

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

**Part Number:** [0022281103](#)  
**Status:** **Active**  
**Description:** 2.54mm (.100") Pitch KK® Header, Breakaway, Right Angle, with Friction Lock, 10 Circuits, Tin (Sn) Plating. with Kinked PC Tails

**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 [42228](#)  
 Application Wire-to-Board  
 Product Name KK®

**Physical**

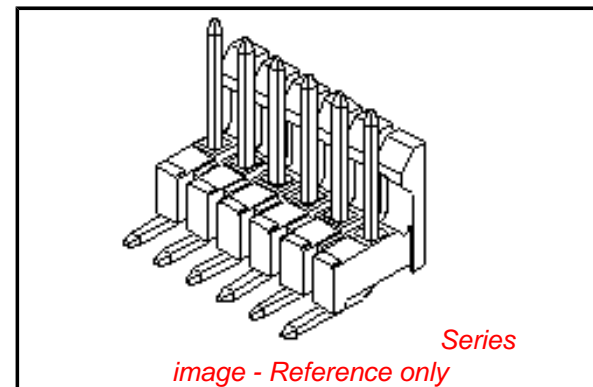
Breakaway Yes  
 Circuits (Loaded) 10  
 Circuits (maximum) 10  
 Durability (mating cycles max) 25  
 First Mate / Last Break No  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Guide to Mating Part No  
 Keying to Mating Part None  
 Lock to Mating Part Yes  
 Material - Plating Mating Tin  
 Number 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  
 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**

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)



**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](#)

Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	235

**Material Info**

Old Part Number	42228-0115
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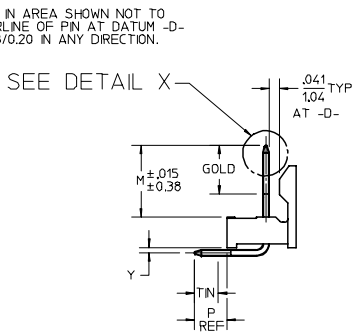
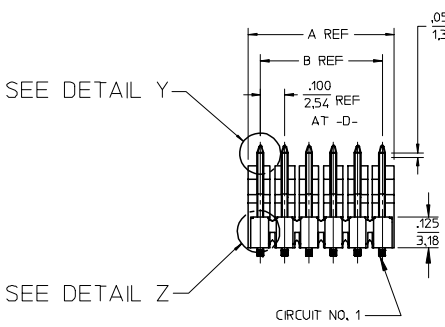
**Reference - Drawing Numbers**

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

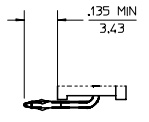
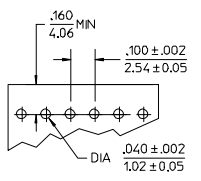
This document was generated on 03/22/2010

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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	APPR.
L4	ADD NOTE 9	2006/02/07	DRWN:ADERR
		2006/02/07	CHKD:LSCHM1DT
		2006/02/06	APPR:FSM1TH

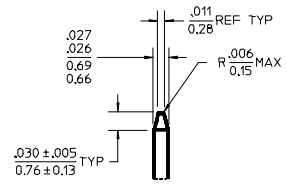
QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm	INCH
▽=0	4 PLACES ± ---	± ---
▽=0	3 PLACES ± ---	± .010
	2 PLACES ± 0.25	± .014
	1 PLACE ± 0.36	± ---
	ANGULAR ±1/2°	

DIMENSION STYLE		SCALE	DESIGN UNITS
IN/MM	IN/MM	2:1	INCH
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	

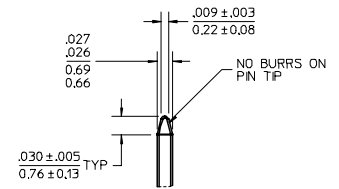
THIRD ANGLE PROJECTION	
SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION
B	

2-*	L
1	L4
SHT	REV

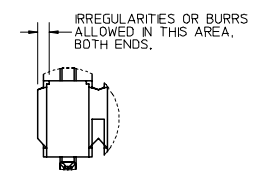
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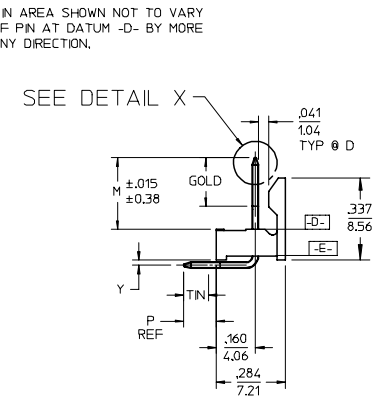
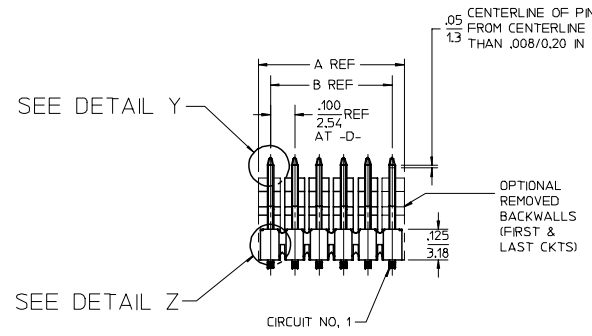
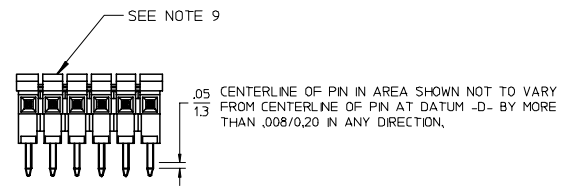
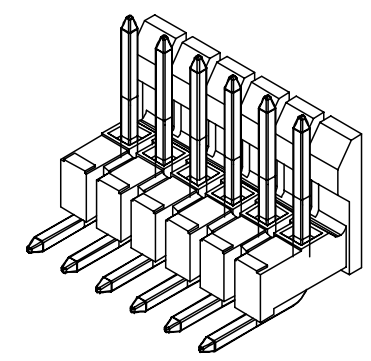
DETAIL X  
SCALE 5:1



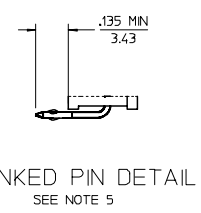
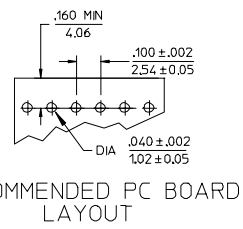
DETAIL Y  
SCALE 5:1



DETAIL Z  
SCALE 5:1



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ADD NOTE 9	DESCRIPTION
EC NO: UCP2006-1710	2006/02/01
DRW: ADERR	2006/02/02
CHKD: LSCHM1DT	2006/02/06
APPR: FSWJTH	2006/02/06
REV	
L4	

QUALITY SYMBOLS
▽=0
▽=0

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.	SHEET NO.	
SD-42228-002	1 OF 6	
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