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Part Number: [0022102281](#)
Status: **Active**
Description: 2.54mm (.100") Pitch KK® Wire-to-Board Header, Single Row, Vertical, 28 Circuits, PA Polyamide Nylon, Gold (Au) Plating

Documents:

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

Agency Certification

CSA	LR19980
UL	E29179

General

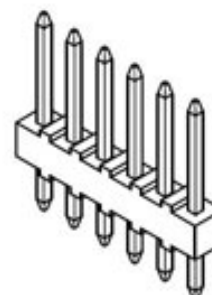
Product Family	PCB Headers
Series	4030
Application	Board-to-Board, Wire-to-Board
Product Name	KK®

Physical

Breakaway	No
Circuits (Loaded)	28
Circuits (maximum)	28
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 - 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)	0.50
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

Electrical

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



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
 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](#)

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-4030-28A501
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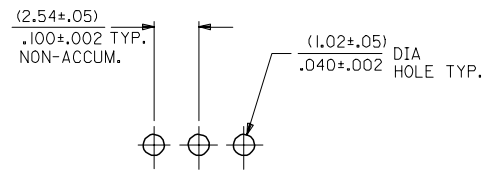
Reference - Drawing Numbers

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

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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.

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	MATERIAL NO. SEE CHART		DOCUMENT NO. SDA-4030	SHEET NO. 1 OF 2		

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

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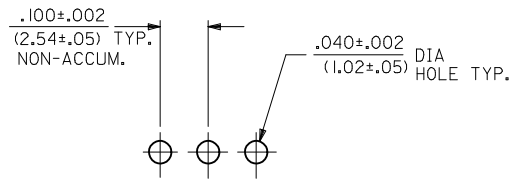
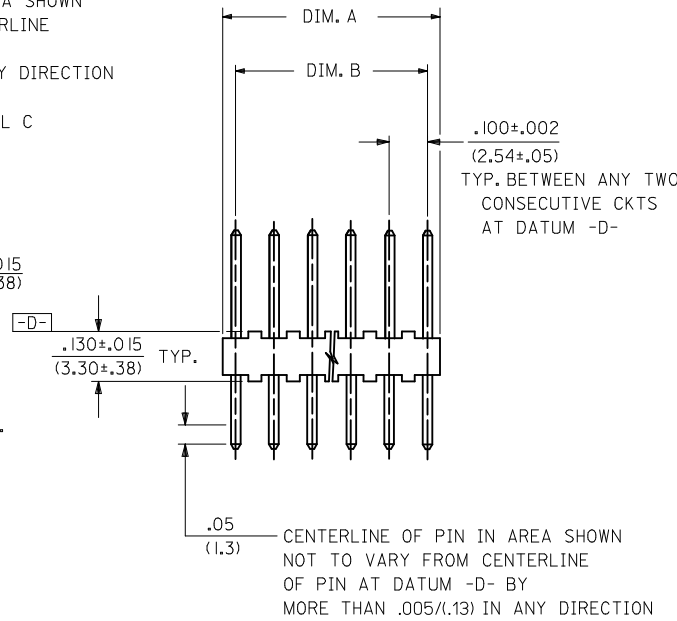
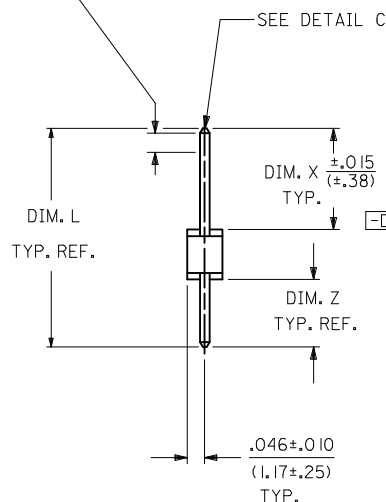
12 11 10 9 8 7 6 5 4 3 2 1

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.	NO OF CKTS	EDP NO.	ENG. NO.	NO OF CKTS	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 2007/10/11 APPR:FSM LTH 2007/10/12	QUALITY SYMBOLS =0 =0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM	SCALE ---	DESIGN UNITS INCH	THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± ---	mm INCH ± --- ± --- ± --- ± --- ± --- ± ---	DRAWN BY SAMIEC	DATE 1993/07/15	TITLE KK HEADER (2.54)/.100 CENTERS STD CATALOG PRODUCTS			
		ANGULAR ±1/2°		CHECKED BY PATEL	DATE 1993/07/15	MOLEX INCORPORATED			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY LENZ	DATE 1993/07/15	MATERIAL NO. SEE CHART	DOCUMENT NO. SDA-4030	SHEET NO. 2 OF 2	

.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 ±	---	±	---																							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY SAMIEC 06/10/88	DATE 06/10/88	TITLE KK 100 HEADER FLAT CUSTOM PRODUCTS	MOLEX INCORPORATED	SHEET NO. 1 OF 16	SEE CHART SDA-4030-002																				
MATERIAL NO. SEE CHART	APPROVED BY LENZ 06/10/88	DATE 06/10/88	MOLEX INCORPORATED	DOCUMENT NO.	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																					