

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0022280052](#)
Status: **Active**
Description: 2.54mm (.100") Pitch KK® Header, Breakaway, Vertical, with Friction Lock, 5 Circuits, 0.76µm (30µ") Gold (Au) Selective 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	42227
Application	Wire-to-Board
Product Name	KK®

Physical

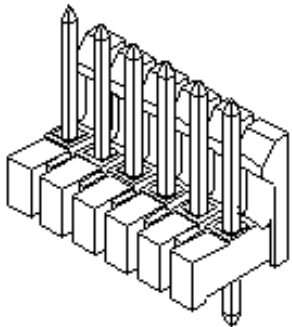
Breakaway	Yes
Circuits (Loaded)	5
Circuits (maximum)	5
Durability (mating cycles max)	100
First Mate / Last Break	No
Flammability	94V-0
Glow-Wire Compliant	No
Guide to Mating Part	No
Keying to Mating Part	None
Lock to Mating Part	Yes
Material - Plating Mating	Gold
Number of Rows	1
Orientation	Vertical
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
Polarized to Mating Part	No
Polarized to PCB	No
Shrouded	No
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)



*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.

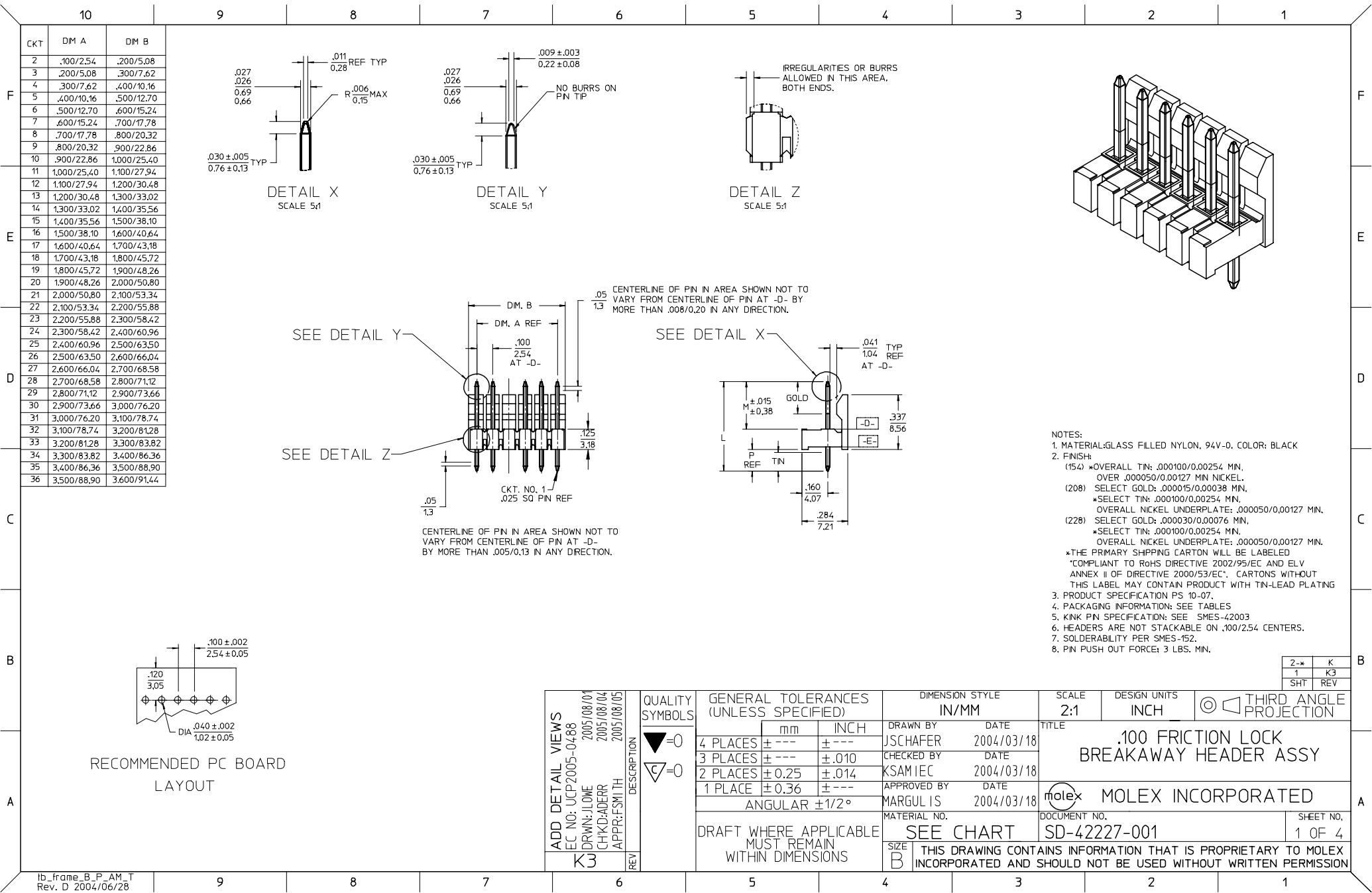
Search Parts in this Series
[42227Series](#)

