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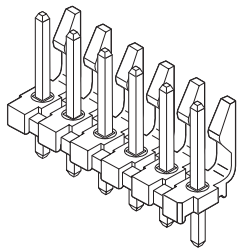
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Jameco Part Number 1931018

3.96mm (.156") Pitch KK® Breakaway Header

41671/41711

Vertical, Friction Lock



Features and Benefits

- Sizes 2 to 24 circuits available
- Optional voided circuits available
- Various pin lengths available (contact Molex)
- May be purchased in full 24 circuit sticks and broken into required circuit sizes
- Passive locking feature is used to maintain interconnection and is ideal for high vibration applications

Reference Information

Product Specification: PS-41186/08-50
Packaging: Bag
Tooling Information: See cutting tool section
UL File No.: E29179
CSA File No.: LR19980
TUV File No.: R75108
Mates With: 2139, 2145, 3069, 3215, 6442, 7674, 7675, 41695 and 41815
Designed In: Inches

Electrical

Voltage: 250V AC max.
Current: 7.0A max.*
Contact Resistance: 6 milliohms max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K Megohms min.

Mechanical

Durability: Tin—25 cycles max.
Gold—100 cycles max.

Physical

Housing: Polyester, UL 94V-0
Contact: Brass, 1.14mm (.045") pins
Plating: See Table
Operating Temperature: 0 to +75°C

Circuits	Order No.					Lead-free
	Square Pin			Round Pin		
	Tin	15 _µ " Select Gold	30 _µ " Select Gold	Tin	Overall Gold	
2	26-48-1025	41671-0001	41671-0024	26-51-0022	26-51-2022	Yes
3	26-48-1035	41671-0002	41671-0025	26-51-0032	26-51-2032	
4	26-48-1045	41671-0003	41671-0026	26-51-0042	26-51-2042	
5	26-48-1055	41671-0004	41671-0027	26-51-0052	26-51-2052	
6	26-48-1065	41671-0005	41671-0028	26-51-0062	26-51-2062	
7	26-48-1075	41671-0006	41671-0029	26-51-0072	26-51-2072	
8	26-48-1085	41671-0007	41671-0030	26-51-0082	26-51-2082	
9	26-48-1095	41671-0008	41671-0031	26-51-0092	26-51-2092	
10	26-48-1105	41671-0009	41671-0032	26-51-0102	26-51-2102	
11	26-48-1115	41671-0010	41671-0033	26-51-0112	26-51-2112	
12	26-48-1125	41671-0011	41671-0034	26-51-0122	26-51-2122	
13	26-48-1135	41671-0012	41671-0035	26-51-0132	26-51-2132	

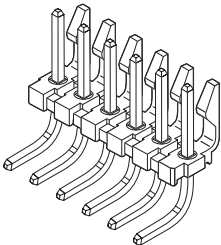
* Dependent upon connector and PC board

Circuits	Order No.					Lead-free
	Square Pin			Round Pin		
	Tin	15 μ " Select Gold	30 μ " Select Gold	Tin	Overall Gold	
14	26-48-1145	41671-0013	41671-0036	26-51-0142	26-51-2142	Yes
15	26-48-1155	41671-0014	41671-0037	26-51-0152	26-51-2152	
16	26-48-1165	41671-0015	41671-0038	26-51-0162	26-51-2162	
17	26-48-1175	41671-0016	41671-0039	26-51-0172	26-51-2172	
18	26-48-1185	41671-0017	41671-0040	26-51-0182	26-51-2182	
19	26-48-1195	41671-0018	41671-0041	26-51-0192	26-51-2192	
20	26-48-1205	41671-0019	41671-0042	26-51-0202	26-51-2202	
21	26-48-1215	41671-0020	41671-0043	26-51-0212	26-51-2212	
22	26-48-1225	41671-0021	41671-0044	26-51-0222	26-51-2222	
23	26-48-1235	41671-0022	41671-0045	26-51-0232	26-51-2232	
24	26-48-1245	41671-0023	41671-0046	26-51-0242	26-51-2242	

3.96mm (.156") Pitch KK® Breakaway Header

41672

Right Angle, Friction Lock



Features and Benefits

- Sizes 2 to 24 circuits available
- Optional voided circuits available (contact Molex)
- Various pin lengths available (contact Molex)
- PCB edge mount only
- May be purchased in full 24 circuit sticks and broken into required circuit sizes

Reference Information

Product Specification: PS-41186/08-50
Packaging: Bag
Tooling Information: See cutting tool section
UL File No.: E29179
CSA File No.: LR19980
TUV File No.: R75108
Mates With: 2139, 2145, 3069, 3215, 6442, 7674, 7675, 41695 and 41815
Designed In: Inches

Electrical

Voltage: 250V
Current: 7.0A
Contact Resistance: 6 milliohms max.
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 50K Megohms min.

Mechanical

Durability: Tin—25 cycles max.
Gold—100 cycles max.

