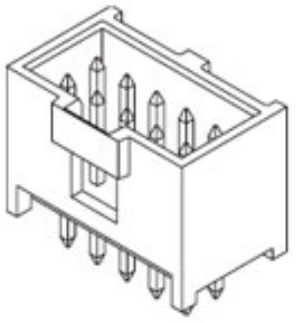
This document was generated on 08/11/2014

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: 90130-1106
Status: Active
Overview: C-Grid III™
Description: C-Grid III™ Header, Dual Row, Vertical, Shrouded, Fully Loaded, 6 Circuits, Black, 3µm Tin (Sn) over Nickel (Ni)



Series image - Reference only

Documents:

3D Model
Drawing (PDF)
Product Specification PS-99020-0001 (PDF)
RoHS Certificate of Compliance (PDF)

Agency Certification

UL	E29179

General

Product Family	PCB Headers
Series	90130
Application	Signal, Wire-to-Board
Overview	C-Grid III™
Product Name	C-Grid III™
UPC	800753700390

Physical

Breakaway	No
Circuits (Loaded)	6
Circuits (maximum)	6
Color - Resin	Black
Durability (mating cycles max)	30
First Mate / Last Break	No
Flammability	94V-0
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
Net Weight	0.894/g
Number of Rows	2
Orientation	Vertical
PC Tail Length	2.90mm
PCB Locator	No
PCB Retention	None
PCB Thickness - Recommended	1.60mm
Packaging Type	Tray
Pitch - Mating Interface	2.54mm
Pitch - Termination Interface	2.54mm
Plating min - Mating	3.048µm
Plating min - Termination	3.048µm
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
Low-Halogen Status
Not Low-Halogen

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

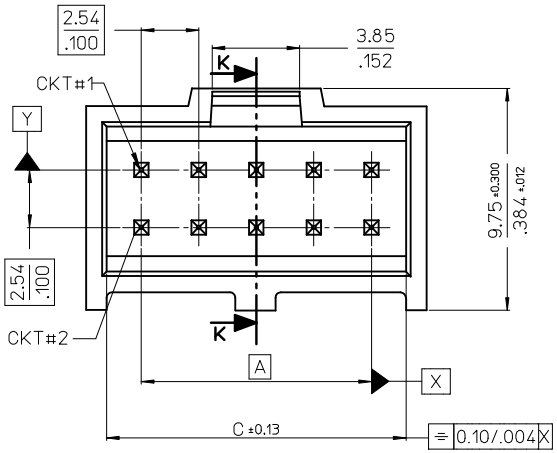
Solder Process Data

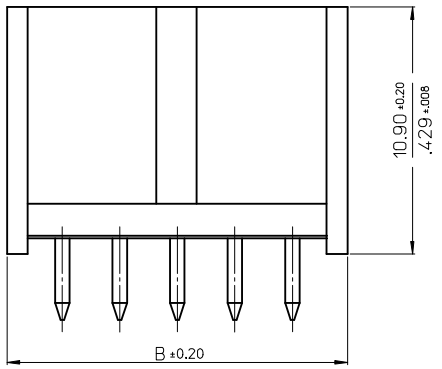
Duration at Max. Process Temperature (seconds)	3
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	235

Material Info

Reference - Drawing Numbers

Product Specification	PS-99020-0001
Sales Drawing	SDA-90130





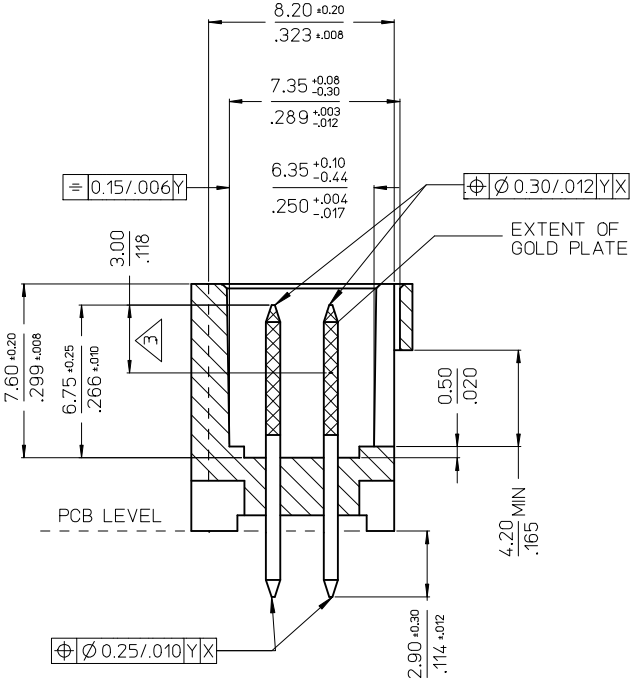
NOTES :
1. MATERIAL:-
- PIN:- (0.65)/.0255 SQ. BRASS WIRE.
- HOUSING:- 15% GLASS FILLED POLYESTER
- UL 94 V-0 COLOUR BLACK