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

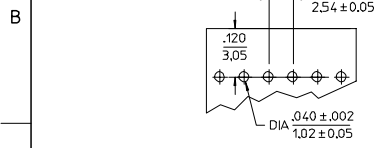
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	235
Material Info	
Old Part Number	42227-0075
Reference - Drawing Numbers	
Product Specification	PS-10-07
Sales Drawing	SD-42227-001

This document was generated on 03/21/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION



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



RECOMMENDED PC BOARD LAYOUT

- 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, 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
 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.

2-*	K
1	K3
SHT	REV

ADD DETAIL VIEWS EC NO: UCP2005-0488 DRWN: JLOWE 2005/08/01 CHKD: ADERR 2005/08/04 APPR: FSWITH 2005/08/05		DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 2:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
K3	REV				mm	INCH	DRAWN BY	DATE	.100 FRICTION LOCK BREAKAWAY HEADER ASSY		
				4 PLACES	± ---	± ---	JSCHAFER	2004/03/18			
				3 PLACES	± ---	± .010	CHECKED BY	DATE	MOLEX MOLEX INCORPORATED		
				2 PLACES	± 0.25	± .014	KSAMIEC	2004/03/18			
				1 PLACE	± 0.36	± ---	APPROVED BY	DATE			
ANGULAR ±1/2°		MARGULIS	2004/03/18	SHEET NO. 1 OF 4							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				MATERIAL NO.		SEE CHART					
				SIZE B		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

