

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

**Part Number:** [0022281023](#)  
**Status:** **Active**  
**Description:** 2.54mm (.100") Pitch KK® Header, Breakaway, Right Angle, with Friction Lock, 2 Circuits, Tin (Sn) Plating. with Kinked PC Tails

**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

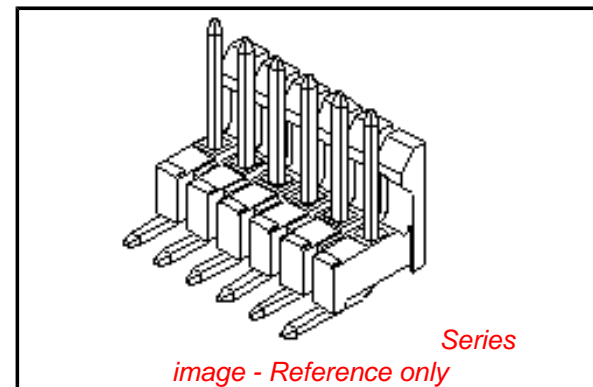
**General**

Product Family	PCB Headers
Series	<a href="#">42228</a>
Application	Wire-to-Board
Product Name	KK®

**Physical**

Breakaway	Yes
Circuits (Loaded)	2
Circuits (maximum)	2
Color - Resin	Black
Durability (mating cycles max)	25
Flammability	94V-0
Glow-Wire Compliant	No
Lock to Mating Part	Yes
Material - Metal	Brass
Material - Plating Mating	Tin
Material - Plating Termination	Tin
Material - Resin	Nylon
Number of Rows	1
Orientation	Right Angle
PC Tail Length (in)	0.120 In
PC Tail Length (mm)	3.05 mm
PCB Locator	No
PCB Retention	Yes
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)	100
Plating min: Mating (µm)	2.5
Plating min: Termination (µin)	100
Plating min: Termination (µm)	2.5
Polarized to Mating Part	Yes
Polarized to PCB	No
Shrouded	Partial
Stackable	No
Temperature Range - Operating	0°C to +75°C
Termination Interface: Style	Through Hole

**Electrical**



**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](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**

[42228Series](#)

**Mates With**

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

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	42228-0107
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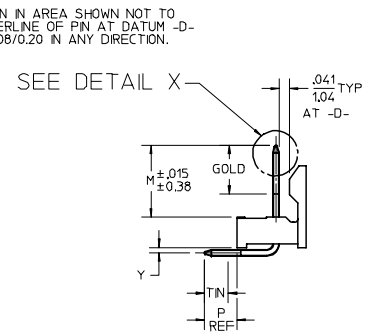
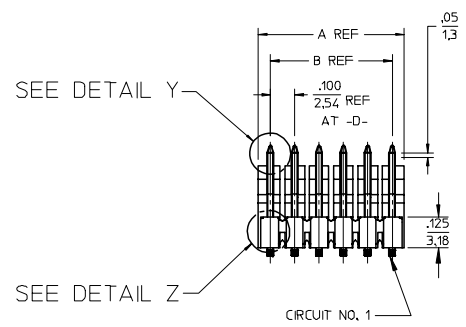
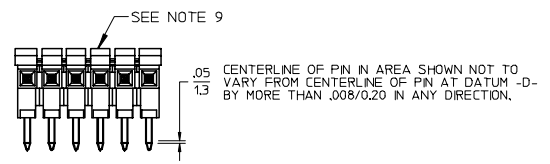
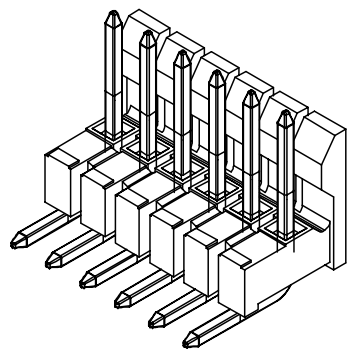
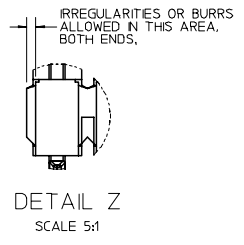
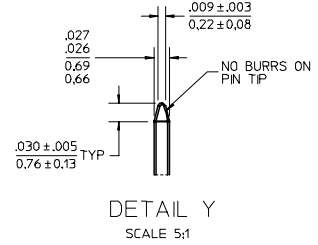
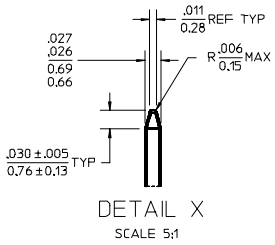
**Reference - Drawing Numbers**