Physical

Housing: Polyester, UL 94V-0
Contact: Brass, 1.14mm (.045") pins
Plating: See Table
Operating Temperature: 0 to +75°C

Circuits	Order No.				Lead-free
	Tin	15µ" Select Gold	30µ" Select Gold	Overall Gold	
2	26-48-1026	41672-0001	41672-0024	26-48-2026	Yes
3	26-48-1036	41672-0002	41672-0025	26-48-2036	
4	26-48-1046	41672-0003	41672-0026	26-48-2046	
5	26-48-1056	41672-0004	41672-0027	26-48-2056	
6	26-48-1066	41672-0005	41672-0028	26-48-2066	
7	26-48-1076	41672-0006	41672-0029	26-48-2076	
8	26-48-1086	41672-0007	41672-0030	26-48-2086	
9	26-48-1096	41672-0008	41672-0031	26-48-2096	
10	26-48-1106	41672-0009	41672-0032	26-48-2106	
11	26-48-1116	41672-0010	41672-0033	26-48-2116	
12	26-48-1126	41672-0011	41672-0034	26-48-2126	
13	26-48-1136	41672-0012	41672-0035	26-48-2136	

Circuits	Order No.				Lead-free
	Tin	15µ" Select Gold	30µ" Select Gold	Overall Gold	
14	26-48-1146	41672-0013	41672-0036	26-48-2146	Yes
15	26-48-1156	41672-0014	41672-0037	26-48-2156	
16	26-48-1166	41672-0015	41672-0038	26-48-2166	
17	26-48-1176	41672-0016	41672-0039	26-48-2176	
18	26-48-1186	41672-0017	41672-0040	26-48-2186	
19	26-48-1196	41672-0018	41672-0041	26-48-2196	
20	26-48-1206	41672-0019	41672-0042	26-48-2206	
21	26-48-1216	41672-0020	41672-0043	26-48-2216	
22	26-48-1226	41672-0021	41672-0044	26-48-2226	
23	26-48-1236	41672-0022	41672-0045	26-48-2236	
24	26-48-1246	41672-0023	41672-0046	26-48-2246	

Circuit number designation is for ordering purposes only, check corresponding circuit designation on mating connector



PRODUCT SPECIFICATION

1.0 SCOPE

This Product Specification covers the 3.96 mm (.156 inch) centerline (pitch) 1.14mm (.045) square pin headers when mated with either printed circuit board (PCB) connectors or connectors terminated with 18 to 26 AWG wire using crimp technology.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME AND SERIES NUMBERS

Crimp Terminals: 2478,2578,2878,2477,

Crimp Housings: 2139, 41695

PCB Connectors: 2145, 41815

Headers: 41771, 41772, 41791, 41792, 42471, 42472, 42491, 42492, 41661, 41662, 41671, 61672, 41681, 41682

Other products conforming to this specification are noted on the individual drawings.

2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

Terminal Material: Brass or Phos. Bronze (for Max performance use phos bronze material.)

Housing: Nylon or Polyester

Pins: Brass or Phos. Bronze

For more information on dimensions, materials, and plating see the individual drawings.

2.3 SAFETY AGENCY APPROVALS

UL File Number E29179

CSALR19980

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

3.1 PS-45499-002 COSMETIC SPECIFICATION

4.0 RATINGS

4.1 VOLTAGE

250 Volts

4.2 CURRENT (Current is dependent on connector size, contact material, plating, ambient temperature, printed circuit board characteristics and related factors. Actual current rating is application dependent and should be evaluated for each application.)

a. For Crimp Terminals- and Applicable Wires

Wire Awg	Amps (Max) With Brass	Amps (Max) With Phos Bronze	Wire Insulation Dia
18	5.00	7.00	See terminal drawings
20	4.75	6.25	See terminal drawings
22	4.50	5.50	See terminal drawings
24	4.25	5.00	See terminal drawings
26	4.00	4.50	See terminal drawings

REVISION: R3	ECR/ECN INFORMATION: EC No: UCP2008-1760 DATE: 2008/01/30	TITLE: PRODUCT SPECIFICATION .156 CENTER KK CONNECTORS	SHEET No. 1 of 5
DOCUMENT NUMBER: PS-08-50	CREATED / REVISED BY: ADERR	CHECKED BY: JBELL	APPROVED BY: FSMITH



PRODUCT SPECIFICATION

4.2 CURRENT (cont)

b. For Printed Circuit Board Connectors

Connector Style	Amps (Max) With Brass	Amps (Max) With Phos Bronze
Top Entry	4.50	5.00
Right Angle	4.50	5.00
Bottom Entry	4.00	4.50

4.3 TEMPERATURE (ambient + 30°C temp rise)

	Brass	Phos Bronze
Operating Temperature	0°C to +50°C	0°C to +75°C
Non Operating Temperature	-40°C to +105°C	-40°C to +105°C

5.0 PERFORMANCE

5.1 ELECTRICAL REQUIREMENTS

DESCRIPTION	TEST CONDITION	REQUIREMENT
Contact Resistance (Low Level)	Mate connectors: apply a maximum voltage of 20 mV and a current of 100 mA.	10 milliohms MAXIMUM [initial]
Contact Resistance of Wire Termination (Low Level)	Terminate the applicable wire to the terminal and measure wire using a voltage of 20 mV and a current of 100 mA.	2 milliohms MAXIMUM [initial]
Insulation Resistance	Unmate & unmount connectors: apply a voltage of 500 VDC between adjacent terminals and between terminals to ground.	1000 Megohms MINIMUM
Dielectric Withstanding Voltage	Unmate connectors: apply a voltage of {two times the rated voltage plus 1000 volts} VAC for 1 minute between adjacent terminals and between terminals to ground.	No breakdown
Capacitance	Measure between adjacent terminals at 1 MHz.	1.2 picofarads MAXIMUM
Temperature Rise (via Current Cycling)	Mate connectors: measure the temperature rise at the rated current after: 1) 96 hours (steady state) 2) 240 hours (45 minutes ON and 15 minutes OFF per hour) 3) 96 hours (steady state)	Temperature rise: +30°C MAXIMUM

REVISION: R3	ECR/ECN INFORMATION: EC No: UCP2008-1760 DATE: 2008/01/30	TITLE: PRODUCT SPECIFICATION .156 CENTER KK CONNECTORS	SHEET No. 2 of 5
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PRODUCT SPECIFICATION

