

Distributed by:

JAMECO[®]
ELECTRONICS

www.Jameco.com ♦ 1-800-831-4242

The content and copyrights of the attached
material are the property of its owner.

Jameco Part Number 879924

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 2 to 18 circuits
- Provides left to right polarization when mated with 41695 or 43061 .156" crimp housing with the optional polarizing ribs
- Various pin lengths available
- Voided circuits available (contact Molex)
- Passive locking feature is used to maintain interconnection, ideal for high vibration applications
- End-to-end stackable

Reference Information

Product Specification: PS-08-50

Packaging: Bag

UL File No.: E29179

CSA File No.: LR19980

TUV File No.: R75108

Mates With: [2139](#), [2145](#), [3069](#), [6442](#), [7674](#), [7675](#),

[41695](#) and [41815](#)

Designed In: Inches

Electrical

Voltage: 250V

Current: 7.0A

Contact Resistance: 6mΩ max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 50K MΩ min.

Mechanical

Durability:

Tin—25 cycles max.

Gold—100 cycles max.

Physical

Housing: Polyester, UL 94V-0

Contact: Brass, 1.14mm (.045") pin

Plating: See Table

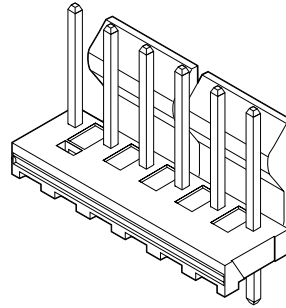
Operating Temperature: 0 to +75°C

molex® **3.96mm (.156") Pitch**
KK®

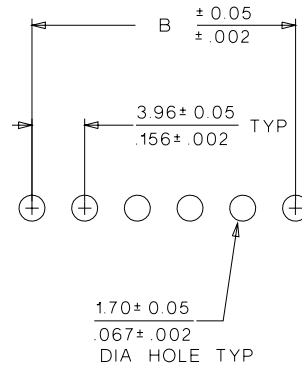
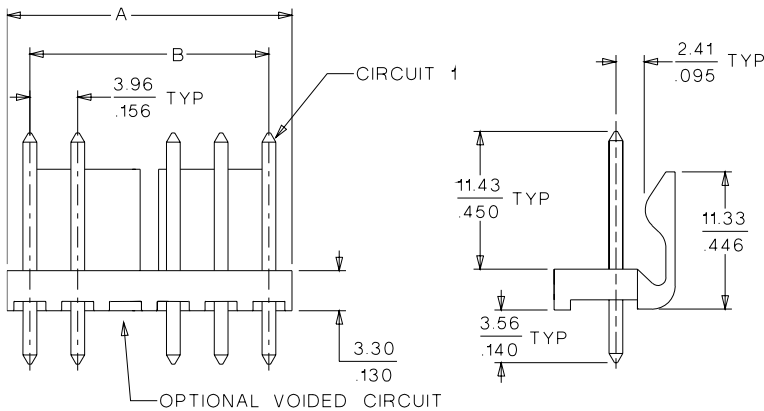
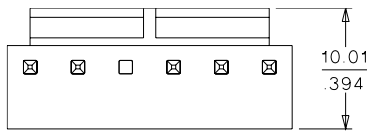
Solid Header

41791

Vertical
Friction Lock



CATALOG DRAWING (FOR REFERENCE ONLY)



PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS $\frac{1.67 \pm 0.18}{.062 \pm .007}$

ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.				Dimension	
	Tin	15μ" Select Gold	30μ" Select Gold	Overall Gold	A	B
2	26-60-4020	41791-0832	41791-0849	26-61-4020	7.77 (.306)	3.96 (.156)
3	26-60-4030	41791-0833	41791-0850	26-61-4030	11.73 (.462)	7.92 (.312)
4	26-60-4040	41791-0834	41791-0851	26-61-4040	15.70 (.618)	11.89 (.468)
5	26-60-4050	41791-0835	41791-0852	26-61-4050	19.66 (.774)	15.85 (.624)
6	26-60-4060	41791-0836	41791-0853	26-61-4060	23.62 (.930)	19.81 (.780)
7	26-60-4070	41791-0837	41791-0854	26-61-4070	27.58 (1.086)	23.77 (.936)
8	26-60-4080	41791-0838	41791-0855	26-61-4080	31.55 (1.242)	27.74 (1.092)
9	26-60-4090	41791-0839	41791-0856	26-61-4090	35.51 (1.398)	31.70 (1.248)
10	26-60-4100	41791-0840	41791-0857	26-61-4100	39.47 (1.554)	35.66 (1.404)
11	26-60-4110	41791-0841	41791-0858	26-61-4110	43.43 (1.710)	39.62 (1.560)
12	26-60-4120	41791-0842	41791-0859	26-61-4120	47.40 (1.866)	43.59 (1.716)
13	26-60-4130	41791-0843	41791-0860	26-61-4130	51.36 (2.022)	47.55 (1.872)
14	26-60-4140	41791-0844	41791-0861	26-61-4140	55.32 (2.178)	51.51 (2.028)
15	26-60-4150	41791-0845	41791-0862	26-61-4150	59.28 (2.334)	55.47 (2.184)
16	26-60-4160	41791-0846	41791-0863	26-61-4160	63.25 (2.490)	59.44 (2.340)
17	26-60-4170	41791-0847	41791-0864	26-61-4170	67.21 (2.646)	63.40 (2.496)
18	26-60-4180	41791-0848	41791-0865	26-61-4180	71.17 (2.802)	67.36 (2.652)

