

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0022032231](#)
Status: **Active**
Description: 2.54mm (.100") Pitch KK® Wire-to-Board Header, Single Row, Vertical, 23 Circuits, PA Polyamide Nylon, Tin (Sn) Plating

Documents:

[3D Model](#) [Product Specification PS-10-07 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)
[Packaging Specification \(PDF\)](#)

Agency Certification

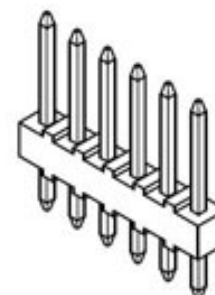
CSA LR19980
 UL E29179

General

Product Family PCB Headers
 Series [4030](#)
 Application Board-to-Board, Wire-to-Board
 Product Name KK®

Physical

Breakaway No
 Circuits (Loaded) 23
 Circuits (maximum) 23
 Color - Resin Natural (White)
 Durability (mating cycles max) 25
 Flammability 94V-0
 Glow-Wire Compliant No
 Lock to Mating Part None
 Material - Metal Brass
 Material - Plating Mating Tin
 Material - Plating Termination Tin
 Material - Resin Nylon
 Number of Rows 1
 Orientation Vertical
 PC Tail Length (in) 0.135 In
 PC Tail Length (mm) 3.43 mm
 PCB Locator No
 PCB Retention None
 PCB Thickness Recommended (in) 0.062 In
 PCB Thickness Recommended (mm) 1.60 mm
 Packaging Type Bag
 Pitch - Mating Interface (in) 0.100 In
 Pitch - Mating Interface (mm) 2.54 mm
 Plating min: Mating (µin) 200
 Plating min: Mating (µm) 5
 Plating min: Termination (µin) 200
 Plating min: Termination (µm) 5
 Polarized to Mating Part No
 Polarized to PCB No
 Shrouded No
 Stackable Yes
 Surface Mount Compatible (SMC) No
 Temperature Range - Operating 0°C to +75°C
 Termination Interface: Style Through Hole



Series

image - Reference only

EU RoHS

ELV and RoHS Compliant
REACH SVHC
 Not Reviewed
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

[4030Series](#)

Mates With

[2695](#) , [6471](#) , [7880](#) , [4455](#) , [7720](#)

Electrical

Current - Maximum per Contact 4A
Voltage - Maximum 250V

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 235

Material Info

Old Part Number A-4030-23A102

Reference - Drawing Numbers

Packaging Specification PK-4030-001
Product Specification PS-10-07
Sales Drawing SDA-4030, SDA-4030-002

This document was generated on 05/13/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

13 12 11 10 9 8 7 6 5 4 3 2 1



RECOMMENDED P.C. BOARD HOLE DIMENSIONS

NOTES:

1. MATERIAL: NYLON, UL94V-0, COLOR: WHITE
2. FINISH: 102: 0.00508/0.00200 MIN TIN OVER 0.00254/.000100 MIN COPPER
501: 0.00051/0.00020 MIN GOLD OVER 0.00076/0.00030 MIN NICKEL
3. PARTS CONFORM TO PRODUCT SPECIFICATION PS-10-07.
4. BULK PACK PER PK-4030-001.
5. PINS MUST CONFORM TO SOLDERABILITY SPECIFICATION SMES-152.
6. PIN PUSH OUT FORCE: 2 LBS. MIN.
7. PARTS ARE STACKABLE END TO END AND SIDE TO SIDE ON (2.54)/.100 CENTERS.
8. SEE SDA-4030-002 FOR CUSTOMER DEFINED OPTIONS.
9. THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