5.2 MECHANICAL REQUIREMENTS

DESCRIPTION	TEST CONDITION	REQUIREMENT
Connector Mate and Unmate Forces	Per circuit when mated to a .045 Sq. pin. Mate and unmate connector (male to female) at a rate of 25 ± 6 mm ($1 \pm \frac{1}{4}$ inch) per minute.	<u>Without Friction Lock</u> 9.4 N (2.12 lbf) MAXIMUM insertion force & 1.8 N (0.40 lbf) MINIMUM withdrawal force
		<u>With Friction Lock</u> 10.7 N (2.40 lbf) MAXIMUM insertion force & 4.0 N (0.90 lbf) MINIMUM withdrawal force
Terminal Insertion Force (into Housing)	Apply an axial insertion force on the terminal at a rate of 25 ± 6 mm ($1 \pm \frac{1}{4}$ inch) per minute. (Forces will change with platings and materials.)	17.8 N (4.0 lbf) MAXIMUM insertion force
Terminal Retention Force (in Housing)	Axial pullout force on the terminal in the housing at a rate of 25 ± 6 mm ($1 \pm \frac{1}{4}$ inch) per minute. (Forces will change with platings and materials.)	35.6 N (8.0 lbf) MINIMUM withdrawal force
Durability	Mate connectors up to 25 cycles at a maximum rate of 10 cycles per minute prior to Environmental Tests.	10 milliohms MAXIMUM (change from initial)
Vibration (Random)	Mate connectors and vibrate per EIA 364-28, test condition VII.	10 milliohms MAXIMUM (change from initial) & Discontinuity < 1 microsecond
Shock (Mechanical)	Mate connectors and shock at 50 g's with $\frac{1}{2}$ sine wave (11 milliseconds) shocks in the $\pm X, \pm Y, \pm Z$ axes (18 shocks total).	10 milliohms MAXIMUM (change from initial) & Discontinuity < 1 microsecond
Wire Pullout Force (Axial)	Apply an axial pullout force on the wire at a rate of 25 ± 6 mm ($1 \pm \frac{1}{4}$ inch) per minute. (For maximum performance use Molex application tooling with stranded tinned copper wire)	18 awg = 89 N (20 lbf) 20 awg = 66 N (15 lbf) 22 awg = 53 N (12 lbf) 24 awg = 35 N (8 lbf) 26 awg = 22 N (5 lbf)
Normal Force	Apply a perpendicular force.	7.34 N (748 grams) average

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PRODUCT SPECIFICATION

5.3 ENVIRONMENTAL REQUIREMENTS

DESCRIPTION	TEST CONDITION	REQUIREMENT										
Shock (Thermal)	Mate connectors; expose to 5 cycles of: <table><tr><th>Temperature °C</th><th>Duration (Minutes)</th></tr><tr><td>-40 +0/-3</td><td>30</td></tr><tr><td>+25 ±10</td><td>5 MAXIMUM</td></tr><tr><td>+105 +3/-0</td><td>30</td></tr><tr><td>+25 ±10</td><td>5 MAXIMUM</td></tr></table>	Temperature °C	Duration (Minutes)	-40 +0/-3	30	+25 ±10	5 MAXIMUM	+105 +3/-0	30	+25 ±10	5 MAXIMUM	10 milliohms MAXIMUM (change from initial) & Visual: No Damage
Temperature °C	Duration (Minutes)											
-40 +0/-3	30											
+25 ±10	5 MAXIMUM											
+105 +3/-0	30											
+25 ±10	5 MAXIMUM											
Thermal Aging	Mate connectors; expose to: 96 hours at 105 ± 2°C	10 milliohms MAXIMUM (change from initial]) & Visual: No Damage										
Humidity (Steady State)	Mate connectors: expose to a temperature of 40 ± 2°C with a relative humidity of 90-95% for 96 hours. Note: Remove surface moisture and air dry for 1 hour prior to measurements.	10 milliohms MAXIMUM (change from initial) & Dielectric Withstanding Voltage: No Breakdown at 500 VAC & Insulation Resistance: 1000 Megohms MINIMUM & Visual: No Damage										
Humidity (Cyclic)	Mate connectors: cycle per EIA-364-31: 24 cycles at temperature 25 ± 3°C at 80 ± 5% relative humidity and 65 ± 3°C at 50 ± 5% relative humidity; dwell time of 1.0 hour; ramp time of 0.5 hours. {Note: Remove surface moisture and air dry for 1 hour prior to measurements.}	10 milliohms MAXIMUM (change from initial) & Dielectric Withstanding Voltage: No Breakdown at 500 VAC & Insulation Resistance: 1000 Megohms MINIMUM & Visual: No Damage										
Solderability	Per SMES-152	Solder coverage: 95% MINIMUM (per SMES-152)										

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PS-08-50	ADERR	JBELL	FSMITH



PRODUCT SPECIFICATION

5.3 ENVIRONMENTAL REQUIREMENTS

DESCRIPTION	TEST CONDITION	REQUIREMENT
Solder Resistance	Dip connector terminal tails in solder: Solder Duration: 5 ± 0.5 seconds; Solder Temperature: $230 \pm 5^{\circ}\text{C}$	Visual: No Damage to insulator material
Cold Resistance	Mate connectors: Duration: 96 hours; Temperature: $-40 \pm 3^{\circ}\text{C}$	10 milliohms MAXIMUM (change from initial) & Visual: No Damage
Corrosive Atmosphere: Flowing Mixed Gas (FMG)	Mate connectors: Test per EIA-364-65, method 2A	10 milliohms MAXIMUM (change from initial) & Visual: No Damage

6.0 PACKAGING

Parts shall be packaged to protect against damage during handling, transit and storage.

7.0 GAGES AND FIXTURES

8.0 OTHER

REVISION:	ECR/ECN INFORMATION:	TITLE:	SHEET No.
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6

5

4

3

2

1

NOTES:

1. MATERIAL: POLYESTER, 94V-0, MOLDED BLACK

2. FINISH: PER ES-88

(102) OVERALL TIN: 0.00508/.000200 MIN. OVER
0.00254/.000100 MIN. COPPER.