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

None

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: R	ECR/ECN INFORMATION: EC No: UCR2002-0299 DATE: 2001 / 09 / 18	TITLE: PRODUCT SPECIFICATION .156 CENTER KK CONNECTORS	SHEET No. 1 of 5
DOCUMENT NUMBER: PS-08-50	CREATED / REVISED BY: SAMIEC	CHECKED BY: MUELLER	APPROVED BY: MARGULIS



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: R	ECR/ECN INFORMATION: EC No: UCR2002-0299 DATE: 2001 / 09 / 18	TITLE: PRODUCT SPECIFICATION .156 CENTER KK CONNECTORS	SHEET No. 2 of 5
DOCUMENT NUMBER: PS-08-50	CREATED / REVISED BY: SAMIEC	CHECKED BY: MUELLER	APPROVED BY: MARGULIS



PRODUCT SPECIFICATION

5.2 MECHANICAL REQUIREMENTS

DESCRIPTION	TEST CONDITION	REQUIREMENT
Connector Mate and Unmate Forces	Per circuit when mated to an .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.	10.0 N (2.25 lbf) MAXIMUM insertion force & 3.7 N (0.84 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). (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). (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

REVISION: R	ECR/ECN INFORMATION: EC No: UCR2002-0299 DATE: 2001 / 09 / 18	TITLE: PRODUCT SPECIFICATION .156 CENTER KK CONNECTORS	SHEET No. 3 of 5
DOCUMENT NUMBER: PS-08-50	CREATED / REVISED BY: SAMIEC	CHECKED BY: MUELLER	APPROVED BY: MARGULIS



PRODUCT SPECIFICATION

5.3 ENVIRONMENTAL REQUIREMENTS

DESCRIPTION	TEST CONDITION	REQUIREMENT										
Shock (Thermal)	Mate connectors; expose to 5 cycles of: <table border="1"> <thead> <tr> <th>Temperature °C</th> <th>Duration (Minutes)</th> </tr> </thead> <tbody> <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> </tbody> </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)										

REVISION: R	ECR/ECN INFORMATION: EC No: UCR2002-0299 DATE: 2001 / 09 / 18	TITLE: PRODUCT SPECIFICATION .156 CENTER KK CONNECTORS	SHEET No. 4 of 5
DOCUMENT NUMBER: PS-08-50	CREATED / REVISED BY: SAMIEC	CHECKED BY: MUELLER	APPROVED BY: MARGULIS



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 ± 5°C	Visual: No Damage to insulator material
Salt Spray	Mate connectors: Duration: 48 hours exposure; Atmosphere: salt spray from a 5% solution; Temperature: 35 +1/-2°C	10 milliohms MAXIMUM (change from initial) & Visual: No Damage
Cold Resistance	Mate connectors: Duration: 96 hours; Temperature: -40 ± 3°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: R	ECR/ECN INFORMATION: EC No: UCR2002-0299 DATE: 2001 / 09 / 18	TITLE: PRODUCT SPECIFICATION .156 CENTER KK CONNECTORS	SHEET No. 5 of 5
DOCUMENT NUMBER: PS-08-50	CREATED / REVISED BY: SAMIEC	CHECKED BY: MUELLER	APPROVED BY: MARGULIS