Product Specification	PS-10-07
Sales Drawing	SD-42228-001, SD-42228-002

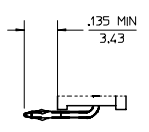
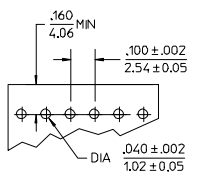
This document was generated on 03/22/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**

CKTS	DM A	DM B
2	.200/5.08	.100/2.54
3	.300/7.62	.200/5.08
4	.400/10.16	.300/7.62
5	.500/12.70	.400/10.16
6	.600/15.24	.500/12.70
7	.700/17.78	.600/15.24
8	.800/20.32	.700/17.78
9	.900/22.86	.800/20.32
10	1.000/25.40	.900/22.86
11	1.100/27.94	1.000/25.40
12	1.200/30.48	1.100/27.94
13	1.300/33.02	1.200/30.48
14	1.400/35.56	1.300/33.02
15	1.500/38.10	1.400/35.56
16	1.600/40.64	1.500/38.10
17	1.700/43.18	1.600/40.64
18	1.800/45.72	1.700/43.18
19	1.900/48.26	1.800/45.72
20	2.000/50.80	1.900/48.26
21	2.100/53.34	2.000/50.80
22	2.200/55.88	2.100/53.34
23	2.300/58.42	2.200/55.88
24	2.400/60.96	2.300/58.42
25	2.500/63.50	2.400/60.96
26	2.600/66.04	2.500/63.50
27	2.700/68.58	2.600/66.04
28	2.800/71.12	2.700/68.58
29	2.900/73.66	2.800/71.12
30	3.000/76.20	2.900/73.66
31	3.100/78.74	3.000/76.20
32	3.200/81.28	3.100/78.74
33	3.300/83.82	3.200/81.28
34	3.400/86.36	3.300/83.82
35	3.500/88.90	3.400/86.36
36	3.600/91.44	3.500/88.90



- NOTES:
- MATERIAL: GLASS FILLED NYLON, 94V-0, COLOR: BLACK
  - FINISH:
    - (154) \*OVERALL TIN: .000100/0.00254 MIN. OVER .000050/0.00127 MIN NICKEL.
    - (208) SELECT GOLD: .000015/0.00038 MIN. \*SELECT TIN: .000100/0.00254 MIN. OVERALL NICKEL UNDERPLATE: .000050/0.00127 MIN.
    - (228) SELECT GOLD: .000030/0.00076 MIN. \*SELECT TIN: .000100/0.00254 MIN. OVERALL NICKEL UNDERPLATE: .000050/0.00127 MIN.
  - THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC". CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH TIN-LEAD PLATING
  - PRODUCT SPECIFICATION: PS-10-07.
  - PACKAGING INFORMATION: SEE TABLES
  - KINK PIN SPECIFICATION: SEE SMES-42003
  - HEADERS ARE NOT STACKABLE ON .100/2.54 CENTERS.
  - SOLDERABILITY PER SMES-152.
  - PN PUSH OUT FORCE: 3 LBS. MIN.
  - ABRASION MARKS ON BACK WALL SURFACE ARE PERMISSIBLE.



RECOMMENDED PC BOARD LAYOUT

KINKED PIN DETAIL  
SEE NOTE 5

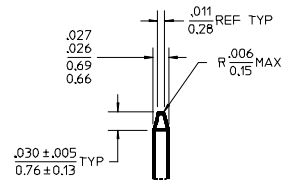
REV	DESCRIPTION	DATE	BY
L4	ADD NOTE 9	2006/02/07	UCP
	EC NO: UCP2006-1710	2006/02/07	UCP
	DRWN: ADERR	2006/02/07	UCP
	CHKD: LSCHM1DT	2006/02/07	UCP
	APPR: FSWJTH	2006/02/07	UCP

QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm	INCH
▽=0	4 PLACES ± ---	± ---
▽=0	3 PLACES ± ---	± .010
	2 PLACES ± 0.25	± .014
	1 PLACE ± 0.36	± ---
	ANGULAR ± 1/2°	

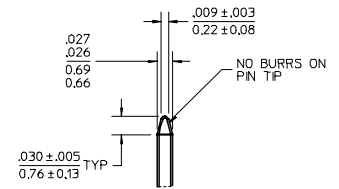
DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
IN/MM	IN/MM	2:1	INCH	THIRD ANGLE PROJECTION
DRAWN BY	DATE	TITLE		
JSCHAFFER	2004/03/18	.100 FRICTION LOCK BREAKAWAY HEADER ASSY		
CHECKED BY	DATE	MATERIAL NO.		
KSAMIEC	2004/03/18	SEE CHART		
APPROVED BY	DATE	DOCUMENT NO.		
MARGULIS	2004/03/18	SD-42228-001		