CKTS. NO. OF	DIM. B		DIM. A	
	mm	INCH	mm	INCH
2	.100 ± .002 (2.54 ± .05)		.190 ± .008 (4.83 ± .20)	
3	.200 ± .005 (5.08 ± .13)		.290 ± .008 (7.37 ± .20)	
4	.300 ± .005 (7.62 ± .13)		.390 ± .008 (9.91 ± .20)	
5	.400 ± .005 (10.16 ± .13)		.490 ± .008 (12.45 ± .20)	
6	.500 ± .006 (12.70 ± .15)		.590 ± .009 (14.99 ± .23)	
7	.600 ± .006 (15.24 ± .15)		.690 ± .009 (17.53 ± .23)	
8	.700 ± .006 (17.78 ± .15)		.790 ± .009 (20.07 ± .23)	
9	.800 ± .007 (20.32 ± .18)		.890 ± .010 (22.61 ± .25)	
10	.900 ± .007 (22.86 ± .18)		.990 ± .010 (25.15 ± .25)	
11	1.000 ± .007 (25.40 ± .18)		1.090 ± .010 (27.69 ± .25)	
12	1.100 ± .008 (27.94 ± .20)		1.190 ± .011 (30.23 ± .28)	
13	1.200 ± .008 (30.48 ± .20)		1.290 ± .011 (32.77 ± .28)	
14	1.300 ± .008 (33.02 ± .20)		1.390 ± .011 (35.31 ± .28)	
15	1.400 ± .008 (35.56 ± .20)		1.490 ± .011 (37.85 ± .28)	
16	1.500 ± .008 (38.10 ± .20)		1.590 ± .011 (40.39 ± .28)	
17	1.600 ± .009 (40.64 ± .23)		1.690 ± .012 (42.93 ± .30)	
18	1.700 ± .009 (43.18 ± .23)		1.790 ± .012 (45.47 ± .30)	
19	1.800 ± .009 (45.72 ± .23)		1.890 ± .012 (48.01 ± .30)	
20	1.900 ± .009 (48.26 ± .23)		1.990 ± .012 (50.55 ± .30)	
21	2.000 ± .010 (50.80 ± .25)		2.090 ± .013 (53.09 ± .33)	
22	2.100 ± .010 (53.34 ± .25)		2.190 ± .013 (55.63 ± .33)	
23	2.200 ± .010 (55.88 ± .25)		2.290 ± .013 (58.17 ± .33)	
24	2.300 ± .010 (58.42 ± .25)		2.390 ± .013 (60.71 ± .33)	
25	2.400 ± .011 (60.96 ± .28)		2.490 ± .014 (63.25 ± .36)	
26	2.500 ± .011 (63.50 ± .28)		2.590 ± .014 (65.79 ± .36)	
27	2.600 ± .011 (66.04 ± .28)		2.690 ± .014 (68.33 ± .36)	
28	2.700 ± .011 (68.58 ± .28)		2.790 ± .014 (70.87 ± .36)	

2 CH2
1 CH2
SHI REV.

UPDATE NOTES EC NO: UCP2008-0017 DRAWN: ADERR 2007/10/11 CHKD: LSCHMI DT 2007/10/11 APPR: FSM TH 2007/10/12	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH		DIMENSION STYLE MM/IN		SCALE ---	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- ANGULAR ±1/2°	DRAWN BY SAMIEC DATE 1988/06/10 CHECKED BY PATEL DATE 1988/06/10 APPROVED BY LENZ DATE 1988/06/10	SEE CHART THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		MOLEX MOLEX INCORPORATED		MATERIAL NO. SDA-4030	DOCUMENT NO.

