

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0901301108

Status:

Active

Overview:

cgrid_iii

Description:

2.54mm (.100") Pitch C-Grid III™ Header, Dual Row, Vertical, Shrouded, Fully Loaded, 8 Circuits, Black, 3µm (118µ") Tin (Sn) over Nickel (Ni)

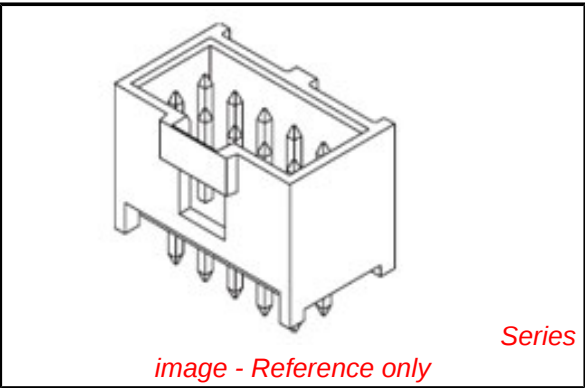
Documents:

3D Model

Drawing (PDF)

RoHS Certificate of Compliance (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)	8
Circuits (maximum)	8
Color - Resin	Black
Durability (mating cycles max)	30
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	Tin
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)	118
Plating min: Mating (µm)	3
Plating min: Termination (µin)	118
Plating min: Termination (µm)	3
Polarized to Mating Part	Yes
Polarized to PCB	No
Shrouded	Closed Ends
Stackable	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 Halogen-Free

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

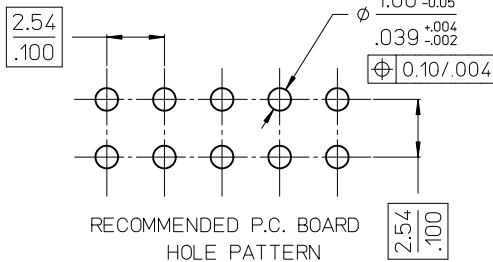
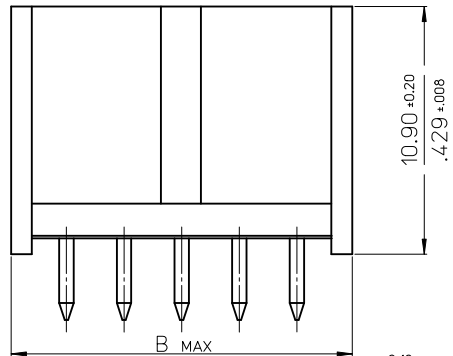
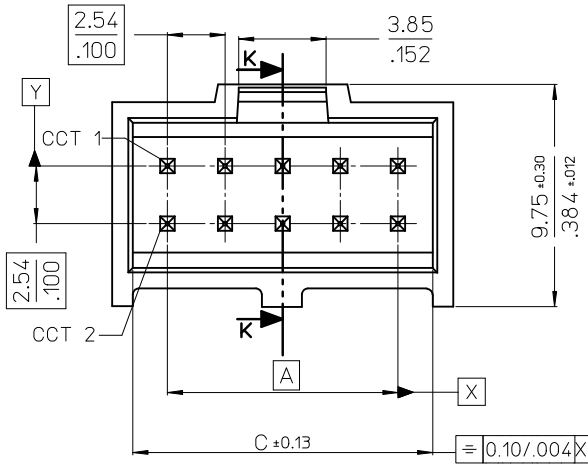
Reference - Drawing Numbers