MATERIAL NO.		DOCUMENT NO.	SHEET NO.
SEE CHART		SD-42228-001	1 OF 4

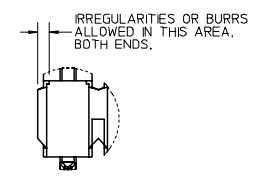
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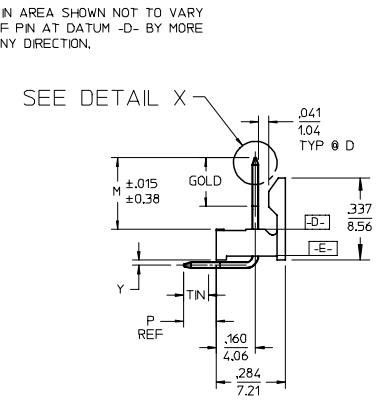
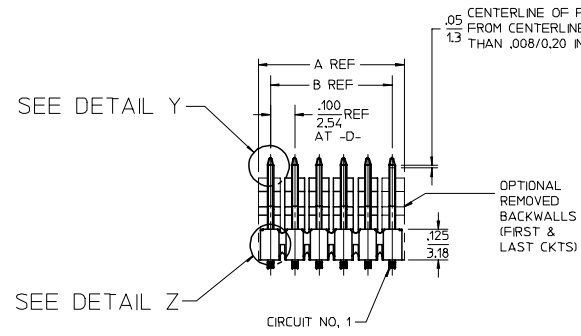
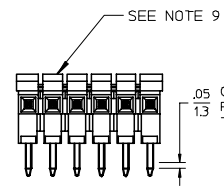
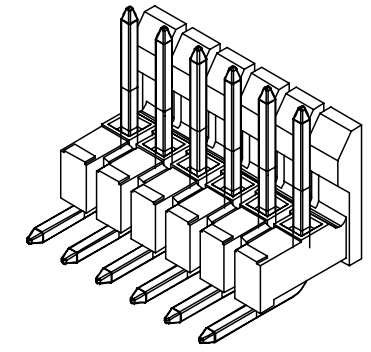
DETAIL X  
SCALE 5:1



DETAIL Y  
SCALE 5:1

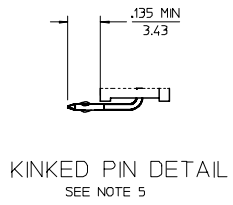
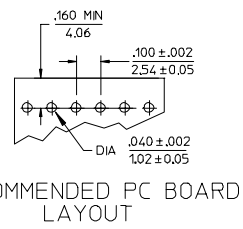


DETAIL Z  
SCALE 5:1



- NOTES:
- MATERIAL: GLASS FILLED NYLON, 94V-0, COLOR: BLACK
  - FINISH:
    - (154) \*OVERALL TIN: .000100/0.00254 MIN, OVER .000050/0.00127 MN NICKEL.
    - (208) SELECT GOLD: .000015/0.00038 MIN, \*SELECT TIN: .000100/0.00254 MIN, OVERALL NICKEL UNDERPLATE: .000050/0.00127 MN.
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  - PRODUCT SPECIFICATION: PS-10-07.
  - PACKAGING INFORMATION: SEE TABLES
  - KINK PIN SPECIFICATION: SEE SMES-42003
  - HEADERS ARE NOT STACKABLE ON .100/2.54 CENTERS.
  - SOLDERABILITY PER SMES-152.
  - PIN PUSH OUT FORCE: 3 LBS. MIN.
  - ABRASION MARKS ON BACK WALL SURFACE ARE PERMISSIBLE.

2--	L
1	L4
SHT	REV



ADD NOTE 9

EC NO: UCP2006-1710	2006/02/01
DRWN: ADERR	2006/02/02
CHKD: LSCHM1DT	2006/02/06
APPR: FSWJTH	2006/02/06

DESCRIPTION

QUALITY SYMBOLS
▽=0
▽=0
REV
L4

	GENERAL TOLERANCES (UNLESS SPECIFIED)	
	MM	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± .014
1 PLACE	± 0.36	± ---
ANGULAR		± 1/2°

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE	
IN/MM	
DRAWN BY	DATE
JSCHAFFER	2004/03/18
CHECKED BY	DATE
KSAMIEC	2004/03/18
APPROVED BY	DATE
MARGULIS	2004/03/18
MATERIAL NO.	SEE CHART

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
2:1	INCH	☉
TITLE		
.100 FRICTION LOCK BREAKAWAY HEADER ASSY		
MATERIAL NO. MOLEX INCORPORATED		
DOCUMENT NO. SD-42228-002		SHEET NO. 1 OF 6