10 9 8 7 6 5 4 3 2 1

F

E

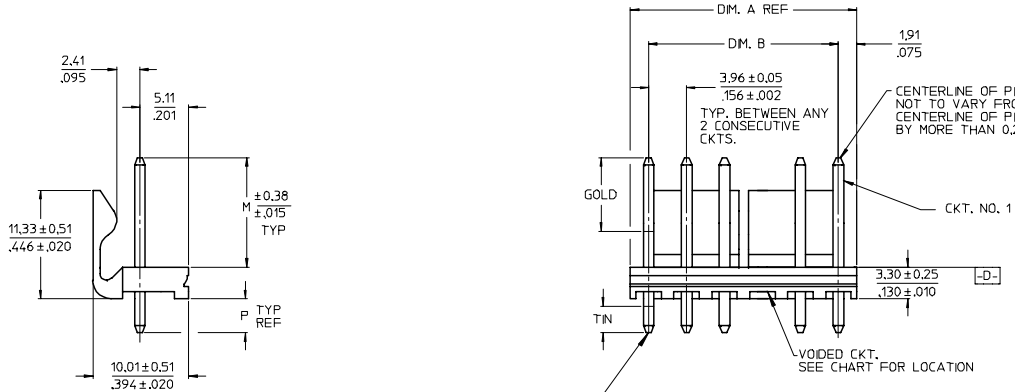
D

C

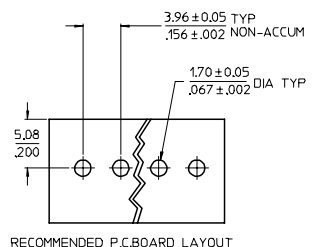
B

A

CKT	DM. A	DM. B
2	7.77 .306	3.96±0.05 .156±.002
3	11.73 .462	7.92±0.08 .312±.003
4	15.70 .618	11.89±0.08 .468±.003
5	19.66 .774	15.85±0.10 .624±.004
6	23.62 .930	19.81±0.10 .780±.004
7	27.58 1.086	23.77±0.10 .936±.004
8	31.55 1.242	27.74±0.13 1.092±.005
9	35.51 1.398	31.70±0.13 1.248±.005
10	39.47 1.554	35.66±0.13 1.404±.005
11	43.43 1.710	39.62±0.15 1.560±.006
12	47.40 1.866	43.59±0.15 1.716±.006
13	51.36 2.022	47.55±0.15 1.872±.006
14	55.32 2.178	51.51±0.18 2.028±.007
15	59.28 2.334	55.47±0.18 2.184±.007
16	63.25 2.490	59.44±0.18 2.340±.007
17	67.21 2.646	63.40±0.20 2.496±.008
18	71.17 2.802	67.36±0.20 2.652±.008



CENTERLINE OF PN AT TP
NOT TO VARY FROM
CENTERLINE OF PN AT DATUM -D-
BY MORE THAN 0.13/.005 IN ANY DIRECTION.



RECOMMENDED P.C. BOARD LAYOUT

- NOTES:
1. MATERIAL: HEADER-GLASS FILLED POLYESTER, 94V-0, MOLDED NATURAL (WHITE).
 2. FINISH: (102-TIN) OVERALL TIN: 0.00508/.000200 MIN OVER 0.00254/.000100 MN COPPER.
(122-TIN) OVERALL TIN: 0.00381/.000150 MN OVER 0.00076/.000030 MN NICKEL.
(208-15 GOLD) SELECT GOLD: 0.00038/.000015 MN, SELECT TIN: 0.00254/.000100 MN,
OVERALL NICKEL UNDERPLATE: 0.00127/.000050 MN.
(228-30 GOLD) SELECT GOLD: 0.00076/.000030 MN, SELECT TIN: 0.00254/.000100 MN,
OVERALL NICKEL UNDERPLATE: 0.00127/.000050 MN.
(501-GOLD) OVERALL GOLD: 0.00051/.000020 MN OVER 0.00076/.000030 MN NICKEL.
 - *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 AND PROCESS PARAMETERS; SEE PS-08-50.
 4. PACKAGING INFORMATION; SEE CHARTS.
 5. SOLDERABILITY: PER SMES-152.
 6. PIN PUSH-OUT FORCE: PRIOR TO SOLDERING, A 3 LB. MINIMUM FORCE IN EITHER DIRECTION.
 7. PARTS ARE STACKABLE END TO END ON 3.96/.156 CENTERS.

2-x	P6
1	REV

ADD: P/N 26-62-4101	2006/05/18
EC NO: UCF2006-2683	2006/05/18
DRWN: ADERR	2006/05/18
CHKD: LSCHM1DT	2006/05/18
APPR: FSWJH	2006/05/18
REV	DESCRIPTION
P6	

QUALITY SYMBOLS
◀=0
▽=0

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	11-07-03
CHECKED BY	DATE
KSAMIEC	11-10-03
APPROVED BY	DATE
MARGULIS	11-17-03
MATERIAL NO.	DOCUMENT NO.
SEE CHART	SDA-41791
SIZE	
B	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
2:1	INCH	
TITLE		
KK 156 HEADER ASSEMBLY FRICTION LOCK VERTICAL SOLID BODY W/O PEGS		
MOLDEX MOLEX INCORPORATED		
SHEET NO.		1 OF *

