

NOTES :

1. MATERIAL:-

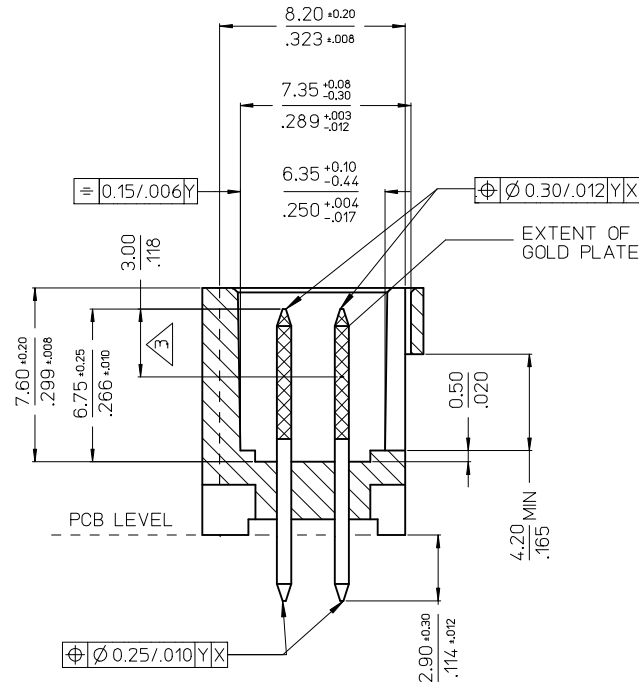
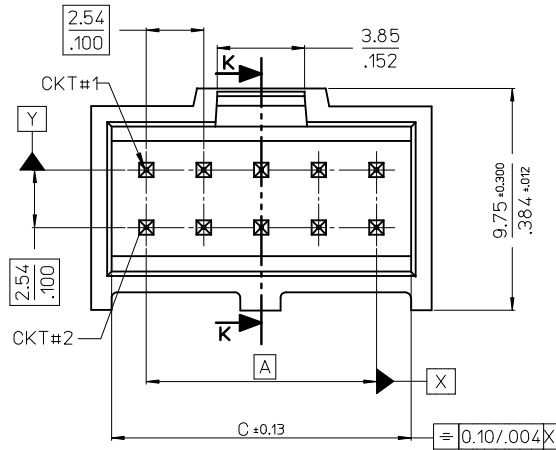
- PIN:- (0.65)/.0255 SQ. BRASS WIRE.
- HOUSING:- 15% GLASS FILLED POLYESTER
- UL 94 V-0 COLOUR BLACK

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

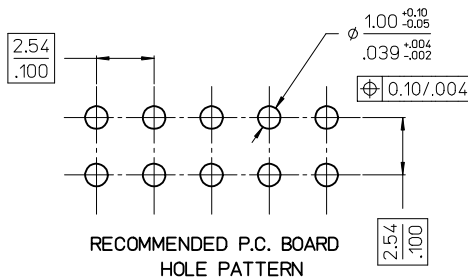
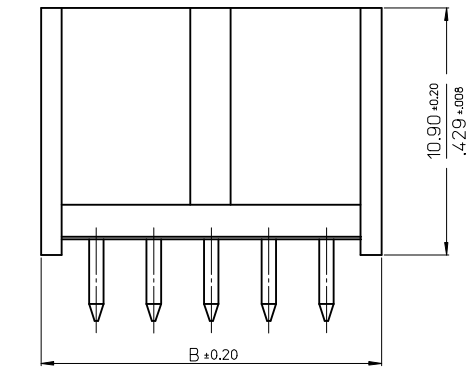
3. MEASUREMENT POINT FOR MINIMUM PLATING THICKNESS.