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:-

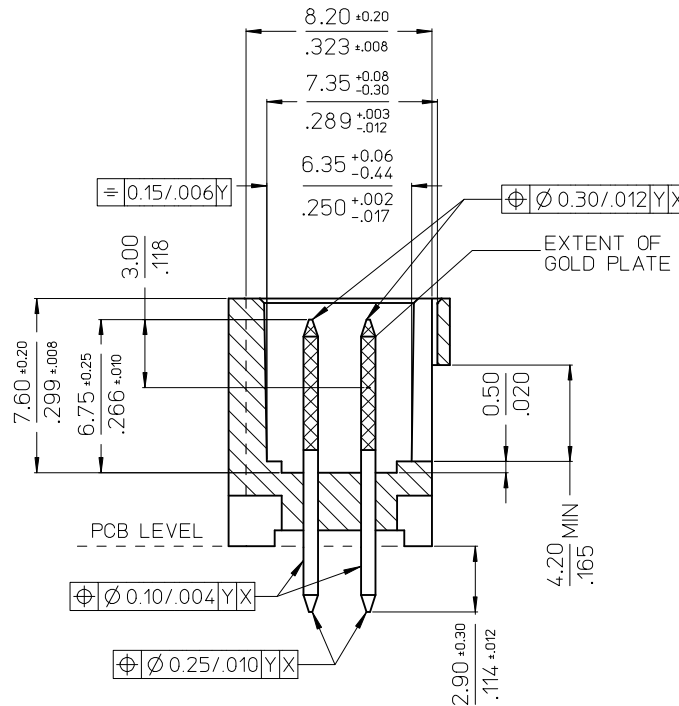
- PIN:- (0.635)/.025 SQ. BRASS WIRE.
- HOUSING:- 15% GLASS FILLED POLYESTER
- UL 94 V-0 COLOUR BLACK

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 EC NO: S2010-0811 DRWNSKANG CHKD:ATSEE APPR:MLONG B1	2010/03/25	2010/03/31	2010/03/31	DESCRIPTION REV	QUALITY SYMBOLS F _A =0 F _B =0 F _C =0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
	mm		INCH			DRAWN BY		DATE		TITLE C-GRID III DUAL ROW STRAIGHT SHROUDED HEADER				
	4 PLACES		± ---			KS		1988/08/23						
	3 PLACES		± ---			CHECKED BY		DATE		MOLEX INCORPORATED				
	2 PLACES		± 0.10			ATSEE		2010/02/11						
	1 PLACE		± ---			APPROVED BY		DATE		MOLEX INCORPORATED				
	ANGULAR ±1/2°		MLONG			2010/02/19								
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					MATERIAL NO.		DOCUMENT NO.		SHEET NO.				
						SEE TABLE		SDA-90130		1 OF 4				
						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
F	NO OF CKTS	HSG CKT SIZE	PART NUMBER			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				
	6	6	90130-X106	90130-X206	90130-X306					
	8	8	X108	X208	X308					
	10	10	X110	X210	X310					
	12	12	X112	X212	X312					
E	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					
D	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					
C	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					
B	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					
A	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					
	VERSION FULLY LOADED									
	RE-POSITION DIM B EC NO: S2010-0811 DRWN:SKANG CHKD:ATSEE APPR:MLONG 2010/03/25 2010/03/31 2010/03/31 QUALITY SYMBOLS F=0 F=0 F=0 GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .004 2 PLACES ± 0.10 ± --- 1 PLACE ± --- ± --- ANGULAR ± 1/2° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS DIMENSION STYLE MM/IN DRAWN BY DATE CHECKED BY DATE APPROVED BY DATE MATERIAL NO. SIZE THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION C-GRID III DUAL ROW STRAIGHT SHROUDED HEADER MOLEX INCORPORATED SDA-90130 SHEET NO. 2 OF 4									
tb_frame_A3_P_AM_T	9	8	7	6	5	4	3	2	1	

