4



HSG CKT SIZE	A		B		C	
6	(5.08)	.200	(10.34)	.407	(7.92)	.312
8	(7.62)	.300	(12.88)	.507	(10.46)	.412
10	(10.16)	.400	(15.42)	.607	(13.00)	.512
12	(12.70)	.500	(17.96)	.707	(15.54)	.612
14	(15.24)	.600	(20.50)	.807	(18.08)	.712
16	(17.78)	.700	(23.04)	.907	(20.62)	.812
18	(20.32)	.800	(25.58)	1.007	(23.16)	.912
20	(22.86)	.900	(28.12)	1.107	(25.70)	1.012
22	(25.40)	1.000	(30.66)	1.207	(28.24)	1.112
24	(27.94)	1.100	(33.20)	1.307	(30.78)	1.212
26	(30.48)	1.200	(35.74)	1.407	(33.32)	1.312
28	(33.02)/1.300		(37.90)/1.492		(36.06)/1.420	
30	(35.56)	1.400	(40.82)	1.607	(38.40)	1.512
32	(38.10)/1.500		(42.98)/1.692		(41.15)/1.620	
34	(40.64)	1.600	(45.90)	1.807	(43.48)	1.712
36	(43.18)/1.700		(48.06)/1.892		(46.22)/1.820	
38	(45.72)	1.800	(50.98)	2.007	(48.56)	1.912
40	(48.26)	1.900	(53.52)	2.107	(51.10)	2.012
42	(50.80)/2.000		(55.68)/2.192		(53.84)/2.120	
44	(53.34)	2.100	(58.60)	2.307	(56.18)	2.212
46	(55.88)/2.200		(60.76)/2.392		(58.92)/2.320	
48	(58.42)/2.300		(63.30)/2.492		(61.46)/2.420	
50	(60.96)	2.400	(66.22)	2.607	(63.80)	2.512
52	(63.50)/2.500		(68.38)/2.692		(66.54)/2.620	
54	(66.04)	2.600	(71.30)	2.807	(68.88)	2.712
56	(68.58)/2.700		(73.46)/2.892		(71.62)/2.820	
58	(71.12)/2.800		(76.00)/2.992		(74.16)/2.920	
60	(73.66)	2.900	(78.92)	3.107	(76.50)	3.012
62	(76.20)/3.000		(81.08)/3.192		(79.24)/3.120	
64	(78.74)	3.100	(84.00)	3.307	(81.58)	3.212
66	(81.28)/3.200		(86.16)/3.392		(84.32)/3.320	
68	(83.82)	3.300	(89.08)	3.507	(86.66)	3.412

- NOTES
- 1.MATERIAL:-
- PIN:- (0.635)/.025 SQ. BRASS WIRE.
 - HOUSING:- 15% GLASS FILLED POLYESTER
 - UL 94 V-0 COLOUR BLACK
- 2.FOR PLATING VERSIONS AND VOID VERSIONS SEE SHEET 2.
- 3.MEASUREMENT POINT FOR MINIMUM PLATING THICKNESS.
- 4.FOR PRODUCT SPEC SEE PS-99020-0001
- 5.RECOMMENDED PCB THICKNESS: 1.6mm

RE-POSITION DIM B EC NO: S2010-0811 DRWN:KANG CHKD:ATSEE APPR:MLONG	QUALITY SYMBOLS $F_A=0$ $F_B=0$ $F_P=0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES 3 PLACES 2 PLACES 1 PLACE	mm INCH	DRAWN BY DATE CHECKED BY DATE APPROVED BY DATE	DATE 1988/08/23 2010/02/11 2010/02/19	TITLE C-GRID III DUAL ROW STRAIGHT SHROUDED HEADER	MOLEX INCORPORATED	DOCUMENT NO. SDA-90130	SHEET NO. 3 OF 4
		ANGULAR $\pm 1/2^\circ$		MATERIAL NO. SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

NO OF CKTS	HSG CKT SIZE	PART NUMBER		
		PLATING TYPE A	PLATING TYPE E	PLATING TYPE F
6	6	90130-X106	90130-X206	90130-X306
8	8	X108	X208	X308
10	10	X110	X210	X310
12	12	X112	X212	X312
14	14	X114	X214	X314
16	16	X116	X216	X316
18	18	X118	X218	X318
20	20	X120	X220	X320
22	22	X122	X222	X322
24	24	X124	X224	X324
26	26	X126	X226	X326
28	28	X128	X228	X328
30	30	X130	X230	X330
32	32	X132	X232	X332
34	34	X134	X234	X334
36	36	X136	X236	X336
38	38	X138	X238	X338
40	40	X140	X240	X340
42	42	X142	X242	X342
44	44	X144	X244	X344
46	46	X146	X246	X346
48	48	X148	X248	X348
50	50	X150	X250	X350
52	52	X152	X252	X352
54	54	X154	X254	X354
56	56	X156	X256	X356
58	58	X158	X258	X358
60	60	X160	X260	X360
62	62	X162	X262	X362
64	64	X164	X264	X364
66	66	X166	X266	X366
68	68	90130-X168	90130-X268	90130-X368

NO OF CKTS	HSG CKT SIZE	VOIDED PART NUMBER	VOID POSITION	PLATING TYPE
11	12	90130-8212	12	E
9	10	90130-8309	2	F
9	10	90130-8311	1	F
11	12	90130-8213	2	E
11	12	90130-8313	2	F

VOIDED OPTION

NOTES:
1. FOR ASSY SEE SHEET 1.
2. FOR PLATING DETAILS SEE SDES-99000-0003

90130 - * * * *
INDICATES CIRCUIT HOUSING SIZE
(EXCEPTION ON VOIDED OPTION -
SEE TABLE FOR HOUSING CIRCUIT SIZE)
PLATING
1 - TYPE A
2 - TYPE E
3 - TYPE F
4 - TYPE G
STYLE* - STRAIGHT ASSY
- 1. VERSION FULLY LOADED BLACK
8. VERSION WITH VOIDS

VERSION FULLY LOADED

Changed 8212 to void 2
EC NO: E2010-0123
DRWN:BMAGUIRE 2009/10/15
CHKD: 2009/10/15
APPR:BMAGUIRE 2009/10/15

DESCRIPTION
REV

QUALITY SYMBOLS
=0
=0

GENERAL TOLERANCES (UNLESS SPECIFIED)
mm INCH
4 PLACES ± --- ± ---
3 PLACES ± --- ± ---
2 PLACES ± --- ± ---
1 PLACE ± --- ± ---
ANGULAR ± ---°
DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

DIMENSION STYLE
MM ONLY

DRAWN BY DATE
KS 1987/09/10
CHECKED BY DATE
APPROVED BY DATE

MATERIAL NO.
SEE CHART
SIZE A2

SCALE
1:1

DESIGN UNITS
METRIC

THIRD ANGLE PROJECTION

C-GRID III DUAL ROW
STRAIGHT SHROUDED
HEADER
MOLEX INCORPORATED
SDA-90130
SHEET NO.
2 OF 4

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX
INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

lb_frame_A2_P_ME_T
Rev. E 2006/04/15

13121110987654321