KK HEADER
(2.54)/.100 CENTERS
STD CATALOG PRODUCTS

12 11 10 9 8 7 6 5 4 3 2 1

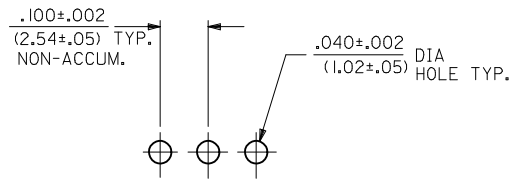
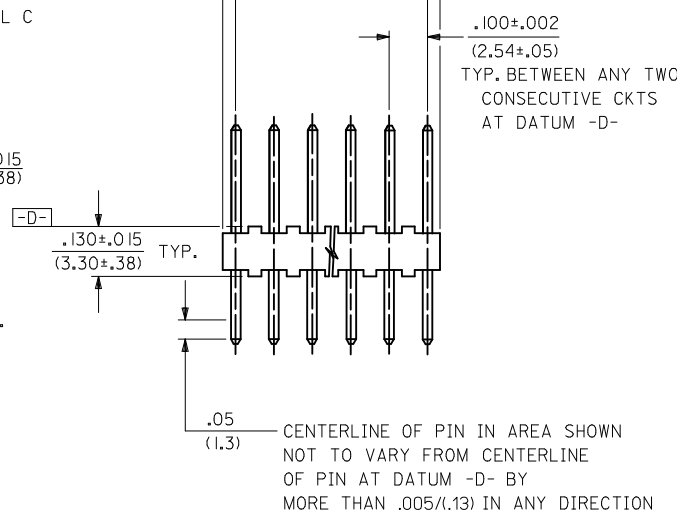
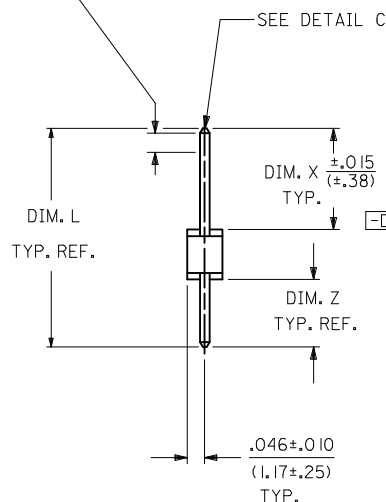
13	12	11	10	9	8	7	6	5	4	3	2	1
ENG. NO.	PIN NO.	DIM. L	DIM. X	DIM. Z	PACKAGE PER	EDP NO. IN COL NO						
A-4030 -NA(102)	2766 -I(102)	.560 (14.22)	.295 (7.49)	.135 (3.43)	PK-4030-001 BULK	1						
A-4030 -NA(50 I)	2766 -I(50 I)	.560 (14.22)	.295 (7.49)	.135 (3.43)	PK-4030-001 BULK	2						
A- -	-	()	()	()								
A- -	-	()	()	()								
A- -	-	()	()	()								
A- -	-	()	()	()								

COLUMN NO. 1		COLUMN NO. 2	
EDP NO.	ENG. NO.	EDP NO.	ENG. NO.
22-03-202 I	A-4030-02A(102)	22-10-202 I	A-4030-02A(50 I)
22-03-203 I	A-4030-03A(102)	22-10-203 I	A-4030-03A(50 I)
22-03-204 I	A-4030-04A(102)	22-10-204 I	A-4030-04A(50 I)
22-03-205 I	A-4030-05A(102)	22-10-205 I	A-4030-05A(50 I)
22-03-206 I	A-4030-06A(102)	22-10-206 I	A-4030-06A(50 I)
22-03-207 I	A-4030-07A(102)	22-10-207 I	A-4030-07A(50 I)
22-03-208 I	A-4030-08A(102)	22-10-208 I	A-4030-08A(50 I)
22-03-209 I	A-4030-09A(102)	22-10-209 I	A-4030-09A(50 I)
22-03-210 I	A-4030-10A(102)	22-10-210 I	A-4030-10A(50 I)
22-03-211 I	A-4030-11A(102)	22-10-211 I	A-4030-11A(50 I)
22-03-212 I	A-4030-12A(102)	22-10-212 I	A-4030-12A(50 I)
22-03-213 I	A-4030-13A(102)	22-10-213 I	A-4030-13A(50 I)
22-03-214 I	A-4030-14A(102)	22-10-214 I	A-4030-14A(50 I)
22-03-215 I	A-4030-15A(102)	22-10-215 I	A-4030-15A(50 I)
22-03-216 I	A-4030-16A(102)	22-10-216 I	A-4030-16A(50 I)
22-03-217 I	A-4030-17A(102)	22-10-217 I	A-4030-17A(50 I)
22-03-218 I	A-4030-18A(102)	22-10-218 I	A-4030-18A(50 I)
22-03-219 I	A-4030-19A(102)	22-10-219 I	A-4030-19A(50 I)
22-03-220 I	A-4030-20A(102)	22-10-220 I	A-4030-20A(50 I)
22-03-221 I	A-4030-21A(102)	22-10-221 I	A-4030-21A(50 I)
22-03-222 I	A-4030-22A(102)	22-10-222 I	A-4030-22A(50 I)
22-03-223 I	A-4030-23A(102)	22-10-223 I	A-4030-23A(50 I)
22-03-224 I	A-4030-24A(102)	22-10-224 I	A-4030-24A(50 I)
22-03-225 I	A-4030-25A(102)	22-10-225 I	A-4030-25A(50 I)
22-03-226 I	A-4030-26A(102)	22-10-226 I	A-4030-26A(50 I)
22-03-227 I	A-4030-27A(102)	22-10-227 I	A-4030-27A(50 I)
22-03-228 I	A-4030-28A(102)	22-10-228 I	A-4030-28A(50 I)