A-42227-0002/0036											
HEADER NUMBER:		41411									
PIN NUMBER:		42663-AXA154									
PIN LENGTH: L		.540/13.72									
MATING LENGTH: M		.295/7.49									
GOLD POINT: G		N/A									
PC TAIL LENGTH: P		.120/3.05									
TIN: T		OVERALL									
CKTS:		2-36									
KINKS:		NO									
REMOVED BACKWALLS:		NO									
VOIDED CKTS:		NONE									
PACKAGING:		BULK 40873-0056									
CKTS	MATERIAL NUMBER	ENG NUMBER	CKTS	MATERIAL NUMBER	ENG NUMBER						
02	22-28-0020	A-42227-0002	20	22-28-0200	A-42227-0020						
03	22-28-0030	A-42227-0003	21	22-28-0210	A-42227-0021						
04	22-28-0040	A-42227-0004	22	22-28-0220	A-42227-0022						
05	22-28-0050	A-42227-0005	23	22-28-0230	A-42227-0023						
06	22-28-0060	A-42227-0006	24	22-28-0240	A-42227-0024						
07	22-28-0070	A-42227-0007	25	22-28-0250	A-42227-0025						
08	22-28-0080	A-42227-0008	26	22-28-0260	A-42227-0026						
09	22-28-0090	A-42227-0009	27	22-28-0270	A-42227-0027						
10	22-28-0100	A-42227-0010	28	22-28-0280	A-42227-0028						
11	22-28-0110	A-42227-0011	29	22-28-0290	A-42227-0029						
12	22-28-0120	A-42227-0012	30	22-28-0300	A-42227-0030						
13	22-28-0130	A-42227-0013	31	22-28-0310	A-42227-0031						
14	22-28-0140	A-42227-0014	32	22-28-0320	A-42227-0032						
15	22-28-0150	A-42227-0015	33	22-28-0330	A-42227-0033						
16	22-28-0160	A-42227-0016	34	22-28-0340	A-42227-0034						
17	22-28-0170	A-42227-0017	35	22-28-0350	A-42227-0035						
18	22-28-0180	A-42227-0018	36	22-28-0360	A-42227-0036						
19	22-28-0190	A-42227-0019									
A-42227-0037/0071											
HEADER NUMBER:		41411									
PIN NUMBER:		42663-AXB208									
PIN LENGTH: L		.540/13.72									
MATING LENGTH: M		.295/7.49									
GOLD POINT: G		.180/4.57									
PC TAIL LENGTH: P		.120/3.05									
TIN: T		.135/3.43									
CKTS:		2-36									
KINKS:		NO									
REMOVED BACKWALLS:		NO									
VOIDED CKTS:		NONE									
PACKAGING:		BULK 40873-0056									
CKTS	MATERIAL NUMBER	ENG NUMBER	CKTS	MATERIAL NUMBER	ENG NUMBER						
02	22-28-0021	A-42227-0037	20	22-28-0201	A-42227-0055						
03	22-28-0031	A-42227-0038	21	22-28-0211	A-42227-0056						
04	22-28-0041	A-42227-0039	22	22-28-0221	A-42227-0057						
05	22-28-0051	A-42227-0040	23	22-28-0231	A-42227-0058						
06	22-28-0061	A-42227-0041	24	22-28-0241	A-42227-0059						
07	22-28-0071	A-42227-0042	25	22-28-0251	A-42227-0060						
08	22-28-0081	A-42227-0043	26	22-28-0261	A-42227-0061						
09	22-28-0091	A-42227-0044	27	22-28-0271	A-42227-0062						
10	22-28-0101	A-42227-0045	28	22-28-0281	A-42227-0063						
11	22-28-0111	A-42227-0046	29	22-28-0291	A-42227-0064						
12	22-28-0121	A-42227-0047	30	22-28-0301	A-42227-0065						
13	22-28-0131	A-42227-0048	31	22-28-0311	A-42227-0066						
14	22-28-0141	A-42227-0049	32	22-28-0321	A-42227-0067						
15	22-28-0151	A-42227-0050	33	22-28-0331	A-42227-0068						
16	22-28-0161	A-42227-0051	34	22-28-0341	A-42227-0069						
17	22-28-0171	A-42227-0052	35	22-28-0351	A-42227-0070						
18	22-28-0181	A-42227-0053	36	22-28-0361	A-42227-0071						
19	22-28-0191	A-42227-0054									
REV:		SEE SHEET 1			TITLE: .100 FRICTION LOCK BREAKAWAY HEADER ASSY.					SHEET No. - 2 -	
K											
DOCUMENT NUMBER:					CREATED / REVISED BY:			CHECKED BY:		APPROVED BY:	
SD- 42227 -001					S. LINEHAN 03/04/2004			K.SAMIEC 03/04/2004		Y. MARGULIS 03/04/2004	
TEMPLATE FILENAME: PRODUCT_SPEC[SIZE_A](V.1).DOC											