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

3. MEASUREMENT POINT FOR MINIMUM PLATING THICKNESS.

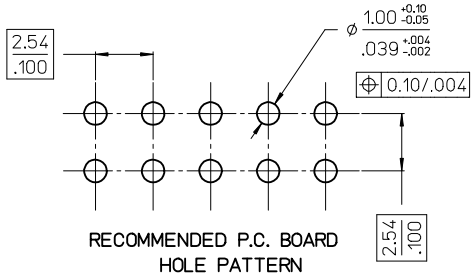
4. FOR PRODUCT SPEC SEE PS-99020-0001

5. RECOMMENDED PCB THICKNESS: 1.60mm



SECTION K-K

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



RECOMMENDED P.C. BOARD HOLE PATTERN

ADD DATUMS
EC NO: S2015-0152 2014/08/18
DRWN:ATSEE 2014/08/18
CHKD:FANNYWONG 2014/08/19
APPR:LBLEE
DESCRIPTION
CA2
REV

QUALITY SYMBOLS
$\sqrt{F_A}=0$
$\sqrt{F_C}=0$
$\sqrt{F_P}=0$

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
SCALE: NTS
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

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

TITLE
C-GRID III
DUAL ROW STRAIGHT
SHROUDED HEADER
MOLEX INCORPORATED

DOCUMENT NO.: SDA-90130
SHEET NO.: 1 OF 4
SIZE: A3

VERSION FULLY LOADED

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
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
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
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
66	66	X166	X266	X366	X466
68	68	90130-X168	90130-X268	90130-X368	90130-X468

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

90130 - * * * *

PLATING TYPES

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

ADD DATUMS
EC NO: S2015-0152 2014/08/18
DRWN:ATSEE 2014/08/18
CH'KD:FANNYWONG 2014/08/19
APPR:LBLEE
DESCRIPTION
REV
CA2

QUALITY SYMBOLS
FA=0
FC=0
FB=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
SCALE: NTS
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

