

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0901301316](#)
Status: **Active**
Overview: [cgrid_iii](#)
Description: 2.54mm (.100") Pitch C-Grid III™ Header, Dual Row, Vertical, Shrouded, Fully Loaded, 16 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)	16
Circuits (maximum)	16
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

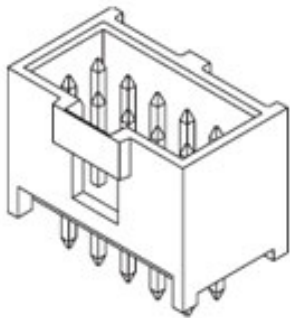


image - Reference only

Series

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

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

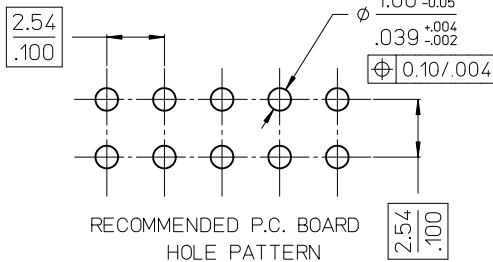
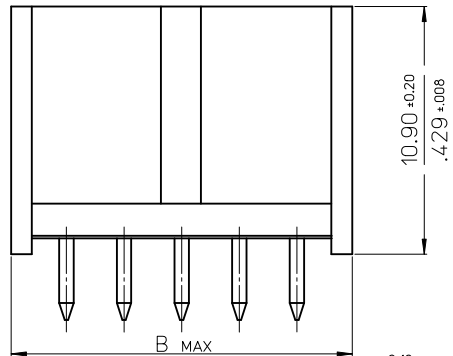
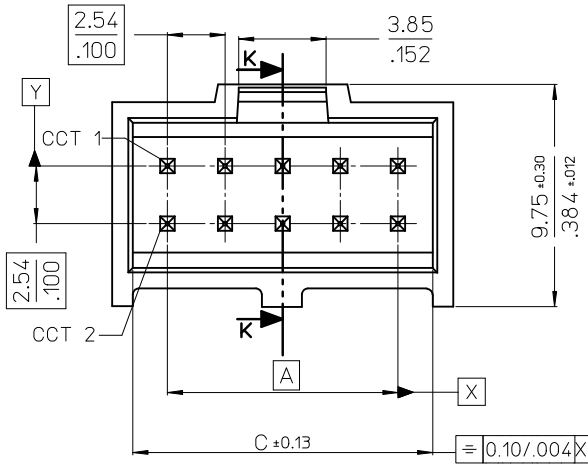
Reference - Drawing Numbers

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

This document was generated on 05/25/2010

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VERSION FULLY LOADED



NOTES

1.MATERIAL:-

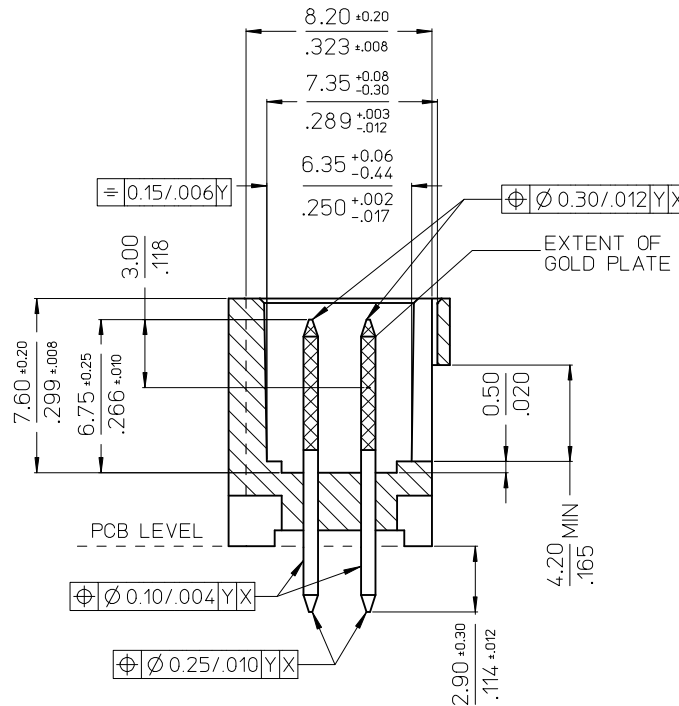
- PIN:- (0.635)/.025 SQ. BRASS WIRE.
- HOUSING:- 15% GLASS FILLED POLYESTER
- UL 94 V-0 COLOUR BLACK