4. FOR PRODUCT SPEC SEE PS-99020-0001

5. RECOMMENDED PCB THICKNESS: 1.60mm



SECTION K-K



RECOMMENDED P.C. BOARD
HOLE PATTERN

CKT	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)/.1092	(25.90)/.1020
22	(25.40)/.1000	(30.28)/.1192	(28.44)/.1120
24	(27.94)/.1100	(32.82)/.1292	(30.98)/.1220
26	(30.48)/.1200	(35.36)/.1392	(33.52)/.1320
28	(33.02)/.1300	(37.90)/.1492	(36.06)/.1420
30	(35.56)/.1400	(40.44)/.1592	(38.60)/.1520
32	(38.10)/.1500	(42.98)/.1692	(41.15)/.1620
34	(40.64)/.1600	(45.52)/.1792	(43.68)/.1720
36	(43.18)/.1700	(48.06)/.1892	(46.22)/.1820
38	(45.72)/.1800	(50.60)/.1992	(48.76)/.1920
40	(48.26)/.1900	(53.14)/.2092	(51.30)/.2020
42	(50.80)/.2000	(55.68)/.2192	(53.84)/.2120
44	(53.34)/.2100	(58.22)/.2292	(56.38)/.2220
46	(55.88)/.2200	(60.76)/.2392	(58.92)/.2320
48	(58.42)/.2300	(63.30)/.2492	(61.46)/.2420
50	(60.96)/.2400	(65.84)/.2592	(64.00)/.2520
52	(63.50)/.2500	(68.38)/.2692	(66.54)/.2620
54	(66.04)/.2600	(70.92)/.2792	(69.08)/.2720
56	(68.58)/.2700	(73.46)/.2892	(71.62)/.2820
58	(71.12)/.2800	(76.00)/.2992	(74.16)/.2920
60	(73.66)/.2900	(78.54)/.3092	(76.70)/.3020
62	(76.20)/.3000	(81.08)/.3192	(79.24)/.3120
64	(78.74)/.3100	(83.62)/.3292	(81.78)/.3220
66	(81.28)/.3200	(86.16)/.3392	(84.32)/.3320
68	(83.82)/.3300	(88.70)/.3492	(86.86)/.3420

ADD DATUMS		QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION	
EC NO: S2015-0152		DESCRIPTION				MM/IN		NTS		INCH			
2014/08/18						DRAWN BY		DATE		TITLE			
DRWN:ATSEE						KS		1988/08/23		C-GRID III			
2014/08/18						CHECKED BY		DATE		DUAL ROW STRAIGHT			
CHKD:FANNYONG						ATSEE		2010/02/11		SHROUDED HEADER			
2014/08/18						APPROVED BY		DATE		MOLEX			
APPR:LBLEE						MLONG		2010/02/19		MOLEX INCORPORATED			
						MATERIAL NO.		DOCUMENT NO.				SHEET NO.	
						SEE TABLE		SDA-90130				1 OF 4	
CA2		REV		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
						A3							