9 8 7 6 5 4 3 2 1

OPTIONS	Group	A-41791-0002/0018	Group	A-41791-0832/0848	Group	A-41791-0849/0865	Group	
	Header No:	41790-0002/0018	Header No:	41790-0002/0018	Header No:	41790-0002/0018	Header No:	
	Pin No:	2161-94(102)	Pin No:	43294-0209	Pin No:	43294-0210	Pin No:	
	Plating:	102 – TIN	Plating:	208 – 15 GOLD	Plating:	228 – 30 GOLD	Plating:	
	Pin Length L	18.29 / .720	Pin Length L	18.29/. 720	Pin Length L	18.29/. 720	Pin Length L	
	Mating M	11.43 / .450	Mating M	11.43/. 450	Mating M	11.43/. 450	Mating M	
	Gold Loc G	N/A	Gold Loc G	6.86/. 270	Gold Loc G	6.86/. 270	Gold Loc G	
	PC Tail P	3.56 / .140	PC Tail P	3.56/. 140	PC Tail P	3.56/. 140	PC Tail P	
	Tin Loc T	OVERALL	Tin Loc T	4.06/. 160	Tin Loc T	4.06/. 160	Tin Loc T	
	Voided Ckts	NONE	Voided Ckts	NONE	Voided CKts	NONE	Voided Ckts	
Pack Per	PK-41791-001	Pack Per	PK-41791-001	Pack Per	PK-41791-001	Pack Per		
Ckts	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number
2	26-60-4020	A-41791-0002	41791-0832	A-41791-0832	41791-0849	A-41791-0849		
3	26-60-4030	A-41791-0003	41791-0833	A-41791-0833	41791-0850	A-41791-0850		
4	26-60-4040	A-41791-0004	41791-0834	A-41791-0834	41791-0851	A-41791-0851		
5	26-60-4050	A-41791-0005	41791-0835	A-41791-0835	41791-0852	A-41791-0852		
6	26-60-4060	A-41791-0006	41791-0836	A-41791-0836	41791-0853	A-41791-0853		
7	26-60-4070	A-41791-0007	41791-0837	A-41791-0837	41791-0854	A-41791-0854		
8	26-60-4080	A-41791-0008	41791-0838	A-41791-0838	41791-0855	A-41791-0855		
9	26-60-4090	A-41791-0009	41791-0839	A-41791-0839	41791-0856	A-41791-0856		
10	26-60-4100	A-41791-0010	41791-0840	A-41791-0840	41791-0857	A-41791-0857		
11	26-60-4110	A-41791-0011	41791-0841	A-41791-0841	41791-0858	A-41791-0858		
12	26-60-4120	A-41791-0012	41791-0842	A-41791-0842	41791-0859	A-41791-0859		
13	26-60-4130	A-41791-0013	41791-0843	A-41791-0843	41791-0860	A-41791-0860		
14	26-60-4140	A-41791-0014	41791-0844	A-41791-0844	41791-0861	A-41791-0861		
15	26-60-4150	A-41791-0015	41791-0845	A-41791-0845	41791-0862	A-41791-0862		
16	26-60-4160	A-41791-0016	41791-0846	A-41791-0846	41791-0863	A-41791-0863		
17	26-60-4170	A-41791-0017	41791-0847	A-41791-0847	41791-0864	A-41791-0864		
18	26-60-4180	A-41791-0018	41791-0848	A-41791-0848	41791-0865	A-41791-0865		

P6	REV:	ECR/ECN INFORMATION	TITLE:	KK 156 HEADER ASSEMBLY FRICTION LOCK VERTICAL SOLID BODY W/O PEGS	SHEET No.		
		EC NO.: UCP2006-2683			- 2 -		
		DATE: 5/18/2006					
DOCUMENT NUMBER:		CREATED / REVISED BY:		CHECKED BY:		APPROVED BY:	
SDA- 41791		ADERR		LSCHMIDT		FSMITH	

OPTIONS	Group	A-41791-0019/0035	Group	A-41791-0036/0052	Group	A-41791-0059/0074	Group	A-41791-0086/0100
	Header No:	41790-0002/0018	Header No:	41790-0002/0018	Header No:	41790-0002/0018	Header No:	41790-0002/0018
	Pin No:	2161-94(501)	Pin No:	2161-94(102)	Pin No:	2161-94(102)	Pin No:	2161-94(102)
	Plating:	501 – GOLD	Plating:	102 – TIN	Plating:	102 – TIN	Plating:	102 – TIN
	Pin Length L	18.29 / .720	Pin Length L	18.29 / .720	Pin Length L	18.29 / .720	Pin Length L	18.29 / .720
	Mating M	11.43 / .450	Mating M	11.43 / .450	Mating M	11.43 / .450	Mating M	11.43 / .450
	Gold Loc G	OVERALL	Gold Loc G	N/A	Gold Loc G	N/A	Gold Loc G	N/A
	PC Tail P	3.56 / .140	PC Tail P	3.56 / .140	PC Tail P	3.56 / .140	PC Tail P	3.56 / .140
	Tin Loc T	N/A	Tin Loc T	OVERALL	Tin Loc T	OVERALL	Tin Loc T	OVERALL
	Voided Ckts	NONE	Voided Ckts	2	Voided Ckts	3	Voided Ckts	2, 4
Pack Per	PK-41791-001	Pack Per	PK-41791-001	Pack Per	PK-41791-001	Pack Per	PK-41791-001	
Ckts	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number
2	26-61-4020	A-41791-0019	26-62-4020	A-41791-0036				
3	26-61-4030	A-41791-0020	26-62-4030	A-41791-0037	26-62-4036	A-41791-0059		
4	26-61-4040	A-41791-0021	26-62-4040	A-41791-0038	26-62-4046	A-41791-0060	26-62-4041	A-41791-0086
5	26-61-4050	A-41791-0022	26-62-4050	A-41791-0039	26-62-4056	A-41791-0061	26-62-4051	A-41791-0087
6	26-61-4060	A-41791-0023	26-62-4060	A-41791-0040	26-62-4066	A-41791-0062	26-62-4061	A-41791-0088
7	26-61-4070	A-41791-0024	26-62-4070	A-41791-0041	26-62-4076	A-41791-0063		A-41791-0089
8	26-61-4080	A-41791-0025	26-62-4080	A-41791-0042	26-62-4086	A-41791-0064		A-41791-0090
9	26-61-4090	A-41791-0026	26-62-4090	A-41791-0043	26-62-4096	A-41791-0065		A-41791-0091
10	26-61-4100	A-41791-0027	26-62-4100	A-41791-0044	26-62-4106	A-41791-0066	26-62-4101	A-41791-0092
11	26-61-4110	A-41791-0028	26-62-4110	A-41791-0045	26-62-4116	A-41791-0067		A-41791-0093
12	26-61-4120	A-41791-0029	26-62-4120	A-41791-0046	26-62-4126	A-41791-0068		A-41791-0094
13	26-61-4130	A-41791-0030	26-62-4130	A-41791-0047	26-62-4136	A-41791-0069		A-41791-0095
14	26-61-4140	A-41791-0031	26-62-4140	A-41791-0048	26-62-4146	A-41791-0070		A-41791-0096
15	26-61-4150	A-41791-0032	26-62-4150	A-41791-0049	26-62-4156	A-41791-0071		A-41791-0097
16	26-61-4160	A-41791-0033	26-62-4160	A-41791-0050	26-62-4166	A-41791-0072		A-41791-0098
17	26-61-4170	A-41791-0034	26-62-4170	A-41791-0051	26-62-4176	A-41791-0073		A-41791-0099
18	26-61-4180	A-41791-0035	26-62-4180	A-41791-0052	26-62-4186	A-41791-0074		A-41791-0100

