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Part Number: [0022281363](#)
Status: **Active**
Description: 2.54mm (.100") Pitch KK® Header, Breakaway, Right Angle, with Friction Lock, 36 Circuits, Tin (Sn) Plating. with Kinked PC Tails

Documents:

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

Agency Certification

CSA	LR19980
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General

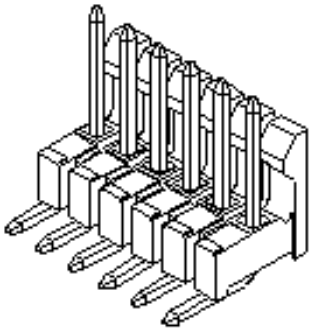
Product Family	PCB Headers
Series	42228
Application	Wire-to-Board
Product Name	KK®

Physical

Breakaway	Yes
Circuits (Loaded)	36
Circuits (maximum)	36
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

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

[42228Series](#)

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	42228-0141
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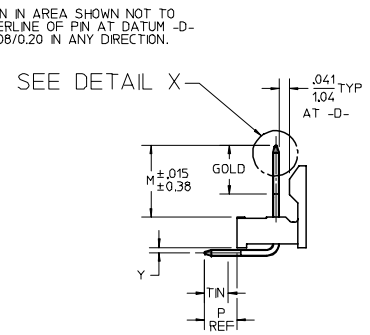
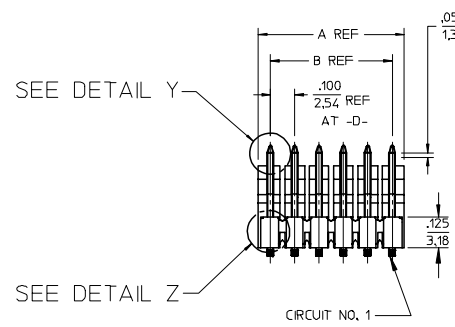
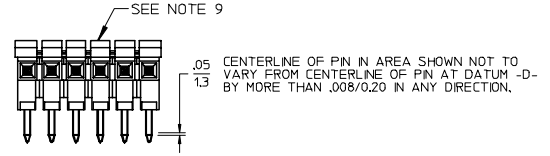
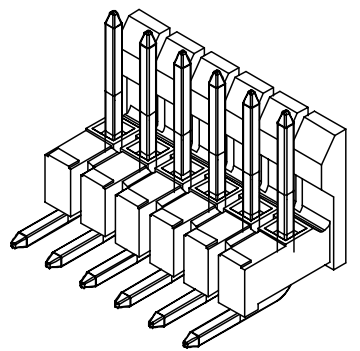
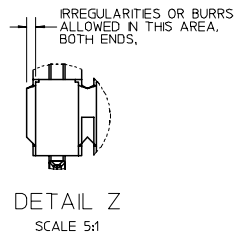
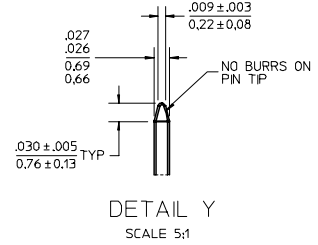
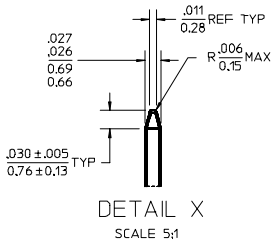
Reference - Drawing Numbers

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

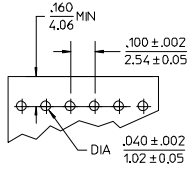
This document was generated on 04/12/2010

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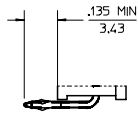
CKTS	DM A	DM B
2	.200/5.08	.100/2.54
3	.300/7.62	.200/5.08
4	.400/10.16	.300/7.62
5	.500/12.70	.400/10.16
6	.600/15.24	.500/12.70
7	.700/17.78	.600/15.24
8	.800/20.32	.700/17.78
9	.900/22.86	.800/20.32
10	1.000/25.40	.900/22.86
11	1.100/27.94	1.000/25.40
12	1.200/30.48	1.100/27.94
13	1.300/33.02	1.200/30.48
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.
 - PIN PUSH OUT FORCE: 3 LBS. MIN.
 - ABRASION MARKS ON BACK WALL SURFACE ARE PERMISSIBLE.



