

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0022281030](#)
Status: **Active**
Description: 2.54mm (.100") Pitch KK® Header, Breakaway, Right Angle, with Friction Lock, 3 Circuits, Tin (Sn) 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

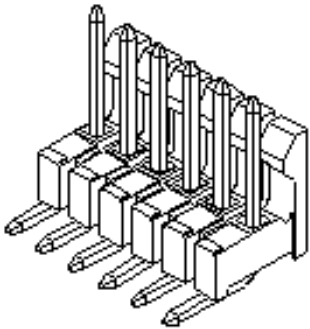
General

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

Physical

Breakaway	Yes
Circuits (Loaded)	3
Circuits (maximum)	3
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	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)	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



Series
image - Reference only

EU RoHS

**ELV and RoHS
Compliant**
**REACH SVHC
Contains SVHC: No**
**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](#)

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	42228-0003
Reference - Drawing Numbers	
Product Specification	PS-10-07
Sales Drawing	SD-42228-001, SD-42228-002, SD-42228-003

This document was generated on 03/22/2010

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A-42228-0002/0036						A-42228-0037/0071											
HEADER NUMBER:		41411				HEADER NUMBER:		41411									
PIN NUMBER:		42663-CKA154				PIN NUMBER:		42663-CKB208									
PIN LENGTH: L		.705/17.91				PIN LENGTH: L		.705/17.91									
MATING LENGTH: M		.295/7.49				MATING LENGTH: M		.295/7.49									
GOLD POINT: G		N/A				GOLD POINT: G		.140/3.56									
PC TAIL LENGTH: P		.120/3.05				PC TAIL LENGTH: P		.120/3.05									
TIN: T		OVERALL				TIN: T		.135/3.43									
DIMENSION Y		.022/0.56				DIMENSION Y		.022/0.56									
CKTS:		2-36				CKTS:		2-36									
KINKS:		NO				KINKS:		NO									
REMOVED BACKWALLS:		NO				REMOVED BACKWALLS:		NO									
VOIDED CKTS:		NONE				VOIDED CKTS:		NONE									
PACKAGING:		BULK 40873-0056				PACKAGING:		BULK 40873-0056									
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03	22-28-1030	A-42228-0003	21	22-28-1210	A-42228-0021	03	22-28-1031	A-42228-0038	21	22-28-1211	A-42228-0056						
04	22-28-1040	A-42228-0004	22	22-28-1220	A-42228-0022	04	22-28-1041	A-42228-0039	22	22-28-1221	A-42228-0057						
05	22-28-1050	A-42228-0005	23	22-28-1230	A-42228-0023	05	22-28-1051	A-42228-0040	23	22-28-1231	A-42228-0058						
06	22-28-1060	A-42228-0006	24	22-28-1240	A-42228-0024	06	22-28-1061	A-42228-0041	24	22-28-1241	A-42228-0059						
07	22-28-1070	A-42228-0007	25	22-28-1250	A-42228-0025	07	22-28-1071	A-42228-0042	25	22-28-1251	A-42228-0060						
08	22-28-1080	A-42228-0008	26	22-28-1260	A-42228-0026	08	22-28-1081	A-42228-0043	26	22-28-1261	A-42228-0061						
09	22-28-1090	A-42228-0009	27	22-28-1270	A-42228-0027	09	22-28-1091	A-42228-0044	27	22-28-1271	A-42228-0062						
10	22-28-1100	A-42228-0010	28	22-28-1280	A-42227-0028	10	22-28-1101	A-42228-0045	28	22-28-1281	A-42228-0063						
11	22-28-1110	A-42228-0011	29	22-28-1290	A-42228-0029	11	22-28-1111	A-42228-0046	29	22-28-1291	A-42228-0064						
12	22-28-1120	A-42228-0012	30	22-28-1300	A-42228-0030	12	22-28-1121	A-42228-0047	30	22-28-1301	A-42228-0065						
13	22-28-1130	A-42228-0013	31	22-28-1310	A-42228-0031	13	22-28-1131	A-42228-0048	31	22-28-1311	A-42228-0066						
14	22-28-1140	A-42228-0014	32	22-28-1320	A-42228-0032	14	22-28-1141	A-42228-0049	32	22-28-1321	A-42228-0067						
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17	22-28-1170	A-42228-0017	35	22-28-1350	A-42228-0035	17	22-28-1171	A-42228-0052	35	22-28-1351	A-42228-0070						
18	22-28-1180	A-42228-0018	36	22-28-1360	A-42228-0036	18	22-28-1181	A-42228-0053	36	22-28-1361	A-42228-0071						
19	22-28-1190	A-42228-0019				19	22-28-1191	A-42228-0054									
REV:						TITLE:		.100 FRICTION LOCK BREAKAWAY HEADER ASSY.				SHEET No. - 2 -					
DOCUMENT NUMBER:		SD- 42228 -001				CREATED / REVISED BY:		S. LINEHAN 03/04/2004		CHECKED BY:		K.SAMIEC 03/04/2004		APPROVED BY:		Y. MARGULIS 03/04/2004	
TEMPLATE FILENAME: PRODUCT_SPEC[SIZE_A](V.1).DOC																	