P6	REV:	ECR/ECN INFORMATION	TITLE:	KK 156 HEADER ASSEMBLY FRICTION LOCK VERTICAL SOLID BODY W/O PEGS	SHEET No.		
		EC NO.: UCP2006-2683			- 3 -		
		DATE: 5/18/2006					
DOCUMENT NUMBER:		CREATED / REVISED BY:		CHECKED BY:		APPROVED BY:	
SDA- 41791		ADERR		LSCHMIDT		FSMITH	

OPTIONS	Group	A-41791-0138/0154	Group	A-41791-0253/0266	Group		Group	
	Header No:	41790-0002/0018	Header No:	41790-0002/0018	Header No:		Header No:	
	Pin No:	2161-94(122)	Pin No:	2161-94(122)	Pin No:		Pin No:	
	Plating:	122 – TIN	Plating:	122 – TIN	Plating:		Plating:	
	Pin Length L	18.29 / .720	Pin Length L	18.29 / .720	Pin Length L		Pin Length L	
	Mating M	11.43 / .450	Mating M	11.43 / .450	Mating M		Mating M	
	Gold Loc G	N/A	Gold Loc G	N/A	Gold Loc G		Gold Loc G	
	PC Tail P	3.56 / .140	PC Tail P	3.56 / .140	PC Tail P		PC Tail P	
	Tin Loc T	OVERALL	Tin Loc T	OVERALL	Tin Loc T		Tin Loc T	
	Voided Ckts	NONE	Voided Ckts	5	Voided Ckts		Voided Ckts	
Pack Per	PK-41791-001	Pack Per	PK-41791-001	Pack Per		Pack Per		
Ckts	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number
2	26-60-4022	A-41791-0138						
3	26-60-4032	A-41791-0139						
4	26-60-4042	A-41791-0140						
5	26-60-4052	A-41791-0141		A-41791-0253				
6	26-60-4062	A-41791-0142	26-62-4064	A-41791-0254				
7	26-60-4072	A-41791-0143	26-62-4074	A-41791-0255				
8	26-60-4082	A-41791-0144	26-62-4084	A-41791-0256				
9	26-60-4092	A-41791-0145		A-41791-0257				
10	26-60-4102	A-41791-0146		A-41791-0258				
11	26-60-4112	A-41791-0147		A-41791-0259				
12	26-60-4122	A-41791-0148		A-41791-0260				
13	26-60-4132	A-41791-0149	26-62-4134	A-41791-0261				
14	26-60-4142	A-41791-0150		A-41791-0262				
15	26-60-4152	A-41791-0151		A-41791-0263				
16	26-60-4162	A-41791-0152		A-41791-0264				
17	26-60-4172	A-41791-0153		A-41791-0265				
18	26-60-4182	A-41791-0154		A-41791-0266				

P6	REV:	ECR/ECN INFORMATION	TITLE:	KK 156 HEADER ASSEMBLY FRICTION LOCK VERTICAL SOLID BODY W/O PEGS	SHEET No.		
		EC NO.: UCP2006-2683			- 4 -		
		DATE: 5/18/2006					
DOCUMENT NUMBER:		CREATED / REVISED BY:		CHECKED BY:		APPROVED BY:	
SDA- 41791		ADERR		LSCHMIDT		FSMITH	