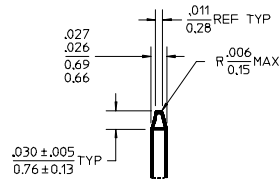
RECOMMENDED PC BOARD LAYOUT



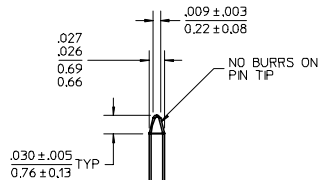
KINKED PIN DETAIL
SEE NOTE 5

ADD NOTE 9 EC NO: UCP2006-1710 DRAWN:ADERR 2006/02/01 CHKD:LSCHMI DT 2006/02/02 APPR:FSM TH 2006/02/06 REV	QUALITY SYMBOLS ▽=0 ◻=0	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 2:1	DESIGN UNITS INCH	 THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY	DATE	TITLE .100 FRICTION LOCK BREAKAWAY HEADER ASSY			
			4 PLACES ± ---	± ---	JSCHAFFER	2004/03/18				
			3 PLACES ± ---	± .010	CHECKED BY	DATE	MOLEX INCORPORATED			
			2 PLACES ± 0.25	± .014	KSAMIEC	2004/03/18				
			1 PLACE ± 0.36	± ---	APPROVED BY	DATE	DOCUMENT NO. SD-42228-001			
ANGULAR ± 1/2°		MARGULIS	2004/03/18	SHEET NO. 1 OF 4						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE CHART								
L4		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								

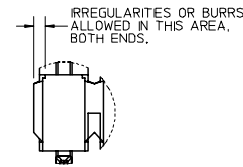
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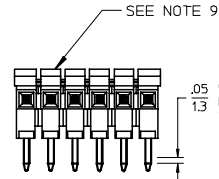
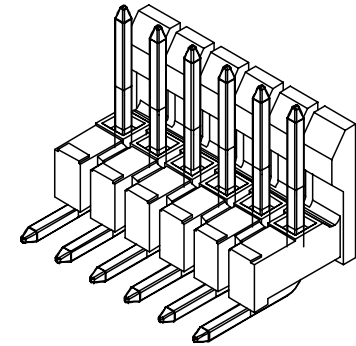
DETAIL X
SCALE 5:1



DETAIL Y
SCALE 5:1



DETAIL Z
SCALE 5:1



.05 CENTERLINE OF PIN IN AREA SHOWN NOT TO VARY FROM CENTERLINE OF PIN AT DATUM -D- BY MORE THAN .008/0.20 IN ANY DIRECTION.

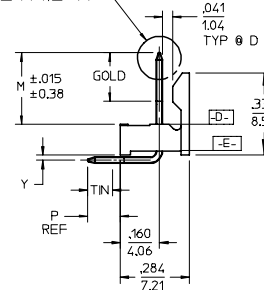
SEE DETAIL Y

SEE DETAIL X

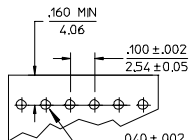
SEE DETAIL Z

CIRCUIT NO. 1

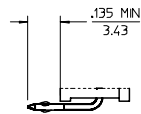
OPTIONAL REMOVED BACKWALLS (FIRST & LAST CKTS)



- NOTES:
 1. MATERIAL: GLASS FILLED NYLON, 94V-0, COLOR: BLACK
 2. FINISH:
 (154) *OVERALL TIN: .000100/0.00254 MIN.
 OVER .000050/0.00127 MIN NICKEL.
 (208) SELECT GOLD: .000015/0.00038 MIN.
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 OVERALL NICKEL UNDERPLATE: .000050/0.00127 MIN.
 (228) SELECT GOLD: .000030/0.00076 MIN.
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 *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
 3. PRODUCT SPECIFICATION: PS-10-07.
 4. PACKAGING INFORMATION: SEE TABLES
 5. KINK PIN SPECIFICATION: SEE SMES-42003
 6. HEADERS ARE NOT STACKABLE ON .100/2.54 CENTERS.
 7. SOLDERABILITY PER SMES-152.
 8. PIN PUSH OUT FORCE: 3 LBS. MIN.
 9. ABRASION MARKS ON BACK WALL SURFACE ARE PERMISSIBLE.



RECOMMENDED PC BOARD
LAYOUT



KINKED PIN DETAIL
SEE NOTE 5

ADD NOTE 9	EC NO: UCP2006-1710	2006/02/01
	DRWN: ADERR	2006/02/01
	CHKD: LSCHMIT	2006/02/02
	APPR: FSWITH	2006/02/06
REV	L4	

QUALITY SYMBOLS
▽=0
▽=0
DESCRIPTION
REV

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
SIZE	B

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