	10	9	8	7	6	5	4	3	2	1				
VERSION FULLY LOADED														
F	NO OF CKTS	HSG CKT SIZE	PART NUMBER				NOTES : 1. FOR ASSEMBLY, SEE SHEET 1. 2. REFER TO LEGEND FOR PLATING OPTIONS.							
			PLATING TYPE A	PLATING TYPE E	PLATING TYPE F	PLATING TYPE G								
	6	6	90130-X106	90130-X206	90130-X306	90130-X406	90130 - * * * *							
	8	8	↑ X108	↑ X208	↑ X308	↑ X408								
	10	10	↑ X110	↑ X210	↑ X310	↑ X410	PLATING TYPES							
	12	12	↑ X112	↑ X212	↑ X312	↑ X412								
	14	14	↑ X114	↑ X214	↑ X314	↑ X414	STYLE: - 1. STRAIGHT PIN VERSION 8. VERSION WITH VOIDS							
	16	16	↑ X116	↑ X216	↑ X316	↑ X416								
E	18	18	↑ X118	↑ X218	↑ X318	↑ X418	1 - TYPE A: 3.0μm MIN. TIN OVER 1.27μm - 2.54μm NICKEL.							
	20	20	↑ X120	↑ X220	↑ X320	↑ X420								
	22	22	↑ X122	↑ X222	↑ X322	↑ X422	2 - TYPE E: 0.38μm MIN. GOLD IN SELECTED AREA & 3.0μm MIN. TIN IN SELECTED AREA OVER 1.3μm MIN. NICKEL OVERALL.							
	24	24	↑ X124	↑ X224	↑ X324	↑ X424								
	26	26	↑ X126	↑ X226	↑ X326	↑ X426	3 - TYPE F: 0.76μm MIN. GOLD IN SELECTED AREA & 3.0μm MIN. TIN IN SELECTED AREA OVER 1.3μm MIN. NICKEL OVERALL.							
	28	28	↑ X128	↑ X228	↑ X328	↑ X428								
	30	30	↑ X130	↑ X230	↑ X330	↑ X430	4 - TYPE G: 0.05 -0.10μm GOLD FLASH IN SELECTED AREA & 3.0μm MIN. TIN IN SELECTED AREA OVER 1.3μm MIN. NICKEL OVERALL.							
	32	32	↑ X132	↑ X232	↑ X332	↑ X432								
D	34	34	↑ X134	↑ X234	↑ X334	↑ X434	VOIDED OPTIONS							
	36	36	↑ X136	↑ X236	↑ X336	↑ X436								
	38	38	↑ X138	↑ X238	↑ X338	↑ X438	NO OF CKTS HSG CKT SIZE VOIDED PART NUMBER VOID POSITION PLATING TYPE							
	40	40	↑ X140	↑ X240	↑ X340	↑ X440								
	42	42	↑ X142	↑ X242	↑ X342	↑ X442	9	10	90130-8190	3	A			
	44	44	↑ X144	↑ X244	↑ X344	↑ X444	9	10	90130-8309	2	F			
	46	46	↑ X146	↑ X246	↑ X346	↑ X446	9	10	90130-8311	1	F			
C	48	48	↑ X148	↑ X248	↑ X348	↑ X448	11	12	90130-8212	12	E			
	50	50	↑ X150	↑ X250	↑ X350	↑ X450	11	12	90130-8213	2	E			
	52	52	↑ X152	↑ X252	↑ X352	↑ X452	11	12	90130-8313	2	F			
	54	54	↑ X154	↑ X254	↑ X354	↑ X454	11	12	90130-8191	3	A			
	56	56	↑ X156	↑ X256	↑ X356	↑ X456								
	58	58	↑ X158	↑ X258	↑ X358	↑ X458								
	60	60	↑ X160	↑ X260	↑ X360	↑ X460								
	62	62	↑ X162	↑ X262	↑ X362	↑ X462								
B	64	64	↑ X164	↑ X264	↑ X364	↑ X464								
	66	66	↓ X166	↓ X266	↓ X366	↓ X466								
	68	68	90130-X168	90130-X268	90130-X368	90130-X468								
A	ADD DATUMS EC NO: S2015-0152 DRWN:ATSEE 2014/08/18 CHKD:FANNYWONG 2014/08/18 APPR:BLEE 2014/08/19 CA2				QUALITY SYMBOLS F _A =0 F _G =0 F _P =0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE NTS	DESIGN UNITS INCH	THIRD ANGLE PROJECTION		
						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	mm	INCH	DRAWN BY KS	DATE 1988/08/23	C-GRID III DUAL ROW STRAIGHT SHROUDED HEADER			
							4 PLACES ± --- ± ---	3 PLACES ± --- ± .004	CHECKED BY ATSEE	DATE 2010/02/11				
							2 PLACES ± 0.10 ± ---	1 PLACE ± --- ± ---	APPROVED BY MLONG	DATE 2010/02/19	MOLEX INCORPORATED			
							ANGULAR ±1/2°	MATERIAL NO. SEE TABLE		DOCUMENT NO. SDA-90130				
						SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							
fb_frame_A3_P_AM_T Rev. F 2009/06/18														
	9	8	7	6	5	4	3	2	1					

