

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

**Part Number:** [0022102031](#)  
**Status:** **Active**  
**Description:** 2.54mm (.100") Pitch KK® Wire-to-Board Header, Single Row, Vertical, 3 Circuits, PA Polyamide Nylon, Gold (Au) Plating

**Documents:**

<a href="#">3D Model</a>	<a href="#">Product Specification PS-10-07 (PDF)</a>
<a href="#">Packaging Specification (PDF)</a>	<a href="#">RoHS Certificate of Compliance (PDF)</a>
<a href="#">Drawing (PDF)</a>	

**Agency Certification**

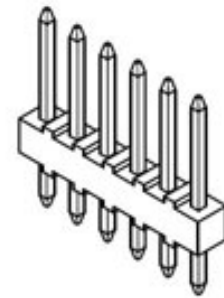
CSA	LR19980
UL	E29179

**General**

Product Family	PCB Headers
Series	<a href="#">4030</a>
Application	Board-to-Board, Wire-to-Board
Product Name	KK®

**Physical**

Breakaway	No
Circuits (Loaded)	3
Circuits (maximum)	3
Color - Resin	Natural (White)
Durability (mating cycles max)	100
Flammability	94V-0
Glow-Wire Compliant	No
Lock to Mating Part	None
Material - Metal	Brass
Material - Plating Mating	Gold
Material - Plating Termination	Gold
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)	20
Plating min: Mating (µm)	0.5
Plating min: Termination (µin)	20
Plating min: Termination (µm)	0.5
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



*image - Reference only*

*Series*

**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-4030-03A501

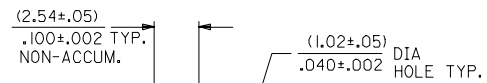
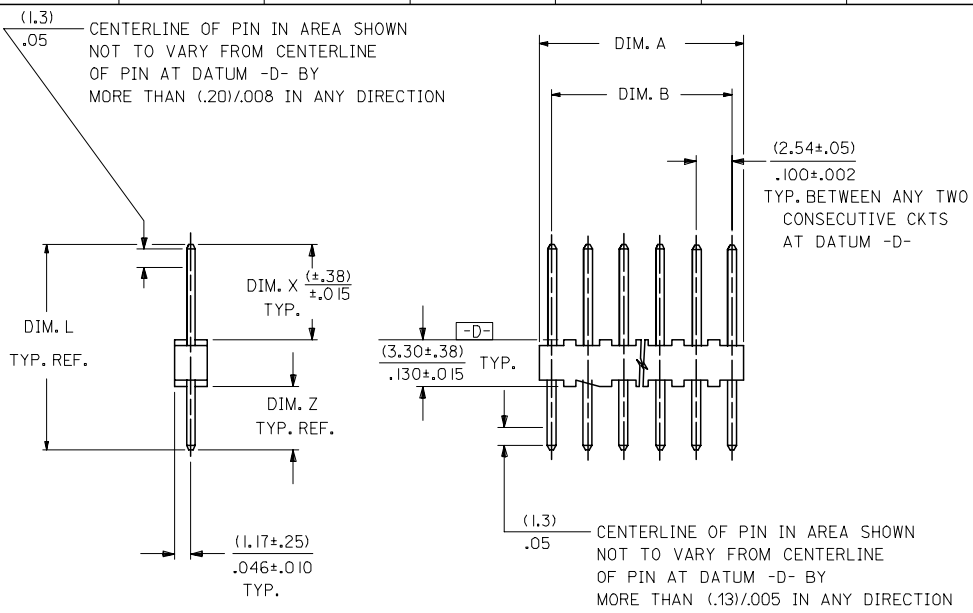
**Reference - Drawing Numbers**

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

This document was generated on 04/09/2010

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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	
	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.

<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> 	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b>		<b>DIMENSION STYLE</b> MM/IN		SCALE ---	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- ANGULAR ±1/2°	mm INCH DRAWN BY: SAMIEC CHECKED BY: PATEL APPROVED BY: LENZ DATE: 1988/06/10 DATE: 1988/06/10 DATE: 1988/06/10	<b>SEE CHART</b>		<b>MOLEX</b> MOLEX INCORPORATED		<b>SDA-4030</b>	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

