

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0022281034](#)
Status: **Active**
Description: 2.54mm (.100") Pitch KK® Header, Breakaway, Right Angle, with Friction Lock, 3 Circuits, 0.38µm (15µ") Gold (Au) Selective Plating, with Kinked PC Tails

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

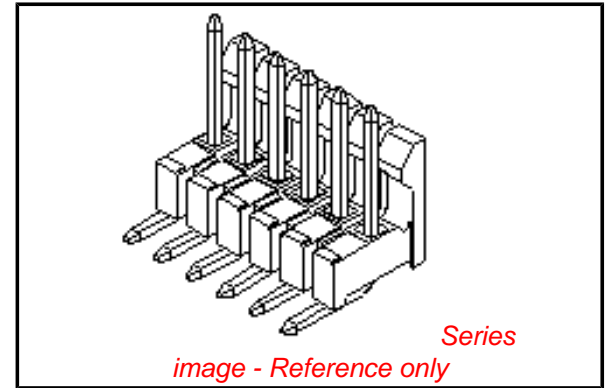
General

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

Physical

Breakaway	Yes
Circuits (Loaded)	3
Circuits (maximum)	3
Color - Resin	Black
Durability (mating cycles max)	100
Flammability	94V-0
Glow-Wire Compliant	No
Lock to Mating Part	Yes
Material - Metal	Brass
Material - Plating Mating	Gold
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)	15
Plating min: Mating (µm)	0.375
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
 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	42228-0143
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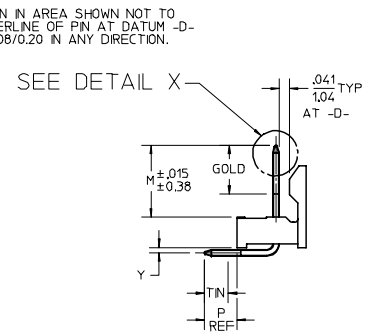
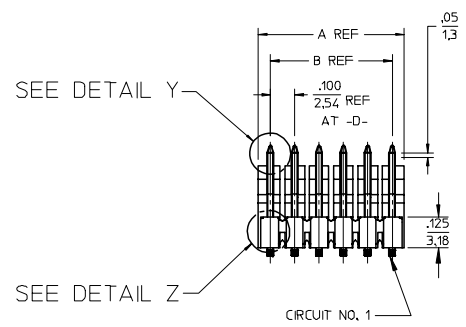
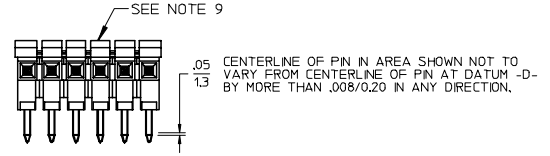
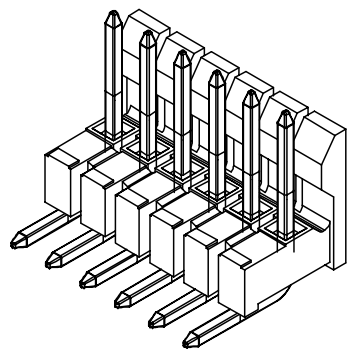
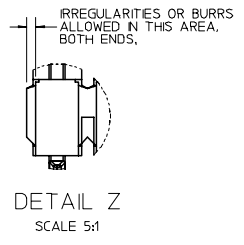
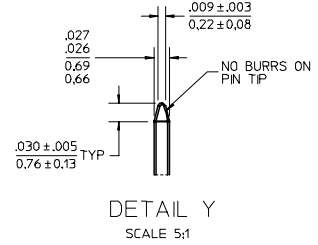
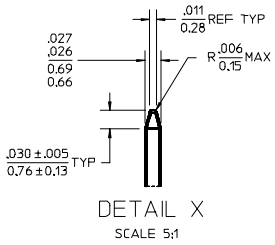
Reference - Drawing Numbers

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

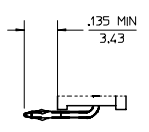
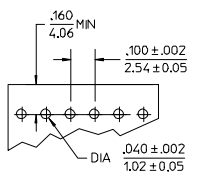
This document was generated on 03/22/2010

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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

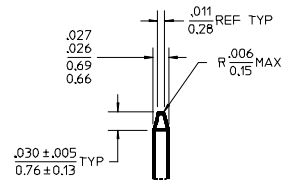
REV	DESCRIPTION	DATE	BY
L4	ADD NOTE 9	2006/02/07	UCP
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	DRWN: ADERR	2006/02/07	UCP
	CHKD: LSCHEM1 DT	2006/02/07	UCP
	APPR: FSWI TH	2006/02/07	UCP