F

E

D

C

B

A

10

9

8

7

6

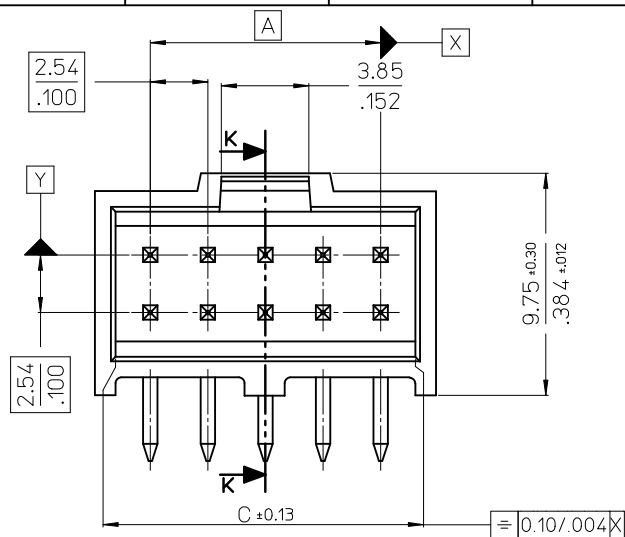
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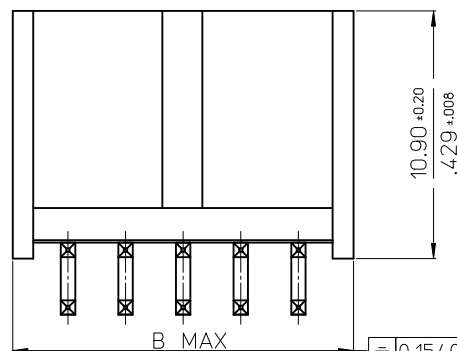
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2

1



VERSION FULLY LOADED



NOTES

1.MATERIAL:-

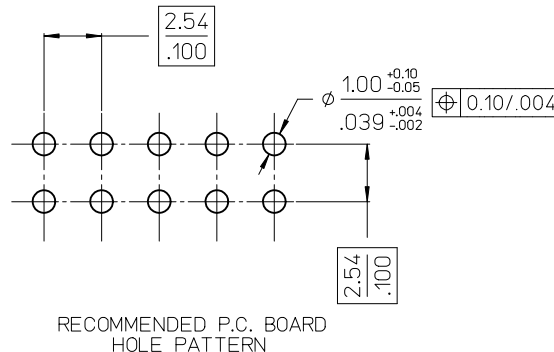
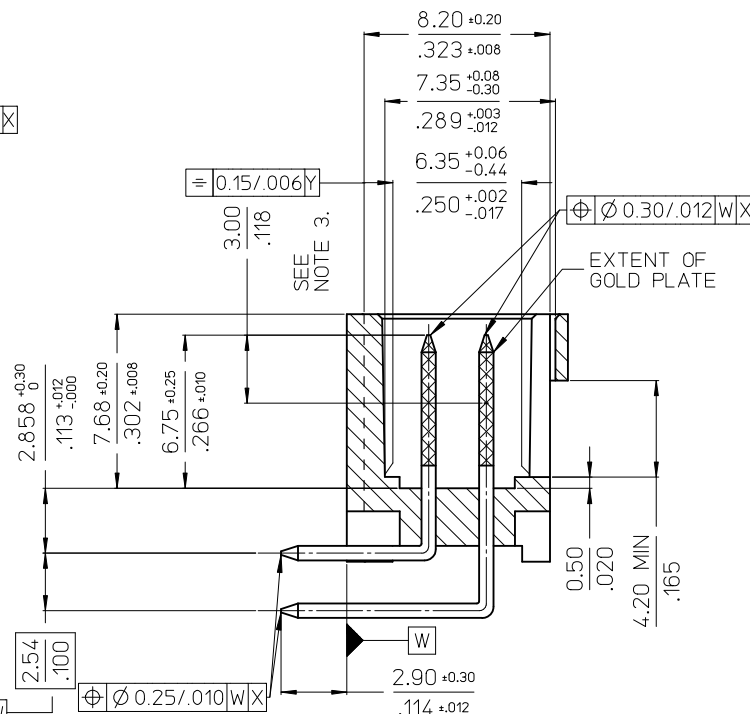
- PIN:- (0.635)/.025 SQ. BRASS WIRE.
- HOUSING:- 15% GLASS FILLED POLYESTER
- UL 94 V-0 COLOUR BLACK

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

RECOMMENDED P.C. BOARD
HOLE PATTERN

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

RE-POSITION DIM B		QUALITY SYMBOLS	DESCRIPTION
REV	DESCRIPTION		
B1	EC NO: S2010-0811 DRWN:KANG CHKD:ATSEE APPR:MLONG	$F_A=0$ $F_G=0$ $F_P=0$	