A-42227-0072/0106						A-42227-0107/0141							
HEADER NUMBER:		41411				HEADER NUMBER:		41411					
PIN NUMBER:		42663-AXB228				PIN NUMBER:		42663-BAA154					
PIN LENGTH: L		.540/13.72				PIN LENGTH: L		.555/14.10					
MATING LENGTH: M		.295/7.49				MATING LENGTH: M		.295/7.49					
GOLD POINT: G		.180/4.57				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					
CKTS:		2-36				CKTS:		2-36					
KINKS:		NO				KINKS:		YES					
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	22-28-0022	A-42227-0072	20	22-28-0202	A-42227-0090	02	22-28-0023	A-42227-0107	20	22-28-0203	A-42227-0125		
03	22-28-0032	A-42227-0073	21	22-28-0212	A-42227-0091	03	22-28-0033	A-42227-0108	21	22-28-0213	A-42227-0126		
04	22-28-0042	A-42227-0074	22	22-28-0222	A-42227-0092	04	22-28-0043	A-42227-0109	22	22-28-0223	A-42227-0127		
05	22-28-0052	A-42227-0075	23	22-28-0232	A-42227-0093	05	22-28-0053	A-42227-0110	23	22-28-0233	A-42227-0128		
06	22-28-0062	A-42227-0076	24	22-28-0242	A-42227-0094	06	22-28-0063	A-42227-0111	24	22-28-0243	A-42227-0129		
07	22-28-0072	A-42227-0077	25	22-28-0252	A-42227-0095	07	22-28-0073	A-42227-0112	25	22-28-0253	A-42227-0130		
08	22-28-0082	A-42227-0078	26	22-28-0262	A-42227-0096	08	22-28-0083	A-42227-0113	26	22-28-0263	A-42227-0131		
09	22-28-0092	A-42227-0079	27	22-28-0272	A-42227-0097	09	22-28-0093	A-42227-0114	27	22-28-0273	A-42227-0132		
10	22-28-0102	A-42227-0080	28	22-28-0282	A-42227-0098	10	22-28-0103	A-42227-0115	28	22-28-0283	A-42227-0133		
11	22-28-0112	A-42227-0081	29	22-28-0292	A-42227-0099	11	22-28-0113	A-42227-0116	29	22-28-0293	A-42227-0134		
12	22-28-0122	A-42227-0082	30	22-28-0302	A-42227-0100	12	22-28-0123	A-42227-0117	30	22-28-0303	A-42227-0135		
13	22-28-0132	A-42227-0083	31	22-28-0312	A-42227-0101	13	22-28-0133	A-42227-0118	31	22-28-0313	A-42227-0136		
14	22-28-0142	A-42227-0084	32	22-28-0322	A-42227-0102	14	22-28-0143	A-42227-0119	32	22-28-0323	A-42227-0137		
15	22-28-0152	A-42227-0085	33	22-28-0332	A-42227-0103	15	22-28-0153	A-42227-0120	33	22-28-0333	A-42227-0138		
16	22-28-0162	A-42227-0086	34	22-28-0342	A-42227-0104	16	22-28-0163	A-42227-0121	34	22-28-0343	A-42227-0139		
17	22-28-0172	A-42227-0087	35	22-28-0352	A-42227-0105	17	22-28-0173	A-42227-0122	35	22-28-0353	A-42227-0140		
18	22-28-0182	A-42227-0088	36	22-28-0362	A-42227-0106	18	22-28-0183	A-42227-0123	36	22-28-0363	A-42227-0141		
19	22-28-0192	A-42227-0089				19	22-28-0193	A-42227-0124					
REV:		SEE SHEET 1				TITLE:				SHEET No.			
K						.100 FRICTION LOCK BREAKAWAY HEADER ASSY.				- 3 -			
DOCUMENT NUMBER:					CREATED / REVISED BY:			CHECKED BY:			APPROVED BY:		
SD- 42227 -001					S. LINEHAN 03/04/2004			K.SAMIEC 03/04/2004			Y. MARGULIS 03/04/2004		
TEMPLATE FILENAME: PRODUCT_SPEC[SIZE_A](V.1).DOC													