(122) OVERALL TIN: 0.00381/.000150 MIN

OVERALL NICKEL: .00076/.000030 MIN

(208) SELECT GOLD: 0.00038/.000015 MIN.

*SELECT TIN: 0.00254/.000100 MIN.,

OVERALL NICKEL UNDERPLATE: 0.00127/.000050 MIN.

(228) SELECT GOLD: 0.00076/.000030 MIN.,

*SELECT TIN: 0.00254/.000100 MIN.,

OVERALL NICKEL UNDERPLATE: 0.00127/.000050 MIN.

(501) OVERALL GOLD: 0.00051/.000020

OVERALL NICKEL: 0.00076/.000030

(503) OVERALL GOLD: 0.00076/.000030

OVERALL NICKEL: 0.00127/.000050

*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-08-50.

4. PACKAGING INFO: SEE TABLE.

5. SOLDERABILITY: PER SMES-152.

6. PIN PUSH-OUT FORCE: PRIOR TO SOLDERING, 3 LB MIN.

FORCE IN EITHER DIRECTION SHALL BE REQUIRED TO

PUSH THE PIN OUT OF THE HEADER.

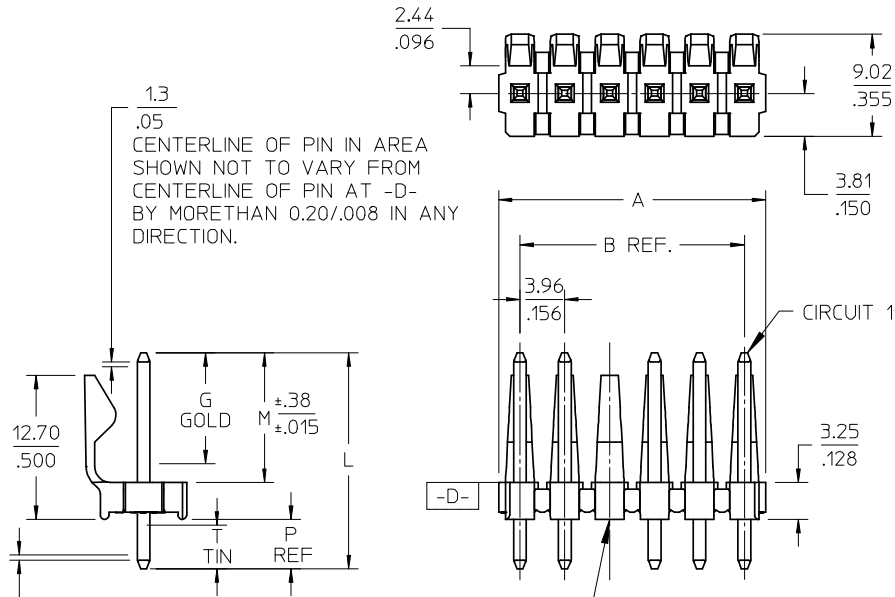
7. PARTS ARE STACKABLE END TO END ON 3.96/.156 CENTERS.

(SPACING TABS MUST BE REMOVED ON CIRCUIT SIZES

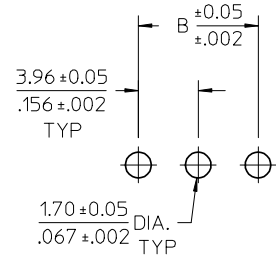
1-23 BEFORE PARTS ARE STACKABLE.

8. THIS PART CONFORMS TO CLASS B REQUIREMENTS OF
COSMETIC SPECIFICATION PS-45499-002.

CKT	B	A
2	3.96 .156	6.78/7.87 .267/.310
3	7.92 .312	10.74/11.84 .423/.466
4	11.89 .468	14.71/15.80 .579/.622
5	15.85 .624	18.67/19.76 .735/.778
6	19.81 .780	22.63/23.72 .891/.934
7	23.77 .936	26.59/27.69 1.047/1.090
8	27.74 1.092	30.56/31.65 1.203/1.246
9	31.70 1.248	34.52/35.61 1.359/1.402
10	35.66 1.404	38.48/39.57 1.515/1.558
11	39.62 1.560	42.44/43.54 1.671/1.714
12	43.59 1.716	46.41/47.50 1.827/1.870
13	47.55 1.872	50.37/51.46 1.983/2.026
14	51.51 2.028	54.33/55.42 2.139/2.182
15	55.47 2.184	58.29/59.39 2.295/2.338
16	59.44 2.340	62.26/63.35 2.451/2.494
17	63.40 2.496	66.22/67.31 2.607/2.650
18	67.36 2.652	70.18/71.27 2.763/2.806
19	71.32 2.808	74.14/75.23 2.919/2.962
20	75.29 2.964	78.11/79.20 3.075/3.118
21	79.25 3.120	82.07/83.16 3.231/3.274
22	83.21 3.276	86.03/87.12 3.387/3.430
23	87.17 3.432	89.94/91.08 3.541/3.586
24	91.14 3.588	93.85/95.00 3.695/3.740



1.3
.05
CENTERLINE OF PIN IN AREA SHOWN
NOT TO VARY FROM CENTERLINE OF
PIN AT DATUM -D- BY MORE THAN
0.13/.005 IN ANY DIRECTION.



PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS:
1.57±.018/.062±.007

A-41671- * N * *-*

OPTION -PIN- PACKING -
A=BRASS -2161- BULK PACK
B=BRASS -2161- TUBE PACK
C=BRASS -43294- BULK PACK

NO OF CKTS
DIM M,L,P
PLATING

VOID LOCATIONS
BLANK=NO VOIDS
NO=CKT NO VOIDED
MULT-VOIDS=51 UP

GENERAL TOLERANCES
(UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± .015
1 PLACE	± 0.38	± ---

ANGULAR ±1/2°

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

DIMENSION STYLE
MM/IN

DRAWN BY	DATE
JSCHAFFER	2004/04/05
CHECKED BY	DATE
KSAMIEC	2004/04/05
APPROVED BY	DATE
MARGULIS	2004/04/05

MATERIAL NO.

SEE CHART

SIZE
ATHIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX
INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSIONSCALE
1.5:1DESIGN UNITS
INCHTHIRD ANGLE
PROJECTION

TITLE
KK 156 HEADER ASSEMBLY
FRICTION LOCK STRAIGHT
BREAKAWAY

MOLEX MOLEX INCORPORATED

DOCUMENT NO.

SD-41671-001

SHEET NO.

1 OF 7

2-*	AH7
1	REV
SHT	REV

ADD P/N	EC NO: UCP2008-0629	DRWN:ADERR	2007/12/21	CHKD:JBELL	2007/12/21	APPR:FSM TH	2007/12/26
REV	AH7	REV		REV		REV	

QUALITY
SYMBOLS
▽=0
▽=0

	Group No:	A-41671-ANA102	Group No:	A-41671-CNA208	Group No:	A-41671-CNA228	
	Pin No:	2161-1 (102)	Pin No:	43294-0236	Pin No:	43294-0237	
	Plating:	102 TIN	Plating:	208 15 GOLD	Plating:	228 30 GOLD	
	Pin Length L	.750 / 19.05	Pin Length L	.750 / 19.05	Pin Length L	.750 / 19.05	
	Mating M	.450 / 11.43	Mating M	.450 / 11.43	Mating M	.450 / 11.43	
	Gold Loc G	NA	Gold Loc G	.270 / 6.86	Gold Loc G	.270 / 6.86	
	PC Tail P	.172 / 4.37	PC Tail P	.172 / 4.37	PC Tail P	.172 / 4.37	
	Tin Loc T	OVERALL	Tin Loc T	.160 / 4.06	Tin Loc T	.160 / 4.06	
	Voided Ckts	NONE	Voided Ckts	NONE	Voided Ckts	NONE	
	Pack Per	PK-41671-001	Pack Per	PK-41671-001	Pack Per	PK-41671-001	
Ckts	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number	
2	26-48-1025	A-41671-A02A102	41671-0001	A-41671-C02A208	41671-0024	A-41671-C02A228	
3	26-48-1035	A-41671-A03A102	41671-0002	A-41671-C03A208	41671-0025	A-41671-C03A228	
4	26-48-1045	A-41671-A04A102	41671-0003	A-41671-C04A208	41671-0026	A-41671-C04A228	
5	26-48-1055	A-41671-A05A102	41671-0004	A-41671-C05A208	41671-0027	A-41671-C05A228	
6	26-48-1065	A-41671-A06A102	41671-0005	A-41671-C06A208	41671-0028	A-41671-C06A228	
7	26-48-1075	A-41671-A07A102	41671-0006	A-41671-C07A208	41671-0029	A-41671-C07A228	
8	26-48-1085	A-41671-A08A102	41671-0007	A-41671-C08A208	41671-0030	A-41671-C08A228	
9	26-48-1095	A-41671-A09A102	41671-0008	A-41671-C09A208	41671-0031	A-41671-C09A228	
10	26-48-1105	A-41671-A10A102	41671-0009	A-41671-C10A208	41671-0032	A-41671-C10A228	
11	26-48-1115	A-41671-A11A102	41671-0010	A-41671-C11A208	41671-0033	A-41671-C11A228	
12	26-48-1125	A-41671-A12A102	41671-0011	A-41671-C12A208	41671-0034	A-41671-C12A228	
13	26-48-1135	A-41671-A13A102	41671-0012	A-41671-C13A208	41671-0035	A-41671-C13A228	
14	26-48-1145	A-41671-A14A102	41671-0013	A-41671-C14A208	41671-0036	A-41671-C14A228	
15	26-48-1155	A-41671-A15A102	41671-0014	A-41671-C15A208	41671-0037	A-41671-C15A228	
16	26-48-1165	A-41671-A16A102	41671-0015	A-41671-C16A208	41671-0038	A-41671-C16A228	
17	26-48-1175	A-41671-A17A102	41671-0016	A-41671-C17A208	41671-0039	A-41671-C17A228	
18	26-48-1185	A-41671-A18A102	41671-0017	A-41671-C18A208	41671-0040	A-41671-C18A228	
19	26-48-1195	A-41671-A19A102	41671-0018	A-41671-C19A208	41671-0041	A-41671-C19A228	
20	26-48-1205	A-41671-A20A102	41671-0019	A-41671-C20A208	41671-0042	A-41671-C20A228	
21	26-48-1215	A-41671-A21A102	41671-0020	A-41671-C21A208	41671-0043	A-41671-C21A228	
22	26-48-1225	A-41671-A22A102	41671-0021	A-41671-C22A208	41671-0044	A-41671-C22A228	
23	26-48-1235	A-41671-A23A102	41671-0022	A-41671-C23A208	41671-0045	A-41671-C23A228	
24	26-48-1245	A-41671-A24A102	41671-0023	A-41671-C24A208	41671-0046	A-41671-C24A228	
	STD TIN CATALOG PRODUCT		STD 15 GOLD CATALOG PRODUCT		STD 30 GOLD CATALOG PRODUCT		