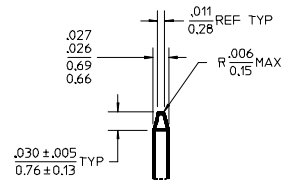
A-42228-0072/0106						A-42228-0107/0141					
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PIN NUMBER:		42663-CKB228				PIN NUMBER:		42663-CNA154			
PIN LENGTH: L		.705/17.91				PIN LENGTH: L		.720/18.29			
MATING LENGTH: M		.295/7.49				MATING LENGTH: M		.295/7.49			
GOLD POINT: G		.140/3.56				GOLD POINT: G		N/A			
PC TAIL LENGTH: P		.120/3.05				PC TAIL LENGTH: P		.135/3.43			
TIN: T		.135/3.43				TIN: T		OVERALL			
DIMENSION Y		.022/0.56				DIMENSION Y		.022/0.56			
CKTS:		2-36				CKTS:		2-36			
KINKS:		NO				KINKS:		YES ES-42003			
REMOVED BACKWALLS:		NO				REMOVED BACKWALLS:		NO			
VOIDED CKTS:		NONE				VOIDED CKTS:		NONE			
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03	22-28-1032	A-42228-0073	21	22-28-1212	A-42228-0091	03	22-28-1033	A-42228-0108	21	22-28-1213	A-42228-0126
04	22-28-1042	A-42228-0074	22	22-28-1222	A-42228-0092	04	22-28-1043	A-42228-0109	22	22-28-1223	A-42228-0127
05	22-28-1052	A-42228-0075	23	22-28-1232	A-42228-0093	05	22-28-1053	A-42228-0110	23	22-28-1233	A-42228-0128
06	22-28-1062	A-42228-0076	24	22-28-1242	A-42228-0094	06	22-28-1063	A-42228-0111	24	22-28-1243	A-42228-0129
07	22-28-1072	A-42228-0077	25	22-28-1252	A-42228-0095	07	22-28-1073	A-42228-0112	25	22-28-1253	A-42228-0130
08	22-28-1082	A-42228-0078	26	22-28-1262	A-42228-0096	08	22-28-1083	A-42228-0113	26	22-28-1263	A-42228-0131
09	22-28-1092	A-42228-0079	27	22-28-1272	A-42228-0097	09	22-28-1093	A-42228-0114	27	22-28-1273	A-42228-0132
10	22-28-1102	A-42228-0080	28	22-28-1282	A-42228-0098	10	22-28-1103	A-42228-0115	28	22-28-1283	A-42228-0133
11	22-28-1112	A-42228-0081	29	22-28-1292	A-42228-0099	11	22-28-1113	A-42228-0116	29	22-28-1293	A-42228-0134
12	22-28-1122	A-42228-0082	30	22-28-1302	A-42228-0100	12	22-28-1123	A-42228-0117	30	22-28-1303	A-42228-0135
13	22-28-1132	A-42228-0083	31	22-28-1312	A-42228-0101	13	22-28-1133	A-42228-0118	31	22-28-1313	A-42228-0136
14	22-28-1142	A-42228-0084	32	22-28-1322	A-42228-0102	14	22-28-1143	A-42228-0119	32	22-28-1323	A-42228-0137
15	22-28-1152	A-42228-0085	33	22-28-1332	A-42228-0103	15	22-28-1153	A-42228-0120	33	22-28-1333	A-42228-0138
16	22-28-1162	A-42228-0086	34	22-28-1342	A-42228-0104	16	22-28-1163	A-42228-0121	34	22-28-1343	A-42228-0139
17	22-28-1172	A-42228-0087	35	22-28-1352	A-42228-0105	17	22-28-1173	A-42228-0122	35	22-28-1353	A-42228-0140
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19	22-28-1192	A-42228-0089				19	22-28-1193	A-42228-0124			