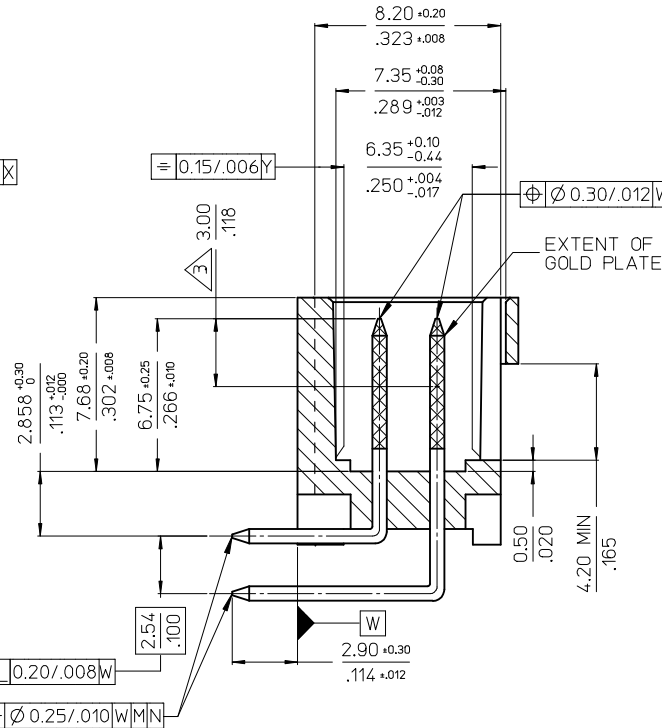
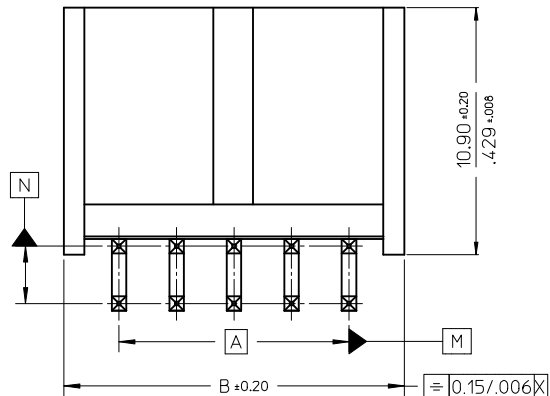
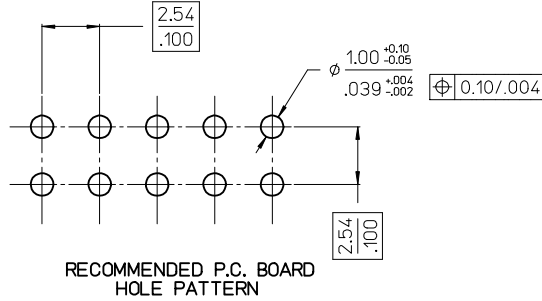
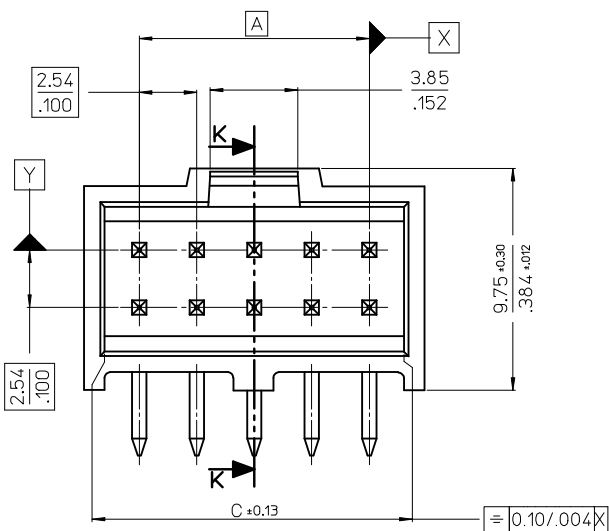
NOTES :
1. FOR ASSEMBLY, SEE SHEET 1.
2. REFER TO LEGEND FOR PLATING OPTIONS.



- STYLE: - 1. STRAIGHT PIN VERSION
8. VERSION WITH VOIDS
- 1 - TYPE A:
3.0µm MIN. TIN OVER 1.27µm - 2.54µm NICKEL.
- 2 - TYPE E:
0.38µm MIN. GOLD IN SELECTED AREA
& 3.0µm MIN. TIN IN SELECTED AREA
OVER 1.3µm MIN. NICKEL OVERALL.
- 3 - TYPE F:
0.76µm MIN. GOLD IN SELECTED AREA.
& 3.0µm MIN. TIN IN SELECTED AREA
OVER 1.3µm MIN. NICKEL OVERALL.
- 4 - TYPE G:
0.05 -0.10µm GOLD FLASH IN SELECTED AREA
& 3.0µm MIN. TIN IN SELECTED AREA
OVER 1.3µm MIN. NICKEL OVERALL.

VOIDED OPTIONS

NO OF CKTS	HSG CKT SIZE	VOIDED PART NUMBER	VOID POSITION	PLATING TYPE
9	10	90130-8190	3	A
9	10	90130-8309	2	F
9	10	90130-8311	1	F
11	12	90130-8212	12	E
11	12	90130-8213	2	E
11	12	90130-8313	2	F
11	12	90130-8191	3	A



- NOTES :
1. MATERIAL:-
- PIN:- (0.65)/.0255 SQ. BRASS WIRE.
- HOUSING:- 15% GLASS FILLED POLYESTER
- UL 94 V-0 COLOUR BLACK

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

△ MEASUREMENT POINT FOR MINIMUM PLATING THICKNESS.