<u>REV:</u> AH7	<u>ECR/ECN INFORMATION:</u> EC. NO. UCP2008-0629 DATE: 12/26/2007	<u>TITLE:</u> KK 156 HEADER ASSEMBLY FRICION LOCK STRAIGHT BREAKAWAY			<u>SHEET No.</u> - 2 -
<u>DOCUMENT NUMBER:</u> SD – 41671 - 001		<u>CREATED / REVISED BY:</u> ADERR	<u>CHECKED BY:</u> JBELL	<u>APPROVED BY:</u> FSMITH	
TEMPLATE FILENAME: PRODUCT_SPEC [SIZE_A](V.1). DOC					

	Group No:	A-41671-ANA501	Group No:	A-41671-ANA503	Group No:	A-41671-AND102	Group No:	A-41671-ANB102
	Pin No:	2161-1 (501)	Pin No:	2161 – 1(503)	Pin No:	2161-56 (102)	Pin No:	2161-1 (102)
	Plating:	501 GOLD	Plating:	503 GOLD	Plating:	102 TIN	Plating:	102 TIN
	Pin Length L	.750 / 19.05	Pin Length L	.750 / 19.05	Pin Length L	.703 / 17.86	Pin Length L	.750 / 19.05
	Mating M	.450 / 11.43	Mating M	.450 / 11.43	Mating M	.450 / 11.43	Mating M	.523 / 13.28
	Gold Loc G	OVERALL	Gold Loc G	OVERALL	Gold Loc G	NA	Gold Loc G	NA
	PC Tail P	.172 / 4.37	PC Tail P	.172 / 4.37	PC Tail P	.125 / 3.18	PC Tail P	.099 / 2.51
	Tin Loc T	NA	Tin Loc T	NA	Tin Loc T	OVERALL	Tin Loc T	OVERALL
	Voided Ckts	NONE	Voided Ckts	NONE	Voided Ckts	NONE	Voided Ckts	NONE
	Pack Per	PK-41671-001	Pack Per	PK-41671-001	Pack Per	PK-41671-001	Pack Per	PK-41671-001
Ckts	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number
2	26-48-2025	A-41671-A02A501	26-48-9026	A-41671-A02A503	26-48-9023	A-41671-A02D102	41671-0064	A-41671-A02B102
3	26-48-2035	A-41671-A03A501	41671-0047	A-41671-A03A503	26-48-9033	A-41671-A03D102	41671-0065	A-41671-A03B102
4	26-48-2045	A-41671-A04A501	41671-0048	A-41671-A04A503	26-48-9043	A-41671-A04D102	41671-0066	A-41671-A04B102
5	26-48-2055	A-41671-A05A501	26-48-9056	A-41671-A05A503	26-48-9053	A-41671-A05D102	41671-0067	A-41671-A05B102
6	26-48-2065	A-41671-A06A501	41671-0049	A-41671-A06A503	26-48-9063	A-41671-A06D102	41671-0068	A-41671-A06B102
7	26-48-2075	A-41671-A07A501	41671-0050	A-41671-A07A503	26-48-9073	A-41671-A07D102	41671-0069	A-41671-A07B102
8	26-48-2085	A-41671-A08A501	41671-0051	A-41671-A08A503	26-48-9083	A-41671-A08D102	41671-0070	A-41671-A08B102
9	26-48-2095	A-41671-A09A501	26-48-9096	A-41671-A09A503	26-48-9093	A-41671-A09D102	26-48-6095	A-41671-A09B102
10	26-48-2105	A-41671-A10A501	26-48-9106	A-41671-A10A503	26-48-9103	A-41671-A10D102	41671-0071	A-41671-A10B102
11	26-48-2115	A-41671-A11A501	41671-0052	A-41671-A11A503	26-48-9113	A-41671-A11D102	41671-0072	A-41671-A11B102
12	26-48-2125	A-41671-A12A501	26-48-9126	A-41671-A12A503	26-48-9123	A-41671-A12D102	41671-0073	A-41671-A12B102
13	26-48-2135	A-41671-A13A501	41671-0053	A-41671-A13A503	26-48-9133	A-41671-A13D102	41671-0074	A-41671-A13B102
14	26-48-2145	A-41671-A14A501	41671-0054	A-41671-A14A503	26-48-9143	A-41671-A14D102	41671-0075	A-41671-A14B102
15	26-48-2155	A-41671-A15A501	41671-0055	A-41671-A15A503	26-48-9153	A-41671-A15D102	41671-0076	A-41671-A15B102
16	26-48-2165	A-41671-A16A501	41671-0056	A-41671-A16A503	26-48-9163	A-41671-A16D102	41671-0077	A-41671-A16B102
17	26-48-2175	A-41671-A17A501	41671-0057	A-41671-A17A503	26-48-9173	A-41671-A17D102	41671-0078	A-41671-A17B102
18	26-48-2185	A-41671-A18A501	41671-0058	A-41671-A18A503	26-48-9183	A-41671-A18D102	41671-0079	A-41671-A18B102
19	26-48-2195	A-41671-A19A501	41671-0059	A-41671-A19A503	26-48-9193	A-41671-A19D102	41671-0080	A-41671-A19B102
20	26-48-2205	A-41671-A20A501	41671-0060	A-41671-A20A503	26-48-9203	A-41671-A20D102	41671-0081	A-41671-A20B102
21	26-48-2215	A-41671-A21A501	41671-0061	A-41671-A21A503	26-48-9213	A-41671-A21D102	41671-0082	A-41671-A21B102
22	26-48-2225	A-41671-A22A501	41671-0062	A-41671-A22A503	26-48-9223	A-41671-A22D102	41671-0083	A-41671-A22B102
23	26-48-2235	A-41671-A23A501	41671-0063	A-41671-A23A503	26-48-9233	A-41671-A23D102	41671-0084	A-41671-A23B102
24	26-48-2245	A-41671-A24A501	26-48-9246	A-41671-A24A503	26-48-9243	A-41671-A24D102	26-48-6245	A-41671-A24B102

