

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0022032131](#)  
**Status:** **Active**  
**Description:** 2.54mm (.100") Pitch KK® Wire-to-Board Header, Single Row, Vertical, 13 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**

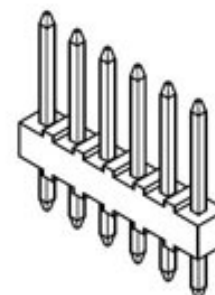
CSA LR19980  
 UL E29179

**General**

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

**Physical**

Breakaway No  
 Circuits (Loaded) 13  
 Circuits (maximum) 13  
 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**

**China RoHS**



**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto: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-4030-13A102

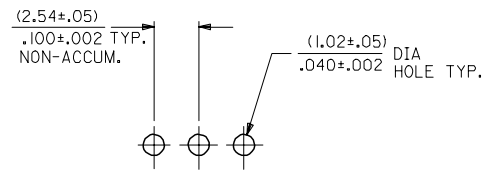
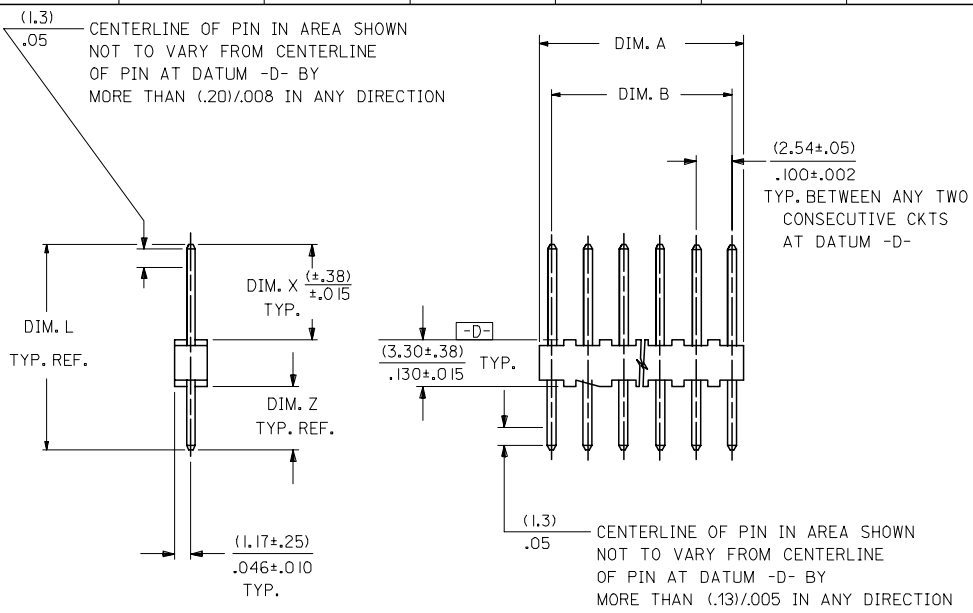
**Reference - Drawing Numbers**

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

This document was generated on 04/08/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://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 0.00254/0.00100 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
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.

<b>UPDATE NOTES</b> EC NO: UCP2008-0017 DRAWN: ADERR 2007/10/11 CHKD: LSCHMI DT 2007/10/11 APPR: FSM TH 2007/10/12	<b>QUALITY SYMBOLS</b> ▽=0 ▽=0	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b> mm INCH		<b>DIMENSION STYLE</b> MM/IN		SCALE ---	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- ANGULAR ±1/2°	DRAWN BY SAMIEC CHECKED BY PATEL APPROVED BY LENZ	DATE 1988/06/10 DATE 1988/06/10 DATE 1988/06/10	TITLE KK HEADER (2.54)/.100 CENTERS STD CATALOG PRODUCTS		MATERIAL NO. SDA-4030	DOCUMENT NO.	SHEET NO. 1 OF 2
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		MOLEX MOLEX INCORPORATED		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