EDP NO.	ENG. NO.	NO OF CKTS	EDP NO.	ENG. NO.	NO OF CKTS
22-03-202 I	A-4030-02A(102)	2	22-10-202 I	A-4030-02A(50 I)	2
22-03-203 I	A-4030-03A(102)	3	22-10-203 I	A-4030-03A(50 I)	3
22-03-204 I	A-4030-04A(102)	4	22-10-204 I	A-4030-04A(50 I)	4
22-03-205 I	A-4030-05A(102)	5	22-10-205 I	A-4030-05A(50 I)	5
22-03-206 I	A-4030-06A(102)	6	22-10-206 I	A-4030-06A(50 I)	6
22-03-207 I	A-4030-07A(102)	7	22-10-207 I	A-4030-07A(50 I)	7
22-03-208 I	A-4030-08A(102)	8	22-10-208 I	A-4030-08A(50 I)	8
22-03-209 I	A-4030-09A(102)	9	22-10-209 I	A-4030-09A(50 I)	9
22-03-210 I	A-4030-10A(102)	10	22-10-210 I	A-4030-10A(50 I)	10
22-03-211 I	A-4030-11A(102)	11	22-10-211 I	A-4030-11A(50 I)	11
22-03-212 I	A-4030-12A(102)	12	22-10-212 I	A-4030-12A(50 I)	12
22-03-213 I	A-4030-13A(102)	13	22-10-213 I	A-4030-13A(50 I)	13
22-03-214 I	A-4030-14A(102)	14	22-10-214 I	A-4030-14A(50 I)	14
22-03-215 I	A-4030-15A(102)	15	22-10-215 I	A-4030-15A(50 I)	15
22-03-216 I	A-4030-16A(102)	16	22-10-216 I	A-4030-16A(50 I)	16
22-03-217 I	A-4030-17A(102)	17	22-10-217 I	A-4030-17A(50 I)	17
22-03-218 I	A-4030-18A(102)	18	22-10-218 I	A-4030-18A(50 I)	18
22-03-219 I	A-4030-19A(102)	19	22-10-219 I	A-4030-19A(50 I)	19
22-03-220 I	A-4030-20A(102)	20	22-10-220 I	A-4030-20A(50 I)	20
22-03-221 I	A-4030-21A(102)	21	22-10-221 I	A-4030-21A(50 I)	21
22-03-222 I	A-4030-22A(102)	22	22-10-222 I	A-4030-22A(50 I)	22
22-03-223 I	A-4030-23A(102)	23	22-10-223 I	A-4030-23A(50 I)	23
22-03-224 I	A-4030-24A(102)	24	22-10-224 I	A-4030-24A(50 I)	24
22-03-225 I	A-4030-25A(102)	25	22-10-225 I	A-4030-25A(50 I)	25
22-03-226 I	A-4030-26A(102)	26	22-10-226 I	A-4030-26A(50 I)	26
22-03-227 I	A-4030-27A(102)	27	22-10-227 I	A-4030-27A(50 I)	27
22-03-228 I	A-4030-28A(102)	28	22-10-228 I	A-4030-28A(50 I)	28