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°	

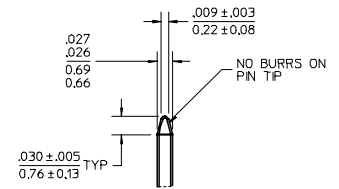
DIMENSION STYLE	
IN/MM	DATE
DRAWN BY JSCHAFFER	2004/03/18
CHECKED BY KSAMIEC	2004/03/18
APPROVED BY MARGULIS	2004/03/18
MATERIAL NO. SEE CHART	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
2:1	INCH	☉
.100 FRICTION LOCK BREAKAWAY HEADER ASSY		
MOLEX MOLEX INCORPORATED		
MATERIAL NO. SEE CHART	DOCUMENT NO. SD-42228-001	SHEET NO. 1 OF 4
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

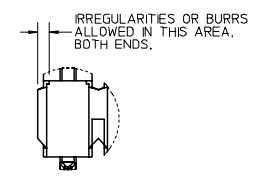
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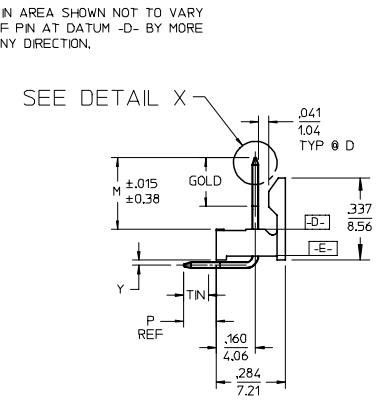
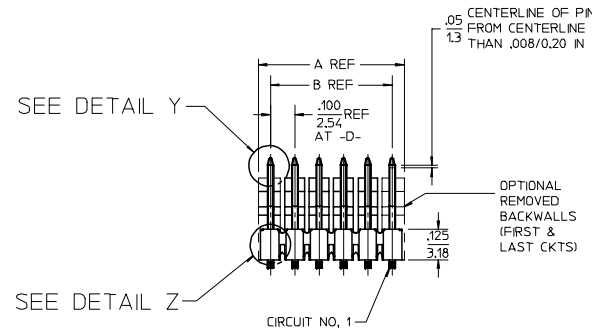
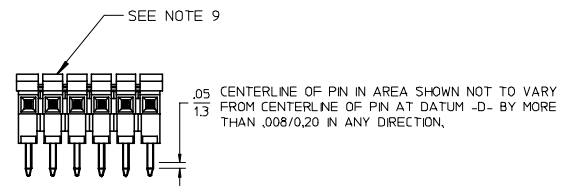
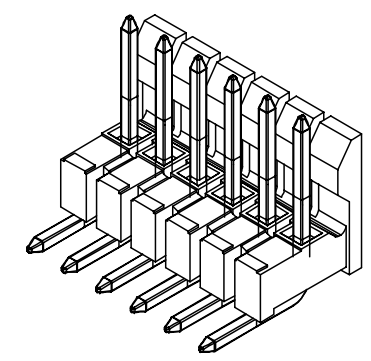
DETAIL X
SCALE 5:1



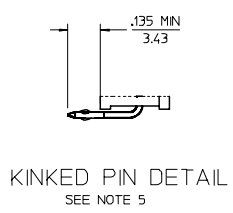
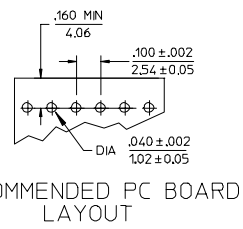
DETAIL Y
SCALE 5:1



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.
 - (228) SELECT GOLD: .000030/0.00076 MIN, *SELECT TIN: .000100/0.00254 MIN, OVERALL NICKEL UNDERPLATE: .000050/0.00127 MN.
 - 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.



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

QUALITY SYMBOLS
▽=0
▽=0

	GENERAL TOLERANCES (UNLESS SPECIFIED)	
	MM	INCH
4 PLACES	± .010	± .0004
3 PLACES	± .010	± .0004
2 PLACES	± 0.25	± .010
1 PLACE	± 0.36	± .014
ANGULAR		± 1/2°

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.	DOCUMENT NO.
SEE CHART	SD-42228-002

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
2:1	INCH	☉
.100 FRICTION LOCK BREAKAWAY HEADER ASSY		
MOLEX MOLEX INCORPORATED		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SHEET NO. 1 OF 6