OPTIONS	Group	A-41791-0297/0308	Group	A-41791-0309/0308	Group	A-41791-0464/0480	Group	
	Header No:	41790-0002/0018	Header No:	41790-0002/0018	Header No:	41790-0002/0018	Header No:	
	Pin No:	2161-94(122)	Pin No:	2161-94(501)	Pin No:	2161-1(102)	Pin No:	
	Plating:	122 – TIN	Plating:	501 – GOLD	Plating:	102 – TIN	Plating:	
	Pin Length L	18.29 / .720	Pin Length L	18.29 / .720	Pin Length L	19.05 / .750	Pin Length L	
	Mating M	11.43 / .450	Mating M	11.43 / .450	Mating M	11.43 / .450	Mating M	
	Gold Loc G	N/A	Gold Loc G	OVERALL	Gold Loc G	N/A	Gold Loc G	
	PC Tail P	3.56 / .140	PC Tail P	3.56 / .140	PC Tail P	4.32 / .170	PC Tail P	
	Tin Loc T	OVERALL	Tin Loc T	N/A	Tin Loc T	OVERALL	Tin Loc T	
	Voided Ckts	7	Voided Ckts	2	Voided Ckts	NONE	Voided Ckts	
Pack Per	PK-41791-001	Pack Per	PK-41791-001	Pack Per	PK-41791-001	Pack Per		
Ckts	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number
2					26-60-4023	A-41791-0464		
3			26-63-4031	A-41791-0310	26-60-4033	A-41791-0465		
4				A-41791-0311	26-60-4043	A-41791-0466		
5				A-41791-0312		A-41791-0467		
6			26-63-4061	A-41791-0313	26-60-4063	A-41791-0468		
7		A-41791-0297	26-63-4071	A-41791-0314	26-60-4073	A-41791-0469		
8		A-41791-0298		A-41791-0315	26-60-4083	A-41791-0470		
9	26-60-4094	A-41791-0299		A-41791-0316	26-60-4093	A-41791-0471		
10		A-41791-0300		A-41791-0317	26-60-4103	A-41791-0472		
11		A-41791-0301		A-41791-0318		A-41791-0473		
12		A-41791-0302		A-41791-0319	26-60-4123	A-41791-0474		
13		A-41791-0303		A-41791-0320		A-41791-0475		
14		A-41791-0304		A-41791-0321		A-41791-0476		
15		A-41791-0305		A-41791-0322		A-41791-0477		
16		A-41791-0306		A-41791-0323		A-41791-0478		
17		A-41791-0307		A-41791-0324		A-41791-0479		
18		A-41791-0308		A-41791-0325	26-60-4183	A-41791-0480		

P6	REV:	ECR/ECN INFORMATION	TITLE:	KK 156 HEADER ASSEMBLY FRICTION LOCK VERTICAL SOLID BODY W/O PEGS	SHEET No.		
		EC NO.: UCP2006-2683			- 5 -		
		DATE: 5/18/2006					
DOCUMENT NUMBER:		CREATED / REVISED BY:		CHECKED BY:		APPROVED BY:	
SDA- 41791		ADERR		LSCHMIDT		FSMITH	

OPTIONS	Group	A-41791-0583/0597	Group	A-41791-0598/0609	Group	A-41791-0638/0653	Group	A-41791-1036 / 1048
	Header No:	41790-0002/0018	Header No:	41790-0002/0018	Header No:	41790-0002/0018	Header No:	41790-0006 / 0018
	Pin No:	2161-94(102)	Pin No:	2161-94(102)	Pin No:	2161-94(501)	Pin No:	2161-94(102)
	Plating:	102 – TIN	Plating:	102 – TIN	Plating:	501 – GOLD	Plating:	102 – TIN
	Pin Length L	18.29 / .720	Pin Length L	18.29 / .720	Pin Length L	18.29 / .720	Pin Length L	18.29 / .720
	Mating M	11.43 / .450	Mating M	11.43 / .450	Mating M	11.43 / .450	Mating M	11.43 / .450
	Gold Loc G	N/A	Gold Loc G	N/A	Gold Loc G	OVERALL	Gold Loc G	N/A
	PC Tail P	3.56 / .140	PC Tail P	3.56 / .140	PC Tail P	3.56 / .140	PC Tail P	3.56 / .140
	Tin Loc T	OVERALL	Tin Loc T	OVERALL	Tin Loc T	N/A	Tin Loc T	OVERALL
	Voided Ckts	4	Voided Ckts	7	Voided Ckts	3	Voided Ckts	4, 6
Pack Per	PK-41791-001	Pack Per	PK-41791-001	Pack Per	PK-41791-001	Pack Per	PK-41791-001	
Ckts	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number
2								
3								
4	27-62-4049	A-41791-0583						
5	27-62-4059	A-41791-0584						
6	27-62-4069	A-41791-0585			26-63-4032	A-41791-0638		
7	27-62-4079	A-41791-0586	41791-0598	A-41791-0598	41791-0639	A-41791-0639		
8	27-62-4089	A-41791-0587	41791-0599	A-41791-0599	26-63-4052	A-41791-0640		
9	27-62-4099	A-41791-0588	41791-0600	A-41791-0600	26-63-4062	A-41791-0641		A-41791-1036
10	27-62-4109	A-41791-0589	41791-0601	A-41791-0601	41791-0642	A-41791-0642	41791-1037	A-41791-1037
11	27-62-4119	A-41791-0590	41791-0602	A-41791-0602	26-63-4082	A-41791-0643		A-41791-1038
12	27-62-4129	A-41791-0591	41791-0603	A-41791-0603	41791-0644	A-41791-0644		A-41791-1039
13	27-62-4139	A-41791-0592	41791-0604	A-41791-0604	41791-0645	A-41791-0645		A-41791-1040
14	27-62-4149	A-41791-0593	41791-0605	A-41791-0605	41791-0646	A-41791-0646		A-41791-1041
15	27-62-4159	A-41791-0594	41791-0606	A-41791-0606	41791-0647	A-41791-0647		A-41791-1042
16	27-62-4169	A-41791-0595	41791-0607	A-41791-0607	41791-0648	A-41791-0648		A-41791-1043
17	27-62-4179	A-41791-0596	41791-0608	A-41791-0608	41791-0649	A-41791-0649		A-41791-1044
18	27-62-4189	A-41791-0597	41791-0609	A-41791-0609	41791-0650	A-41791-0650		A-41791-1045
					41791-0651	A-41791-0651		A-41791-1046
					41791-0652	A-41791-0652		A-41791-1047
					41791-0653	A-41791-0653		A-41791-1048