REV:	ECR/ECN INFORMATION:	TITLE:	KK 156 HEADER ASSEMBLY FRICTION LOCK STRAIGHT BREAKAWAY		SHEET No.
AH7	EC. NO. UCP2008-0629				- 3 -
DATE:	12/26/2007				
DOCUMENT NUMBER:	SD – 41671 - 001	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:	
		ADERR	JBELL	FSMITH	

	Group No:	A-41671-ANF102	Group No:	A-41671-ANB501	Group No:	A-41671-ANF501	Group No:	A-41671-ANN102
	Pin No:	2161-24 (102)	Pin No:	2161-1 (501)	Pin No:	2161-24 (501)	Pin No:	2161-19 (102)
	Plating:	102 TIN	Plating:	501 GOLD	Plating:	501 GOLD	Plating:	102 TIN
	Pin Length L	.800 / 20.32	Pin Length L	.750 / 19.05	Pin Length L	.800 / 20.32	Pin Length L	1.032 / 26.21
	Mating M	.480 / 12.19	Mating M	.523 / 13.28	Mating M	.480 / 12.19	Mating M	.450 / 11.43
	Gold Loc G	NA	Gold Loc G	OVERALL	Gold Loc G	OVERALL	Gold Loc G	NA
	PC Tail P	.192 / 4.88	PC Tail P	.099 / 2.51	PC Tail P	.192 / 4.88	PC Tail P	.454 / 11.53
	Tin Loc T	OVERALL	Tin Loc T	NA	Tin Loc T	NA	Tin Loc T	OVERALL
	Voided Ckts	NONE	Voided Ckts	NONE	Voided Ckts	NONE	Voided Ckts	NONE
	Pack Per	PK-41671-001	Pack Per	PK-41671-001	Pack Per	PK-41671-001	Pack Per	PK-41671-001
Ckts	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number
2	26-48-4026	A-41671-A02F102	26-48-2027	A-41671-A02B501	41671-0250	A-41671-A02F501		A-41671-A02N102
3	26-48-4036	A-41671-A03F102	26-48-2037	A-41671-A03B501	41671-0350	A-41671-A03F501		A-41671-A03N102
4	26-48-4046	A-41671-A04F102	26-48-2047	A-41671-A04B501	41671-0450	A-41671-A04F501		A-41671-A04N102
5	26-48-4056	A-41671-A05F102	26-48-2057	A-41671-A05B501	41671-0550	A-41671-A05F501		A-41671-A05N102
6	26-48-4066	A-41671-A06F102	26-48-2067	A-41671-A06B501	41671-0650	A-41671-A06F501		A-41671-A06N102
7	26-48-4076	A-41671-A07F102	26-48-2077	A-41671-A07B501	41671-0750	A-41671-A07F501		A-41671-A07N102
8	26-48-4086	A-41671-A08F102	26-48-2087	A-41671-A08B501	41671-0850	A-41671-A08F501		A-41671-A08N102
9	26-48-4096	A-41671-A09F102	26-48-2097	A-41671-A09B501	41671-0950	A-41671-A09F501		A-41671-A09N102
10	26-48-4106	A-41671-A10F102	26-48-2107	A-41671-A10B501	41671-1050	A-41671-A10F501		A-41671-A10N102
11	26-48-4116	A-41671-A11F102	26-48-2117	A-41671-A11B501	41671-1150	A-41671-A11F501		A-41671-A11N102
12	26-48-4126	A-41671-A12F102	26-48-2127	A-41671-A12B501	41671-1250	A-41671-A12F501		A-41671-A12N102
13	26-48-4136	A-41671-A13F102	26-48-2137	A-41671-A13B501	41671-1350	A-41671-A13F501		A-41671-A13N102
14	26-48-4146	A-41671-A14F102	26-48-2147	A-41671-A14B501	41671-1450	A-41671-A14F501		A-41671-A14N102
15	26-48-4156	A-41671-A15F102	26-48-2157	A-41671-A15B501	41671-1550	A-41671-A15F501		A-41671-A15N102
16	26-48-4166	A-41671-A16F102	26-48-2167	A-41671-A16B501	41671-1650	A-41671-A16F501		A-41671-A16N102
17	26-48-4176	A-41671-A17F102	26-48-2177	A-41671-A17B501	41671-1750	A-41671-A17F501		A-41671-A17N102
18	26-48-4186	A-41671-A18F102	26-48-2187	A-41671-A18B501	41671-1850	A-41671-A18F501		A-41671-A18N102
19	26-48-4196	A-41671-A19F102	26-48-2197	A-41671-A19B501	41671-1950	A-41671-A19F501		A-41671-A19N102
20	26-48-4206	A-41671-A20F102	26-48-2207	A-41671-A20B501	41671-2050	A-41671-A20F501		A-41671-A20N102
21	26-48-4216	A-41671-A21F102	26-48-2217	A-41671-A21B501	41671-2150	A-41671-A21F501		A-41671-A21N102
22	26-48-4226	A-41671-A22F102	26-48-2227	A-41671-A22B501	41671-2250	A-41671-A22F501		A-41671-A22N102
23	26-48-4236	A-41671-A23F102	26-48-2237	A-41671-A23B501	41671-2350	A-41671-A23F501		A-41671-A23N102
24	26-48-4246	A-41671-A24F102	26-48-2247	A-41671-A24B501	41671-2450	A-41671-A24F501	26-48-8247	A-41671-A24N102

REV:	ECR/ECN INFORMATION:	TITLE:	KK 156 HEADER ASSEMBLY FRICTION LOCK STRAIGHT BREAKAWAY		SHEET No.
AH7	EC. NO. UCP2008-0629				- 4 -
DATE:	12/26/2007				
DOCUMENT NUMBER:	SD – 41671 - 001	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:	
		ADERR	JBELL	FSMITH	