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DOCUMENT NUMBER: SD- 42228 -001		CREATED / REVISED BY: S. LINEHAN 03/04/2004	CHECKED BY: K.SAMIEC 03/04/2004	APPROVED BY: Y. MARGULIS 03/04/2004	

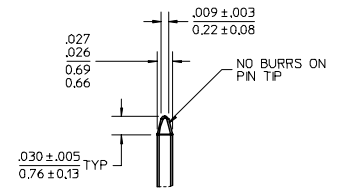
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PIN NUMBER:		42663-CNB208				PIN NUMBER:		42663-CNB228									
PIN LENGTH: L		.720/18.29				PIN LENGTH: L		.720/18.29									
MATING LENGTH: M		.295/7.49				MATING LENGTH: M		.295/7.49									
GOLD POINT: G		.140/3.56				GOLD POINT: G		.140/3.56									
PC TAIL LENGTH: P		.135/3.43				PC TAIL LENGTH: P		.135/3.43									
TIN: T		.135/3.43				TIN: T		.135/3.43									
DIMENSION Y		.022/0.56				DIMENSION Y		.022/0.56									
CKTS:		2-36				CKTS:		2-36									
KINKS:		YES ES-42003				KINKS:		YES ES-42003									
REMOVED BACKWALLS:		NO				REMOVED BACKWALLS:		NO									
VOIDED CKTS:		NONE				VOIDED CKTS:		NONE									
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03	22-28-1034	A-42228-0143	21	22-28-1214	A-42228-0161	03	22-28-1035	A-42228-0178	21	22-28-1215	A-42228-0196						
04	22-28-1044	A-42228-0144	22	22-28-1224	A-42228-0162	04	22-28-1045	A-42228-0179	22	22-28-1225	A-42228-0197						
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09	22-28-1094	A-42228-0149	27	22-28-1274	A-42228-0167	09	22-28-1095	A-42228-0184	27	22-28-1275	A-42228-0202						
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11	22-28-1114	A-42228-0151	29	22-28-1294	A-42228-0169	11	22-28-1115	A-42228-0186	29	22-28-1295	A-42228-0204						
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DOCUMENT NUMBER:		SD- 42228 -001				CREATED / REVISED BY:		S. LINEHAN 03/04/2004		CHECKED BY:		K.SAMIEC 03/04/2004		APPROVED BY:		Y. MARGULIS 03/04/2004	
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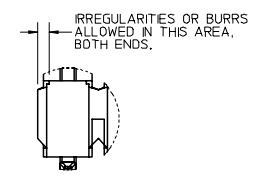
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2	.200/5.08	.100/2.54
3	.300/7.62	.200/5.08
4	.400/10.16	.300/7.62
5	.500/12.70	.400/10.16
6	.600/15.24	.500/12.70
7	.700/17.78	.600/15.24
8	.800/20.32	.700/17.78
9	.900/22.86	.800/20.32
10	1.000/25.40	.900/22.86
11	1.100/27.94	1.000/25.40
12	1.200/30.48	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



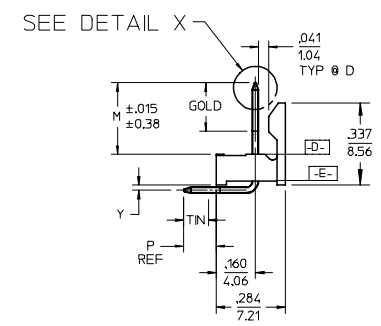
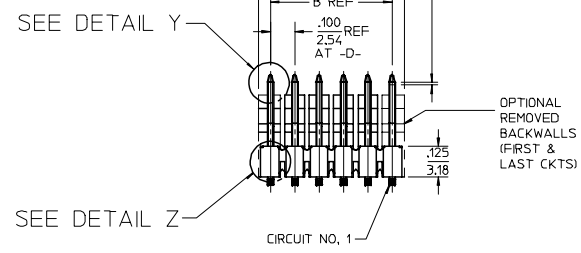
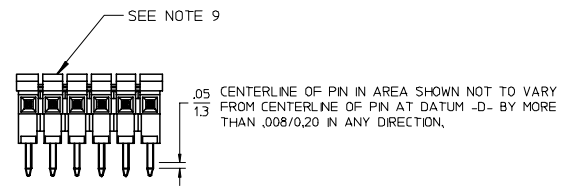
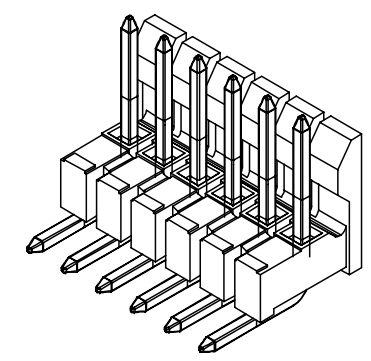
DETAIL X
SCALE 5:1