P6	REV:	ECR/ECN INFORMATION	TITLE:	KK 156 HEADER ASSEMBLY FRICTION LOCK VERTICAL SOLID BODY W/O PEGS	SHEET No.
		EC NO.: UCP2006-2683			- 6 -
		DATE: 5/18/2006			
DOCUMENT NUMBER:		CREATED / REVISED BY:		CHECKED BY:	
SDA- 41791		ADERR		LSCHMIDT	
			APPROVED BY:		
			FSMITH		

OPTIONS	Group	A-41791-0815/0831	Group	A-41791-0883/0891	Group	A-41791-0892/0908	Group	A-41791-0922/0933
	Header No:	41790-0002/0018	Header No:	41790-0010/0018	Header No:	41790-0002/0018	Header No:	41790-0007/0018
	Pin No:	2161-36(102)	Pin No:	2161-94(102)	Pin No:	43294-0299	Pin No:	2161-94(102)
	Plating:	102 – TIN	Plating:	102 – TIN	Plating:	208 – 15 GOLD	Plating:	102 – TIN
	Pin Length L	30.48 / 1.200	Pin Length L	18.29 / .720	Pin Length L	20.83 / .820	Pin Length L	18.29 / .720
	Mating M	11.43 / .450	Mating M	11.43 / .450	Mating M	11.43 / .450	Mating M	11.43 / .450
	Gold Loc G	N/A	Gold Loc G	N/A	Gold Loc G	6.83/. 270	Gold Loc G	N/A
	PC Tail P	15.75/ .620	PC Tail P	3.56 / .140	PC Tail P	6.10/ .240	PC Tail P	3.56 / .140
	Tin Loc T	OVERALL	Tin Loc T	OVERALL	Tin Loc T	6.35/ .250	Tin Loc T	OVERALL
	Voided Ckts	NONE	Voided Ckts	10	Voided Ckts	NONE	Voided Ckts	5, 7
Pack Per	PK-41791-003	Pack Per	PK-41791-001	Pack Per	PK-41791-002	Pack Per	PK-41791-001	
Ckts	Item Number		Item Number		Item Number		Item Number	
2	41791-0815				41791-0892			
3	41791-0816				41791-0893			
4	41791-0817				41791-0894			
5	41791-0818				41791-0895			
6	41791-0819				41791-0896			
7	41791-0820				41791-0897		41791-0922	
8	41791-0821				41791-0898		41791-0923	
9	41791-0822				41791-0899		41791-0924	
10	41791-0823		41791-0883		41791-0900		41791-0925	
11	41791-0824		41791-0884		41791-0901		41791-0926	
12	41791-0825		41791-0885		41791-0902		41791-0927	
13	41791-0826		41791-0886		41791-0903		41791-0928	
14	41791-0827		41791-0887		41791-0904		41791-0929	
15	41791-0828		41791-0888		41791-0905		41791-0930	
16	41791-0829		41791-0889		41791-0906		41791-0931	
17	41791-0830		41791-0890		41791-0907		41791-0932	
18	41791-0831		41791-0891		41791-0908		41791-0933	

P6	REV:	ECR/ECN INFORMATION	TITLE:	KK 156 HEADER ASSEMBLY FRICTION LOCK VERTICAL SOLID BODY W/O PEGS	SHEET No.		
		EC NO.: UCP2006-2683			- 7 -		
		DATE: 5/18/2006					
DOCUMENT NUMBER:		CREATED / REVISED BY:		CHECKED BY:		APPROVED BY:	
SDA- 41791		ADERR		LSCHMIDT		FSMITH	