	Group No:	A-41671-CNP228	Group No:	A-41671-CNR208	Group No:	A-41671-ANT102	Group No:	A-41671-ANA122
	Pin No:	43294-0282	Pin No:	43294-0344	Pin No:	2161-37 (102)	Pin No:	2161-1 (122)
	Plating:	228 30 GOLD	Plating:	208 15 GOLD	Plating:	102 TIN	Plating:	122 TIN
	Pin Length L	.800 / 20.32	Pin Length L	.870 / 22.10	Pin Length L	1.100 / 27.94	Pin Length L	.750 / 19.05
	Mating M	.523 / 13.28	Mating M	.450 / 11.43	Mating M	.486 / 12.34	Mating M	.450 / 11.43
	Gold Loc G	.350 / 8.89	Gold Loc G	.400 / 10.16	Gold Loc G	NA	Gold Loc G	NA
	PC Tail P	.149 / 3.78	PC Tail P	.292 / 7.42	PC Tail P	.486 / 12.34	PC Tail P	.172 / 4.37
	Tin Loc T	.200 / 5.08	Tin Loc T	.200 / 5.08	Tin Loc T	OVERALL	Tin Loc T	OVERALL
	Voided Ckts	NONE	Voided Ckts	NONE	Voided Ckts	NONE	Voided Ckts	NONE
	Pack Per	PK-41671-001	Pack Per	PK-41671-001	Pack Per	PK-41671-001	Pack Per	PK-41671-001
Ckts	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number
2	41671-2451	A-41671-C02P228	41671-2474	A-41671-C02R208	41671-3400	A-41671-A02T102	41671-3423	A-41671-A02A122
3	41671-2452	A-41671-C03P228	41671-2475	A-41671-C03R208	41671-3401	A-41671-A03T102	41671-3424	A-41671-A03A122
4	41671-2453	A-41671-C04P228	41671-2476	A-41671-C04R208	41671-3402	A-41671-A04T102	41671-3425	A-41671-A04A122
5	41671-2454	A-41671-C05P228	41671-2477	A-41671-C05R208	41671-3403	A-41671-A05T102	41671-3426	A-41671-A05A122
6	41671-2455	A-41671-C06P228	41671-2478	A-41671-C06R208	41671-3404	A-41671-A06T102	41671-3427	A-41671-A06A122
7	41671-2456	A-41671-C07P228	41671-2479	A-41671-C07R208	41671-3405	A-41671-A07T102	41671-3428	A-41671-A07A122
8	41671-2457	A-41671-C08P228	41671-2480	A-41671-C08R208	41671-3406	A-41671-A08T102	41671-3429	A-41671-A08A122
9	41671-2458	A-41671-C09P228	41671-2481	A-41671-C09R208	41671-3407	A-41671-A09T102	41671-3430	A-41671-A09A122
10	41671-2459	A-41671-C10P228	41671-2482	A-41671-C10R208	41671-3408	A-41671-A10T102	41671-3431	A-41671-A10A122
11	41671-2460	A-41671-C11P228	41671-2483	A-41671-C11R208	41671-3409	A-41671-A11T102	41671-3432	A-41671-A11A122
12	41671-2461	A-41671-C12P228	41671-2484	A-41671-C12R208	41671-3410	A-41671-A12T102	41671-3433	A-41671-A12A122
13	41671-2462	A-41671-C13P228	41671-2485	A-41671-C13R208	41671-3411	A-41671-A13T102	41671-3434	A-41671-A13A122
14	41671-2463	A-41671-C14P228	41671-2486	A-41671-C14R208	41671-3412	A-41671-A14T102	41671-3435	A-41671-A14A122
15	41671-2464	A-41671-C15P228	41671-2487	A-41671-C15R208	41671-3413	A-41671-A15T102	41671-3436	A-41671-A15A122
16	41671-2465	A-41671-C16P228	41671-2488	A-41671-C16R208	41671-3414	A-41671-A16T102	41671-3437	A-41671-A16A122
17	41671-2466	A-41671-C17P228	41671-2489	A-41671-C17R208	41671-3415	A-41671-A17T102	41671-3438	A-41671-A17A122
18	41671-2467	A-41671-C18P228	41671-2490	A-41671-C18R208	41671-3416	A-41671-A18T102	41671-3439	A-41671-A18A122
19	41671-2468	A-41671-C19P228	41671-2491	A-41671-C19R208	41671-3417	A-41671-A19T102	41671-3440	A-41671-A19A122
20	41671-2469	A-41671-C20P228	41671-2492	A-41671-C20R208	41671-3418	A-41671-A20T102	41671-3441	A-41671-A20A122
21	41671-2470	A-41671-C21P228	41671-2493	A-41671-C21R208	41671-3419	A-41671-A21T102	41671-3442	A-41671-A21A122
22	41671-2471	A-41671-C22P228	41671-2494	A-41671-C22R208	41671-3420	A-41671-A22T102	41671-3443	A-41671-A22A122
23	41671-2472	A-41671-C23P228	41671-2495	A-41671-C23R208	41671-3421	A-41671-A23T102	41671-3444	A-41671-A23A122
24	41671-2473	A-41671-C24P228	41671-2496	A-41671-C24R208	41671-3422	A-41671-A24T102	41671-3445	A-41671-A24A122

REV:	ECR/ECN INFORMATION:	TITLE:	KK 156 HEADER ASSEMBLY FRICTION LOCK STRAIGHT BREAKAWAY		SHEET No.
AH7	EC. NO. UCP2008-0629				- 5 -
DATE: 12/26/2007					
DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:		
SD – 41671 - 001	ADERR	JBELL	FSMITH		