		DATE
DRAWN BY	KS	1988/08/23
CHECKED BY	ATSEE	2010/02/11
APPROVED BY	MLONG	2010/02/19

TITLE: C-GRID III DUAL ROW STRAIGHT SHROUDED HEADER

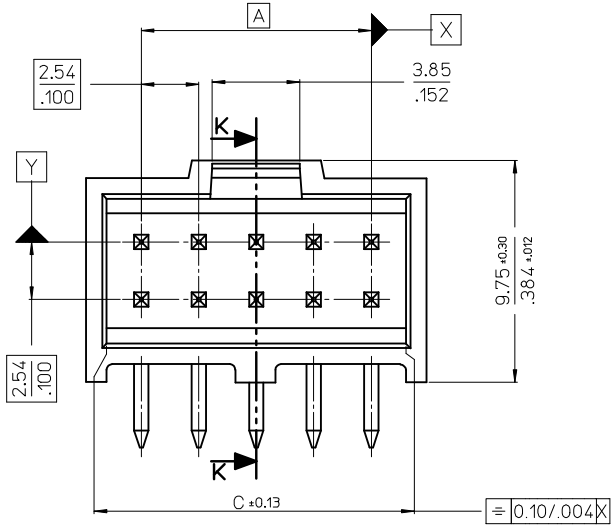
MOLEX INCORPORATED

MATERIAL NO.: SEE TABLE

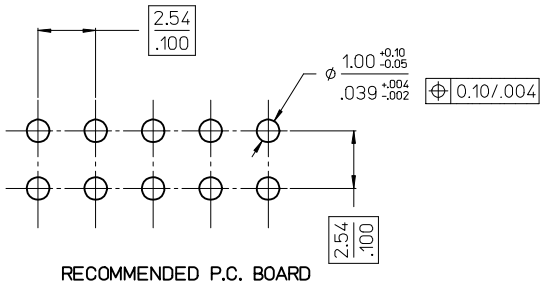
DOCUMENT NO.: SDA-90130

SHEET NO.: 2 OF 4

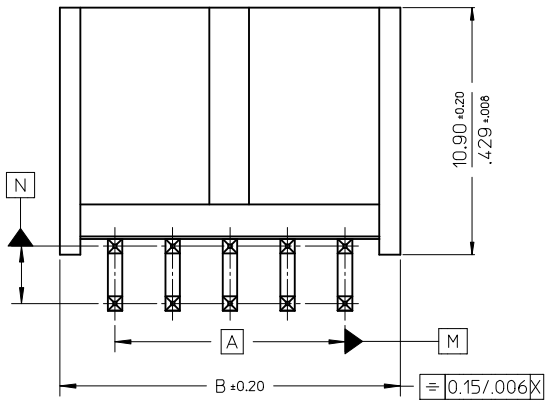
SIZE: A3

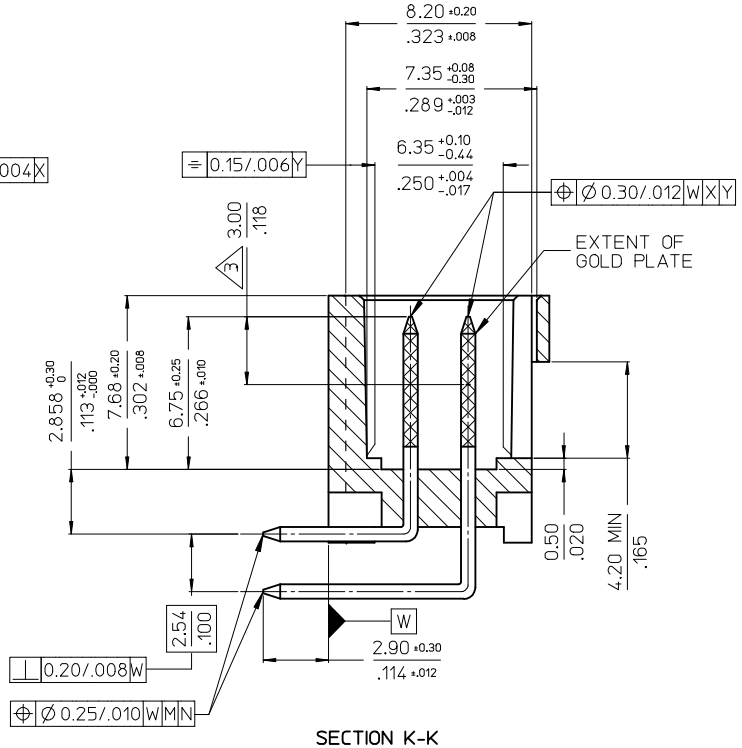


VERSION FULLY LOADED



RECOMMENDED P.C. BOARD
HOLE PATTERN





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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
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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

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

ADD DATUMS
EC NO: S2015-0152 2014/08/18
DRWN:ATSEE 2014/08/18
CH'KD:FANNYWONG 2014/08/19
APPR:LBLEE
DESCRIPTION
REV
CA2

QUALITY SYMBOLS
FA=0
FC=0
FP=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
SCALE: NTS
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

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

TITLE
C-GRID III
DUAL ROW STRAIGHT
SHROUDED HEADER
MOLEX INCORPORATED
DOCUMENT NO.: SDA-90130
SHEET NO.: 3 OF 4
SIZE: A3

VERSION FULLY LOADED

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
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
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
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
66	66	X166	X266	X366	X466
68	68	90130-X168	90130-X268	90130-X368	90130-X468

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.

ADD DATUMS
EC NO: S2015-0152 2014/08/18
DRWN:ATSEE 2014/08/18
CH'KD:FANNYWONG 2014/08/19
APPR:LBLEE
DESCRIPTION
REV
CA2

QUALITY SYMBOLS
FA=0
FC=0
FP=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
SCALE: NTS
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

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

TITLE: C-GRID III DUAL ROW STRAIGHT SHROUDED HEADER
MOLEX INCORPORATED
DOCUMENT NO.: SDA-90130
SHEET NO.: 4 OF 4
SIZE: A3