4. FOR PRODUCT SPEC SEE PS-99020-0001

5. RECOMMENDED PCB THICKNESS: 1.60mm

CKT	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

SECTION K-K

ADD DATUMS EC NO: S2015-0152 2014/08/18 DRW/ATSEE 2014/08/18 CHK/D: FANNYONG 2014/08/19 APPR: LBLEE		DESCRIPTION	QUALITY SYMBOLS FA=0 FC=0 FP=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE NTS	DESIGN UNITS INCH	THIRD ANGLE PROJECTION 			
				mm	INCH	DRAWN BY KS	DATE 1988/08/23	C-GRID III DUAL ROW STRAIGHT SHROUDED HEADER					
				4 PLACES	± ---	± ---	CHECKED BY ATSEE						DATE 2010/02/11
				3 PLACES	± ---	± .004	APPROVED BY MLONG						DATE 2010/02/19
				2 PLACES	± 0.10	± ---	MOLEX INCORPORATED						
1 PLACE	± ---	± ---	ANGULAR ±1/2°		MATERIAL NO.		DOCUMENT NO.		SHEET NO. 3 OF 4				
CA2		REV		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						

	10	9	8	7	6	5	4	3	2	1				
	VERSION FULLY LOADED				NOTES : 1. FOR ASSEMBLY, SEE SHEET 1. 2. REFER TO LEGEND FOR PLATING OPTIONS 90130 - * * * INDICATES CIRCUIT HOUSING SIZE PLATING TYPES STYLE: - 3. RIGHT ANGLE VERSION 1 - TYPE A: 3.0µm MIN. TIN OVER 1.27µm - 2.54µm NICKEL. 2 - TYPE E: 0.38µm MIN. GOLD IN SELECTED AREA & 3.0µm MIN. TIN IN SELECTED AREA OVER 1.3µm MIN. NICKEL OVERALL. 3 - TYPE F: 0.76µm MIN. GOLD IN SELECTED AREA & 3.0µm MIN. TIN IN SELECTED AREA OVER 1.3µm MIN. NICKEL OVERALL. 4 - TYPE G 0.05-0.10µm GOLD FLASH IN SELECTED AREA & 3.0µm MIN. TIN IN SELECTED AREA OVER 1.3µm MIN. NICKEL OVERALL.									
F	NO OF CKTS	HSG CKT SIZE	PART NUMBER											
			PLATING TYPE A	PLATING TYPE E								PLATING TYPE F	PLATING TYPE G	
	6	6	90130-X106	90130-X206								90130-X306	90130-X406	
	8	8	X108	X208								X308	X408	
	10	10	X110	X210								X310	X410	
	12	12	X112	X212								X312	X412	
	14	14	X114	X214								X314	X414	
	16	16	X116	X216								X316	X416	
E	18	18	X118	X218								X318	X418	
	20	20	X120	X220	X320	X420								
	22	22	X122	X222	X322	X422								
	24	24	X124	X224	X324	X424								
	26	26	X126	X226	X326	X426								
	28	28	X128	X228	X328	X428								
	30	30	X130	X230	X330	X430								
	32	32	X132	X232	X332	X432								
D	34	34	X134	X234	X334	X434								
	36	36	X136	X236	X336	X436								
	38	38	X138	X238	X338	X438								
	40	40	X140	X240	X340	X440								
	42	42	X142	X242	X342	X442								
	44	44	X144	X244	X344	X444								
	46	46	X146	X246	X346	X446								
C	48	48	X148	X248	X348	X448								
	50	50	X150	X250	X350	X450								
	52	52	X152	X252	X352	X452								
	54	54	X154	X254	X354	X454								
	56	56	X156	X256	X356	X456								
	58	58	X158	X258	X358	X458								
	60	60	X160	X260	X360	X460								
	62	62	X162	X262	X362	X462								
	64	64	X164	X264	X364	X464								
B	66	66	X166	X266	X366	X466								
	68	68	90130-X168	90130-X268	90130-X368	90130-X468								
A	ADD DATUMS EC NO: S2015-0152 DRWN:ATSEE CHKD:FANNYWONG APPR: LBLEE 2014/08/18 2014/08/18 2014/08/19				QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
									MM/IN		NTS	INCH		
									DRAWN BY		DATE		C-GRID III DUAL ROW STRAIGHT SHROUDED HEADER	
									CHECKED BY		DATE			
									ATSEE		2010/02/11			
									APPROVED BY		DATE			
									MLONG		2010/02/19		MOLEX INCORPORATED	
									MATERIAL NO.		DOCUMENT 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		4 OF 4	
A3														
CA2														

tb_frame_A3_P_AM_T

Rev. F 2009/06/18

9	8	7	6	5	4	3	2	1
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