GENERAL TOLERANCES (UNLESS SPECIFIED)	
mm	INCH
4 PLACES ± ---	± ---
3 PLACES ± ---	± .004
2 PLACES ± 0.10	± ---
1 PLACE ± ---	± ---
ANGULAR ± 1/2°	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE MM/IN	
DRAWN BY	DATE
KS	1988/08/23
CHECKED BY	DATE
ATSEE	2010/02/11
APPROVED BY	DATE
MLONG	2010/02/19
MATERIAL NO.	SEE TABLE
SIZE	A3

SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
C-GRID III DUAL ROW STRAIGHT SHROUDED HEADER		
MOLEX INCORPORATED		
DOCUMENT NO.	SDA-90130	SHEET NO. 3 OF 4

9

8

7

6

5

4

3

2

1

	10		9		8		7		6		5		4		3		2		1		
	NO OF CKTS	HSG CKT SIZE	PART NUMBER																		
			PLATING TYPE A	PLATING TYPE E	PLATING TYPE F																
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																
	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																
	VERSION FULLY LOADED																				
	RE-POSITION DIM B EC NO: S2010-0811 DRWN:SKANG CHKD:ATSEE APPR:MLONG																				
	2010/03/25 2010/03/31 2010/03/31																				
	DESCRIPTION REV B1																				
QUALITY SYMBOLS F=0 F=0 F=0																					
GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .004 2 PLACES ± 0.10 ± --- 1 PLACE ± --- ± --- ANGULAR ± 1/2° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS																					
DIMENSION STYLE MM/IN DRAWN BY DATE KS 1988/08/23 CHECKED BY DATE ATSEE 2010/02/11 APPROVED BY DATE MLONG 2010/02/19 MATERIAL NO. SEE TABLE SIZE A3																					
SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION C-GRID III DUAL ROW STRAIGHT SHROUDED HEADER MOLEX INCORPORATED SDA-90130 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																					
SHEET NO. 4 OF 4																					
fb_frame_A3_P_AM_T Rev. F 2009/06/18	9		8		7		6		5		4		3		2		1				

NOTES:

1. FOR ASSY SEE SHEET 3.
2. FOR PLATING DETAILS SEE SDES-99000-0003

90130 - * * * *

INDICATES CIRCUIT HOUSING SIZE

PLATING

1 - TYPE A
2 - TYPE E
3 - TYPE F

STYLE:- RIGHT ANGLE ASSY
- 3 VERSION FULLY LOADED BLACK

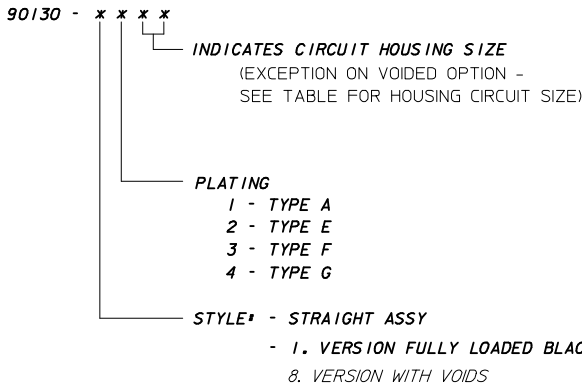
NO OF CKTS	HSG CKT SIZE	PART NUMBER		
		PLATING TYPE A	PLATING TYPE E	PLATING TYPE F
6	6	90130-X106	90130-X206	90130-X306
8	8	X108	X208	X308
10	10	X110	X210	X310
12	12	X112	X212	X312
14	14	X114	X214	X314
16	16	X116	X216	X316
18	18	X118	X218	X318
20	20	X120	X220	X320
22	22	X122	X222	X322
24	24	X124	X224	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



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	QUALITY SYMBOLS =0 =0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY KS	DATE 1987/09/10	TITLE C-GRID III DUAL ROW STRAIGHT SHROUDED HEADER			
		4 PLACES	±----	±----	CHECKED BY	DATE				
		3 PLACES	±----	±----	APPROVED BY		DATE	MOLEX INCORPORATED		
		2 PLACES	±----	±----	MATERIAL NO.		DOCUMENT NO.			
1 PLACE	±----	±----	SIZE A2		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										