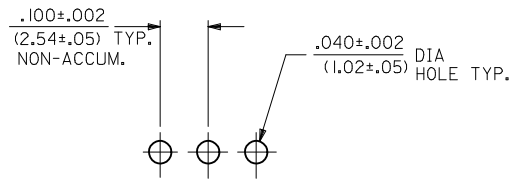
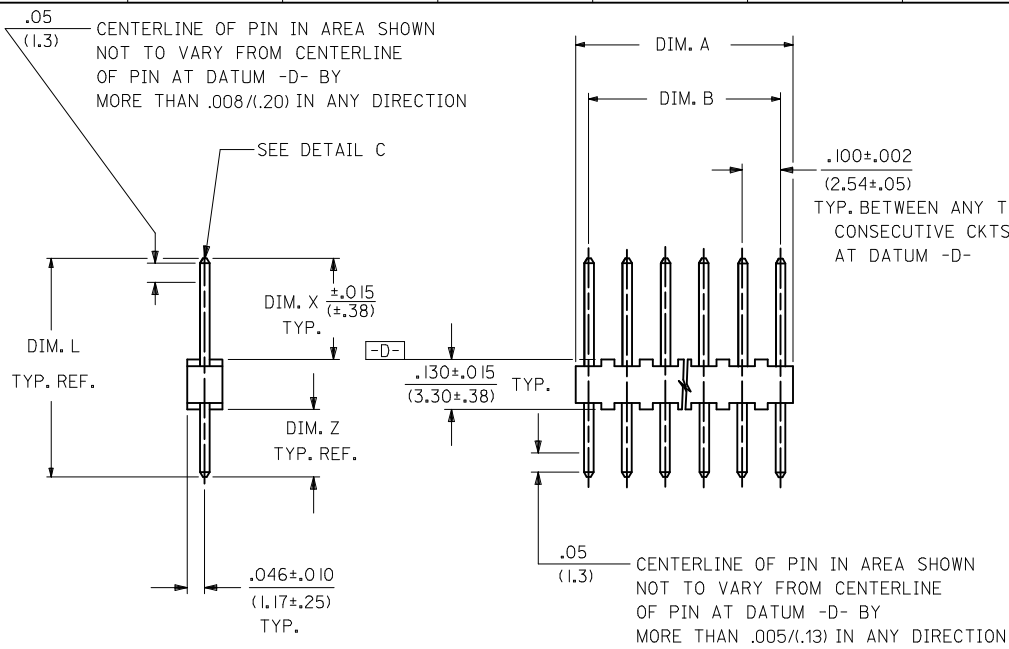
12 11 10 9 8 7 6 5 4 3 2 1

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.
22-03-202 I	A-4030-02A(102)
22-03-203 I	A-4030-03A(102)
22-03-204 I	A-4030-04A(102)
22-03-205 I	A-4030-05A(102)
22-03-206 I	A-4030-06A(102)
22-03-207 I	A-4030-07A(102)
22-03-208 I	A-4030-08A(102)
22-03-209 I	A-4030-09A(102)
22-03-210 I	A-4030-10A(102)
22-03-211 I	A-4030-11A(102)
22-03-212 I	A-4030-12A(102)
22-03-213 I	A-4030-13A(102)
22-03-214 I	A-4030-14A(102)
22-03-215 I	A-4030-15A(102)
22-03-216 I	A-4030-16A(102)
22-03-217 I	A-4030-17A(102)
22-03-218 I	A-4030-18A(102)
22-03-219 I	A-4030-19A(102)
22-03-220 I	A-4030-20A(102)
22-03-221 I	A-4030-21A(102)
22-03-222 I	A-4030-22A(102)
22-03-223 I	A-4030-23A(102)
22-03-224 I	A-4030-24A(102)
22-03-225 I	A-4030-25A(102)
22-03-226 I	A-4030-26A(102)
22-03-227 I	A-4030-27A(102)
22-03-228 I	A-4030-28A(102)

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 APPR:FSMITH 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>± .0004</td> </tr> <tr> <td>3 PLACES</td> <td>± .005</td> <td>± .0004</td> </tr> <tr> <td>2 PLACES</td> <td>± .005</td> <td>± .0004</td> </tr> <tr> <td>1 PLACE</td> <td>± .005</td> <td>± .0004</td> </tr> </table>		mm	INCH	4 PLACES	± .005	± .0004	3 PLACES	± .005	± .0004	2 PLACES	± .005	± .0004	1 PLACE	± .005	± .0004	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	TITLE <b>KK HEADER (2.54)/.100 CENTERS STD CATALOG PRODUCTS</b> <b>MOLEX INCORPORATED</b> DOCUMENT NO. <b>SDA-4030</b>	SHEET NO. <b>2 OF 2</b>
		mm	INCH																		
	4 PLACES	± .005	± .0004																		
	3 PLACES	± .005	± .0004																		
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MATERIAL NO. <b>SEE CHART</b>	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE <b>C</b>	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																		
<b>CH2</b>																					



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

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 )
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- 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.

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>mm</th><th>INCH</th></tr> <tr><td>4 PLACES ± ---</td><td>± ---</td></tr> <tr><td>3 PLACES ± ---</td><td>± ---</td></tr> <tr><td>2 PLACES ± ---</td><td>± ---</td></tr> <tr><td>1 PLACE ± ---</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 06/10/88	DATE 06/10/88	TITLE <b>KK 100 HEADER FLAT CUSTOM PRODUCTS</b>	MOLEX INCORPORATED	SHEET NO. 1 OF 16	SEE CHART <b>SDA-4030-002</b>										
MATERIAL NO. <b>SEE CHART</b>	APPROVED BY LENZ 06/10/88	DATE 06/10/88	MOLEX INCORPORATED	DOCUMENT NO. <b>SDA-4030-002</b>	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	MOLEX INCORPORATED										
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>mm</th><th>INCH</th></tr> <tr><td>4 PLACES ± ---</td><td>± ---</td></tr> <tr><td>3 PLACES ± ---</td><td>± ---</td></tr> <tr><td>2 PLACES ± ---</td><td>± ---</td></tr> <tr><td>1 PLACE ± ---</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 ± ---	± ---															