OPTIONS	Group	41791-0934/0948	Group	41791-0966/0976	Group	41791-0977/0993	Group	41791-0994/1002
	Header No:	41790-0004/0018	Header No:	41790-0007/0018	Header No:	41790-0002/0018	Header No:	41790-0010/0018
	Pin No:	43294-0209	Pin No:	2161-94(102)	Pin No:	43294-0345	Pin No:	43294-0209
	Plating:	208 – 15 GOLD	Plating:	102 – TIN	Plating:	228 – 30 GOLD	Plating:	208 – 15 GOLD
	Pin Length L	18.29/. 720	Pin Length L	18.29/. 720	Pin Length L	22.10/. 870	Pin Length L	18.29/. 720
	Mating M	11.43 / .450	Mating M	11.43/. 450	Mating M	11.43/. 450	Mating M	11.43 / .450
	Gold Loc G	6.86/ .270	Gold Loc G	N/A	Gold Loc G	10.02/. 400	Gold Loc G	6.86/ .270
	PC Tail P	3.56/. 140	PC Tail P	3.56/. 140	PC Tail P	7.37/. 290	PC Tail P	3.56/. 140
	Tin Loc T	4.06/. 160	Tin Loc T	OVERALL	Tin Loc T	5.08/. 200	Tin Loc T	4.06/. 160
	Voided Ckts	4	Voided Ckts	3, 7, 8	Voided Ckts	None	Voided Ckts	3, 4, 5, 8, 9, 10
Pack Per	PK-41791-001	Pack Per	PK-41791-001	Pack Per	PK-41791-002	Pack Per	PK-41791-001	
Ckts	Item Number		Item Number		Item Number		Item Number	
2					41791-0977			
3					41791-0978			
4	41791-0934				41791-0979			
5	41791-0935				41791-0980			
6	41791-0936				41791-0981			
7	41791-0937				41791-0982			
8	41791-0938		41791-0966		41791-0983			
9	41791-0939		41791-0967		41791-0984			
10	41791-0940		41791-0968		41791-0985		41791-0994	
11	41791-0941		41791-0969		41791-0986		41791-0995	
12	41791-0942		41791-0970		41791-0987		41791-0996	
13	41791-0943		41791-0971		41791-0988		41791-0997	
14	41791-0944		41791-0972		41791-0989		41791-0998	
15	41791-0945		41791-0973		41791-0990		41791-0999	
16	41791-0946		41791-0974		41791-0991		41791-1000	
17	41791-0947		41791-0975		41791-0992		41791-1001	
18	41791-0948		41791-0976		41791-0993		41791-1002	

REV: P6	ECR/ECN INFORMATION	TITLE: KK 156 HEADER ASSEMBLY FRICTION LOCK VERTICAL SOLID BODY W/O PEGS	SHEET No. - 8 -
	EC NO.: UCP2006-2683 DATE: 5/18/2006		
DOCUMENT NUMBER: SDA- 41791	CREATED / REVISED BY: ADERR	CHECKED BY: LSCHMIDT	APPROVED BY: FSMITH

OPTIONS	Group	A-41791-1049/1062	Group	A-41791-1063/1071	Group	A-41791-1074/1088	Group	A-41791-0773/0785
	Header No:	41790-0005/0018	Header No:	41790-0010/0018	Header No:	41790-0004/0018	Header No:	41790-0006/0018
	Pin No:	2161-94(102)	Pin No:	2161-94(102)	Pin No:	2161-94(501)	Pin No:	2161-94(102)
	Plating:	102 – TIN	Plating:	102 – TIN	Plating:	501 – GOLD	Plating:	102-TIN
	Pin Length L	18.29 / .720	Pin Length L	18.29 / .720	Pin Length L	18.29 / .720	Pin Length L	18.29/.720
	Mating M	11.43 / .450	Mating M	11.43 / .450	Mating M	11.43 / .450	Mating M	11.43/.450
	Gold Loc G	N/A	Gold Loc G	N/A	Gold Loc G	OVERALL	Gold Loc G	N/A
	PC Tail P	3.56 / .140	PC Tail P	3.56 / .140	PC Tail P	3.56 / .140	PC Tail P	3.56/.140
	Tin Loc T	OVERALL	Tin Loc T	OVERALL	Tin Loc T	N/A	Tin Loc T	OVERALL
	Voided Ckts	2, 5	Voided Ckts	5, 10	Voided Ckts	2, 3, 4	Voided Ckts	3, 6
Pack Per	PK-41791-001	Pack Per	PK-41791-001	Pack Per	PK-41791-001	Pack Per	PK-41791-001	
Ckts	Item Number		Item Number		Item Number		Item Number	
2								
3								
4								
5					41791-1075			
6								
7	41791-1051						41791-0774	
8								
9								
10								
11			41791-1064					
12								
13								
14								
15								
16								
17								
18								

P6	REV:	ECR/ECN INFORMATION	TITLE:	KK 156 HEADER ASSEMBLY FRICTION LOCK VERTICAL SOLID BODY W/O PEGS	SHEET No.
		EC NO.: UCP2006-2683			- 9 -
		DATE: 5/18/2006			
DOCUMENT NUMBER:		CREATED / REVISED BY:		CHECKED BY:	
SDA- 41791		ADERR		LSCHMIDT	
				APPROVED BY: FSMITH	