UPDATE TITLE BLOCK EC NO: UCP2008-0017 2007/10/11 DRW:ADERR CHKD:LSCHMIDT APPR:FSMLTH 2007/10/12	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± .005</td> <td>± .0005</td> </tr> <tr> <td>3 PLACES</td> <td>± .005</td> <td>± .0005</td> </tr> <tr> <td>2 PLACES</td> <td>± .005</td> <td>± .0005</td> </tr> <tr> <td>1 PLACE</td> <td>± .005</td> <td>± .0005</td> </tr> </table>		mm	INCH	4 PLACES	± .005	± .0005	3 PLACES	± .005	± .0005	2 PLACES	± .005	± .0005	1 PLACE	± .005	± .0005	DIMENSION STYLE IN/MM DRAWN BY DATE SAMIEC 1993/07/15 CHECKED BY DATE PATEL 1993/07/15 APPROVED BY DATE LENZ 1993/07/15	SCALE --- DESIGN UNITS INCH THIRD ANGLE PROJECTION	TITLE KK HEADER (2.54)/.100 CENTERS STD CATALOG PRODUCTS MOLEX INCORPORATED DOCUMENT NO. SDA-4030	SHEET NO. 2 OF 2
		mm	INCH																		
	4 PLACES	± .005	± .0005																		
	3 PLACES	± .005	± .0005																		
2 PLACES	± .005	± .0005																			
1 PLACE	± .005	± .0005																			
MATERIAL NO. SEE CHART	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE C	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																		

.05
(1.3)
CENTERLINE OF PIN IN AREA SHOWN
NOT TO VARY FROM CENTERLINE
OF PIN AT DATUM -D- BY
MORE THAN .008/(.20) IN ANY DIRECTION



PCB LAYOUT: COMPONENT SIDE
TYPICAL PCB THICKNESS: .062(1.57)

A-4030-N * (*)*
NO. OF CKTS. ↑
VERSION ↑
LETTER CHANGES WHEN PIN NO. OR PRESS DIM. CHANGES.
PLATING CODE ↑
SEE NOTE 2

SECONDARY OPERATIONS	
CODE	PACKAGE
BLANK	BULK PER PK-4030-001
A	TUBE PER PK-44743-002

- NOTES:
- MATERIAL: WAFER: NYLON, UL94V-0, COLOR: WHITE
PINS: COPPER ALLOY
 - FINISH: 102: .000200/0.00508 MIN TIN OVER .000100/0.00254 MIN COPPER
132: .000200/0.00508 MIN TIN OVER .000200/0.00508 MIN COPPER
501: .000020/0.00051 MIN GOLD OVER .000030/0.00076 MIN NICKEL
503: .000030/0.00076 MIN GOLD OVER .000050/0.00127 MIN NICKEL
516: .000010/0.00025 MIN GOLD OVER .000030/0.00076 MIN NICKEL
 - PARTS CONFORM TO PRODUCT SPECIFICATION PS-10-07.
 - PACKAGING INFORMATION: SEE LEGEND
 - PINS MUST CONFORM TO SOLDERABILITY SPECIFICATION SMES-152.
 - PIN PUSH OUT FORCE: 2 LBS. MIN.
 - PARTS ARE STACKABLE END TO END AND SIDE TO SIDE ON .100/(2.54) CENTERS.
 - SEE SDA-4030 FOR STANDARD CATALOG PRODUCTS.
 - THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