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

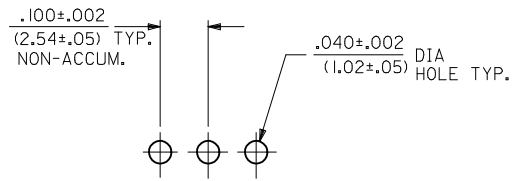
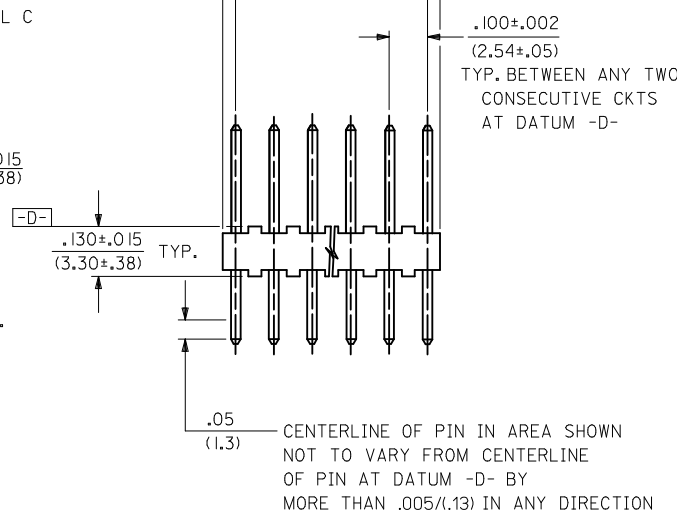
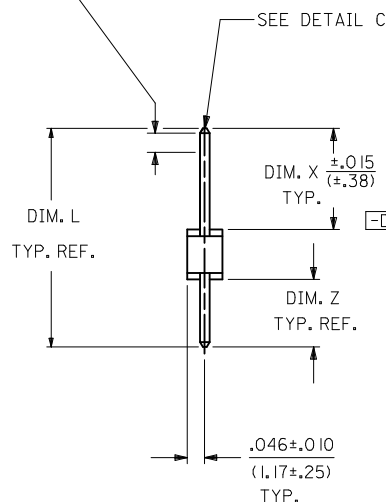
13	12	11	10	9	8	7	6	5	4	3	2	1
ENG. NO.	PIN NO.	DIM. L	DIM. X	DIM. Z	PACKAGE PER	EDP NO. IN COL NO						
A-4030 -NA(102)	2766 -I(102)	.560 (14.22)	.295 (7.49 )	.135 (3.43 )	PK-4030-001 BULK	1						
A-4030 -NA(50 I)	2766 -I(50 I)	.560 (14.22)	.295 (7.49 )	.135 (3.43 )	PK-4030-001 BULK	2						
A- -	-	(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

<b>UPDATE TITLE BLOCK</b> EC NO: UCP2008-0017 2007/10/11 DRW:ADERR CHKD:LSCHMIDT 2007/10/11 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>± .0002</td> </tr> <tr> <td>3 PLACES</td> <td>± .005</td> <td>± .0002</td> </tr> <tr> <td>2 PLACES</td> <td>± .005</td> <td>± .0002</td> </tr> <tr> <td>1 PLACE</td> <td>± .005</td> <td>± .0002</td> </tr> </table>		mm	INCH	4 PLACES	± .005	± .0002	3 PLACES	± .005	± .0002	2 PLACES	± .005	± .0002	1 PLACE	± .005	± .0002	DIMENSION STYLE <b>IN/MM</b> DRAWN BY DATE SAMIEC 1993/07/15 CHECKED BY DATE PATEL 1993/07/15 APPROVED BY DATE LENZ 1993/07/15	SCALE --- DESIGN UNITS <b>INCH</b>	THIRD ANGLE PROJECTION 
		mm	INCH																	
	4 PLACES	± .005	± .0002																	
	3 PLACES	± .005	± .0002																	
2 PLACES	± .005	± .0002																		
1 PLACE	± .005	± .0002																		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. <b>SEE CHART</b>	TITLE <b>KK HEADER          (2.54)/.100 CENTERS          STD CATALOG PRODUCTS</b>	<b>MOLEX INCORPORATED</b>	SHEET NO. <b>2 OF 2</b>															
		SIZE 	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.

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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 <b>IN/MM</b>	SCALE --- INCH	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
	mm		INCH																							
	4 PLACES ±	---	±	---																						
	3 PLACES ±	---	±	---																						
2 PLACES ±	---	±	---																							
1 PLACE ±	---	±	---																							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY SAMIEC DATE 06/10/88	CHECKED BY PATEL DATE 06/10/88	APPROVED BY LENZ DATE 06/10/88	TITLE <b>KK 100 HEADER FLAT          CUSTOM PRODUCTS</b>	MATERIAL NO. <b>SEE CHART</b>	DOCUMENT NO. <b>SDA-4030-002</b>																				
SIZE C	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	SHEET NO. 1 OF 16																								
MOLEX MOLEX INCORPORATED																										