A-42227-0142/0176						A-42227-0177/0211							
HEADER NUMBER:		41411				HEADER NUMBER:		41411					
PIN NUMBER:		42663-BAB208				PIN NUMBER:		42663-BAB228					
PIN LENGTH: L		.555/14.10				PIN LENGTH: L		.555/14.10					
MATING LENGTH: M		.295/7.49				MATING LENGTH: M		.295/7.49					
GOLD POINT: G		.180/4.57				GOLD POINT: G		.180/4.57					
PC TAIL LENGTH: P		.135/3.43				PC TAIL LENGTH: P		.135/3.43					
TIN: T		.135/3.43				TIN: T		.135/3.43					
CKTS:		2-36				CKTS:		2-36					
KINKS:		YES				KINKS:		YES					
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	22-28-0024	A-42227-0142	20	22-28-0204	A-42227-0160	02	22-28-0025	A-42227-0177	20	22-28-0205	A-42227-0195		
03	22-28-0034	A-42227-0143	21	22-28-0214	A-42227-0161	03	22-28-0035	A-42227-0178	21	22-28-0215	A-42227-0196		
04	22-28-0044	A-42227-0144	22	22-28-0224	A-42227-0162	04	22-28-0045	A-42227-0179	22	22-28-0225	A-42227-0197		
05	22-28-0054	A-42227-0145	23	22-28-0234	A-42227-0163	05	22-28-0055	A-42227-0180	23	22-28-0235	A-42227-0198		
06	22-28-0064	A-42227-0146	24	22-28-0244	A-42227-0164	06	22-28-0065	A-42227-0181	24	22-28-0245	A-42227-0199		
07	22-28-0074	A-42227-0147	25	22-28-0254	A-42227-0165	07	22-28-0075	A-42227-0182	25	22-28-0255	A-42227-0200		
08	22-28-0084	A-42227-0148	26	22-28-0264	A-42227-0166	08	22-28-0085	A-42227-0183	26	22-28-0265	A-42227-0201		
09	22-28-0094	A-42227-0149	27	22-28-0274	A-42227-0167	09	22-28-0095	A-42227-0184	27	22-28-0275	A-42227-0202		
10	22-28-0104	A-42227-0150	28	22-28-0284	A-42227-0168	10	22-28-0105	A-42227-0185	28	22-28-0285	A-42227-0203		
11	22-28-0114	A-42227-0151	29	22-28-0294	A-42227-0169	11	22-28-0115	A-42227-0186	29	22-28-0295	A-42227-0204		
12	22-28-0124	A-42227-0152	30	22-28-0304	A-42227-0170	12	22-28-0125	A-42227-0187	30	22-28-0305	A-42227-0205		
13	22-28-0134	A-42227-0153	31	22-28-0314	A-42227-0171	13	22-28-0135	A-42227-0188	31	22-28-0315	A-42227-0206		
14	22-28-0144	A-42227-0154	32	22-28-0324	A-42227-0172	14	22-28-0145	A-42227-0189	32	22-28-0325	A-42227-0207		
15	22-28-0154	A-42227-0155	33	22-28-0334	A-42227-0173	15	22-28-0155	A-42227-0190	33	22-28-0335	A-42227-0208		
16	22-28-0164	A-42227-0156	34	22-28-0344	A-42227-0174	16	22-28-0165	A-42227-0191	34	22-28-0345	A-42227-0209		
17	22-28-0174	A-42227-0157	35	22-28-0354	A-42227-0175	17	22-28-0175	A-42227-0192	35	22-28-0355	A-42227-0210		
18	22-28-0184	A-42227-0158	36	22-28-0364	A-42227-0176	18	22-28-0185	A-42227-0193	36	22-28-0365	A-42227-0211		
19	22-28-0194	A-42227-0159				19	22-28-0195	A-42227-0194					
REV:		SEE SHEET 1		TITLE:				.100 FRICTION LOCK BREAKAWAY HEADER ASSY.				SHEET No. - 4 -	
DOCUMENT NUMBER: SD- 42227 -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													