CKTS. NO. OF	DIM. B	DIM. A
2	.100 ± .002 (2.54 ± .05)	.190 ± .008 (4.83 ± .20)
3	.200 ± .005 (5.08 ± .13)	.290 ± .008 (7.37 ± .20)
4	.300 ± .005 (7.62 ± .13)	.390 ± .008 (9.91 ± .20)
5	.400 ± .005 (10.16 ± .13)	.490 ± .008 (12.45 ± .20)
6	.500 ± .006 (12.70 ± .15)	.590 ± .009 (14.99 ± .23)
7	.600 ± .006 (15.24 ± .15)	.690 ± .009 (17.53 ± .23)
8	.700 ± .006 (17.78 ± .15)	.790 ± .009 (20.07 ± .23)
9	.800 ± .007 (20.32 ± .18)	.890 ± .010 (22.61 ± .25)
10	.900 ± .007 (22.86 ± .18)	.990 ± .010 (25.15 ± .25)
11	1.000 ± .007 (25.40 ± .18)	1.090 ± .010 (27.69 ± .25)
12	1.100 ± .008 (27.94 ± .20)	1.190 ± .011 (30.23 ± .28)
13	1.200 ± .008 (30.48 ± .20)	1.290 ± .011 (32.77 ± .28)
14	1.300 ± .008 (33.02 ± .20)	1.390 ± .011 (35.31 ± .28)
15	1.400 ± .008 (35.56 ± .20)	1.490 ± .011 (37.85 ± .28)
16	1.500 ± .008 (38.10 ± .20)	1.590 ± .011 (40.39 ± .28)
17	1.600 ± .009 (40.64 ± .23)	1.690 ± .012 (42.93 ± .30)
18	1.700 ± .009 (43.18 ± .23)	1.790 ± .012 (45.47 ± .30)
19	1.800 ± .009 (45.72 ± .23)	1.890 ± .012 (48.01 ± .30)
20	1.900 ± .009 (48.26 ± .23)	1.990 ± .012 (50.55 ± .30)
21	2.000 ± .010 (50.80 ± .25)	2.090 ± .013 (53.09 ± .33)
22	2.100 ± .010 (53.34 ± .25)	2.190 ± .013 (55.63 ± .33)
23	2.200 ± .010 (55.88 ± .25)	2.290 ± .013 (58.17 ± .33)
24	2.300 ± .010 (58.42 ± .25)	2.390 ± .013 (60.71 ± .33)
25	2.400 ± .011 (60.96 ± .28)	2.490 ± .014 (63.25 ± .36)
26	2.500 ± .011 (63.50 ± .28)	2.590 ± .014 (65.79 ± .36)
27	2.600 ± .011 (66.04 ± .28)	2.690 ± .014 (68.33 ± .36)
28	2.700 ± .011 (68.58 ± .28)	2.790 ± .014 (70.87 ± .36)

ADD 22-03-5117 EC NO: UCP2010-0896 DRWN:KIPPER 2009/10/16 CHKD:SSOUSEK 2009/10/20 APPR:FSMITH 2009/10/20 REV: C15	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr><th colspan="2">mm</th><th colspan="2">INCH</th></tr> <tr><td>4 PLACES ±</td><td>---</td><td>±</td><td>---</td></tr> <tr><td>3 PLACES ±</td><td>---</td><td>±</td><td>---</td></tr> <tr><td>2 PLACES ±</td><td>---</td><td>±</td><td>---</td></tr> <tr><td>1 PLACE ±</td><td>---</td><td>±</td><td>---</td></tr> </table>	mm		INCH		4 PLACES ±	---	±	---	3 PLACES ±	---	±	---	2 PLACES ±	---	±	---	1 PLACE ±	---	±	---	DIMENSION STYLE IN/MM	SCALE --- INCH	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
	mm		INCH																							
	4 PLACES ±	---	±	---																						
	3 PLACES ±	---	±	---																						
2 PLACES ±	---	±	---																							
1 PLACE ±	---	±	---																							
DRAWN BY SAMIEC	DATE 06/10/88	TITLE KK 100 HEADER FLAT CUSTOM PRODUCTS																								
CHECKED BY PATEL	DATE 06/10/88	MOLEX MOLEX INCORPORATED																								
APPROVED BY LENZ	DATE 06/10/88	MATERIAL NO. SEE CHART	DOCUMENT NO. SDA-4030-002	SHEET NO. 1 OF 16																						

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

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