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

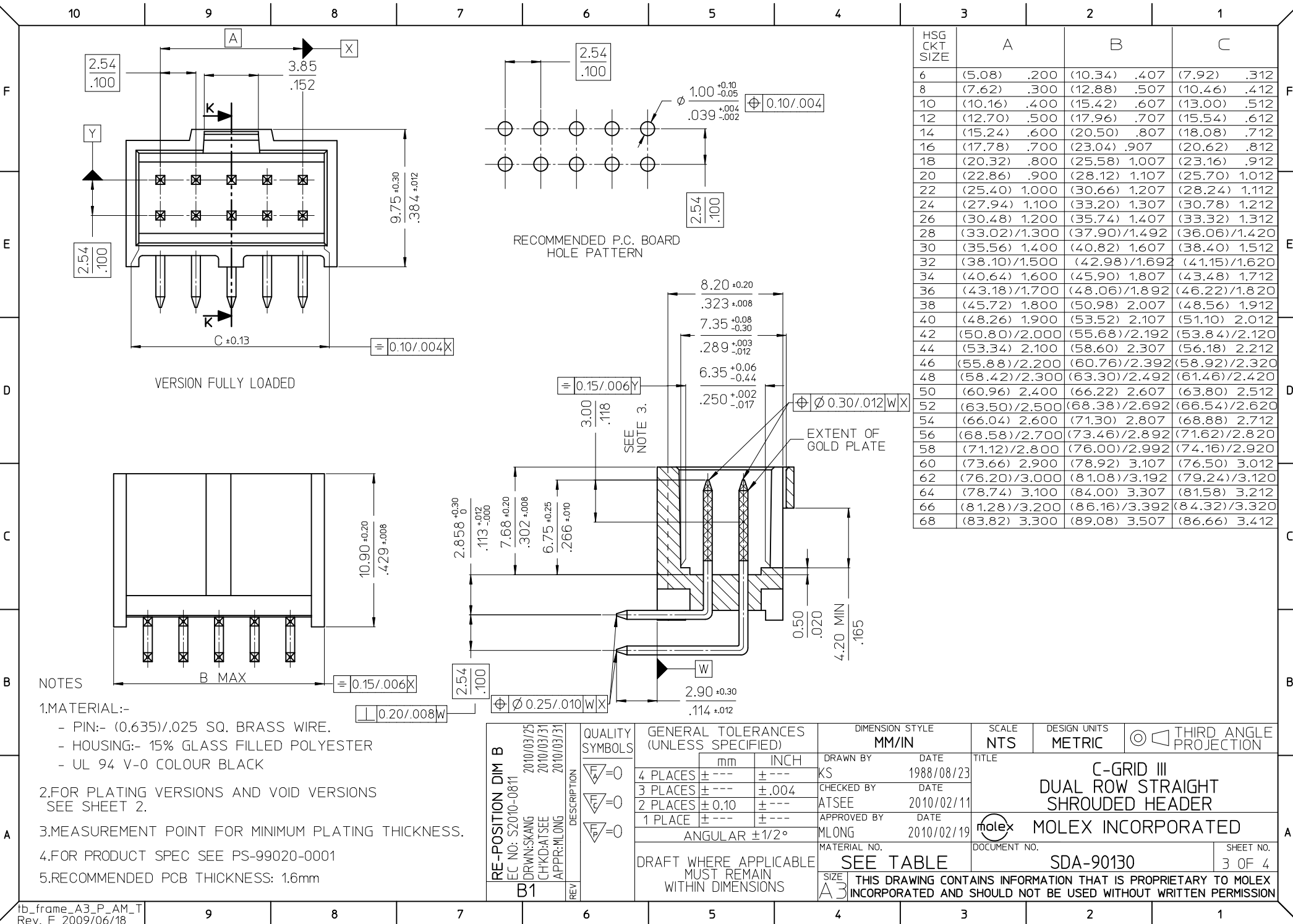
5.RECOMMENDED PCB THICKNESS: 1.6mm



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 DRWNS:KANG CHKD:ATSEE APPR:MLONG B1	2010/03/25	2010/03/31	2010/03/31	QUALITY SYMBOLS F_A=0 F_E=0 F_P=0	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm			INCH	DRAWN BY KS	DATE 1988/08/23	TITLE C-GRID III DUAL ROW STRAIGHT SHROUDED HEADER				
	4 PLACES	± ---	± ---			CHECKED BY ATSEE	DATE 2010/02/11						
	3 PLACES	± ---	± .004										
	2 PLACES	± 0.10	± ---										
			1 PLACE			± ---	± ---	APPROVED BY MLONG	DATE 2010/02/19	MOLEX	MOLEX INCORPORATED		
			ANGULAR ±1/2°					MATERIAL NO.	DOCUMENT NO.	SHEET NO. 1 OF 4			
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE TABLE		SDA-90130					
						SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

[illegible]



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 B1	2010/03/25 2010/03/31 2010/03/31 2010/03/31	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE NTS	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION			
					mm	INCH	DRAWN BY KS	DATE 1988/08/23	C-GRID III DUAL ROW STRAIGHT SHROUDED HEADER MOLEX INCORPORATED				
				4 PLACES	± ---	± ---	CHECKED BY ATSEE	DATE 2010/02/11					
				3 PLACES	± ---	± .004	APPROVED BY MLONG	DATE 2010/02/19					
				2 PLACES	± 0.10	± ---	MATERIAL NO. SEE TABLE				DOCUMENT NO. SDA-90130	SHEET NO. 3 OF 4	