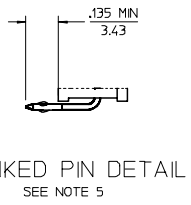
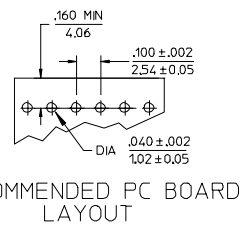
DETAIL Y
SCALE 5:1



DETAIL Z
SCALE 5:1



- 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. *SELECT TIN: .000100/0.00254 MIN.
 - (228) SELECT GOLD: .000030/0.00076 MIN. *SELECT TIN: .000100/0.00254 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
 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.



ADD NOTE 9 EC NO: UCP2006-1710 DRW:NADERR CHKD:LSCHMIT APPR:FSWTH 2006/02/01 2006/02/02 2006/02/06	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 JSCHAFFER	DATE 2004/03/18	TITLE .100 FRICTION LOCK BREAKAWAY HEADER ASSY		
			4 PLACES ± ---	± ---	CHECKED BY KSAMIEC	DATE 2004/03/18			
			3 PLACES ± ---	± .010	APPROVED BY MARGULIS	DATE 2004/03/18	MOLEX INCORPORATED		
			2 PLACES ± 0.25	± .014	MATERIAL NO. SEE CHART				
			1 PLACE ± 0.36	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

A-42228-0077						A-42228-0144					
HEADER NUMBER:		41411				HEADER NUMBER:		41411			
PIN NUMBER:		42663-CKB228				PIN NUMBER:		42663-CNB208			
PIN LENGTH: L		.705/17.91				PIN LENGTH: L		.720/18.29			
MATING LENGTH: M		.295/7.49				MATING LENGTH: M		.295/7.49			
GOLD POINT: G		.140/3.56				GOLD POINT: G		.140/3.56			
PC TAIL LENGTH: P		.120/3.05				PC TAIL LENGTH: P		.135/3.43			
TIN: T		.135/3.43				TIN: T		.135/3.43			
DIMENSION Y		.022/0.56				DIMENSION Y		.022/0.56			
CKTS:		2-36				CKTS:		2-36			
KINKS:		NO				KINKS:		YES ES-42003			
REMOVED BACKWALLS:		NO				REMOVED BACKWALLS:		NO			
VOIDED CKTS:		NONE				VOIDED CKTS:		NONE			
PACKAGING:		BULK 40873-0056				PACKAGING:		BULK 40873-0056			
CKTS	MATERIAL NUMBER	ENG NUMBER	CKTS	MATERIAL NUMBER	ENG NUMBER	CKTS	MATERIAL NUMBER	ENG NUMBER	CKTS	MATERIAL NUMBER	ENG NUMBER
02			20			02			20		
03			21			03			21		
04			22			04	50-29-1739	A-42228-0144	22		
05			23			05			23		
06			24			06			24		
07	50-29-1881	A-42228-0077	25			07			25		
08			26			08			26		
09			27			09			27		
10			28			10			28		
11			29			11			29		
12			30			12			30		
13			31			13			31		
14			32			14			32		
15			33			15			33		
16			34			16			34		
17			35			17			35		
18			36			18			36		
19						19					

REV:		TITLE:	.100 FRICTION LOCK BREAKAWAY HEADER ASSY. LEAD-FREE	SHEET No.
A2				- 2 -
DOCUMENT NUMBER:	SD- 42228 -003	CREATED / REVISED BY:	DPETERSON 09/26/2005	CHECKED BY:
			ADERR 09/26/2005	APPROVED BY:
				FSMITH 09/26/2005

TEMPLATE FILENAME: PRODUCT_SPEC[SIZE_A](V.1).DOC