				1 PLACE	± ---	± ---	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		ANGULAR ±1/2°											

	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						F		
	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						E	
		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						D	
		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						C	
		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												
A												A	

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

RE-POSITION DIM B EC NO: S2010-0811 DRWN:SKANG CHKD:ATSEE APPR:MLONG	DESCRIPTION REV	QUALITY SYMBOLS F=0 F=0 F=0	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
				MM/IN		NTS	METRIC	
				DRAWN BY DATE		TITLE		
				CHECKED BY DATE		MOLEX INCORPORATED		
APPROVED BY DATE		DOCUMENT NO.						
MATERIAL NO.		SEE TABLE		SDA-90130		SHEET NO.		
SIZE		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
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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

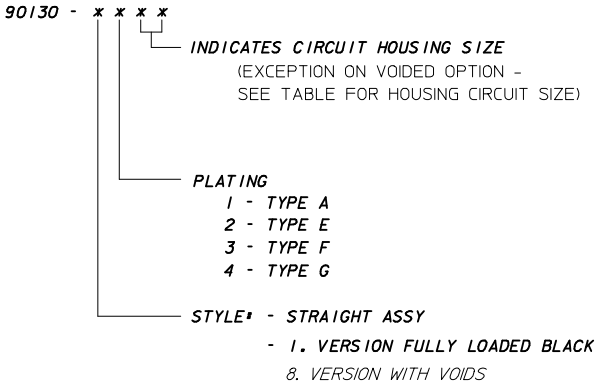
STYLE:- RIGHT ANGLE ASSY
- 3 VERSION FULLY LOADED BLACK

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

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

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

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

1b_frame_A2_P_ME_T
Rev. E 2006/04/15

13121110987654321