

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0022235041](#)  
**Status:** **Active**  
**Description:** 2.54mm (.100") Pitch KK® Solid Header, Vertical, 4 Circuits, with Kinked PC Tails

**Documents:**

[3D Model](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Drawing \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

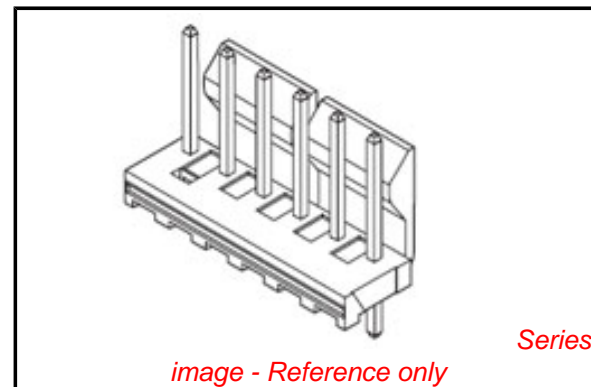
Product Family PCB Headers  
 Series [43009](#)  
 Application Wire-to-Board  
 Product Name KK®

**Physical**

Breakaway No  
 Circuits (Loaded) 4  
 Circuits (maximum) 4  
 Color - Resin Natural  
 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 Polyester  
 Number of Rows 1  
 Orientation Vertical  
 PC Tail Length (in) 0.140 In  
 PC Tail Length (mm) 3.56 mm  
 PCB Locator No  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.062 In  
 PCB Thickness Recommended (mm) 1.60 mm  
 Packaging Type Bag  
 Pitch - Mating Interface (in) 0.100 In  
 Pitch - Mating Interface (mm) 2.54 mm  
 Plating min: Mating (µin) 200  
 Plating min: Mating (µm) 5  
 Plating min: Termination (µin) 200  
 Plating min: Termination (µm) 5  
 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



**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](mailto: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**

[43009Series](#)

**Mates With**

[2695](#) , [6471](#) , [7880](#) , [4455](#) , [7720](#) , [40555](#)

**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**

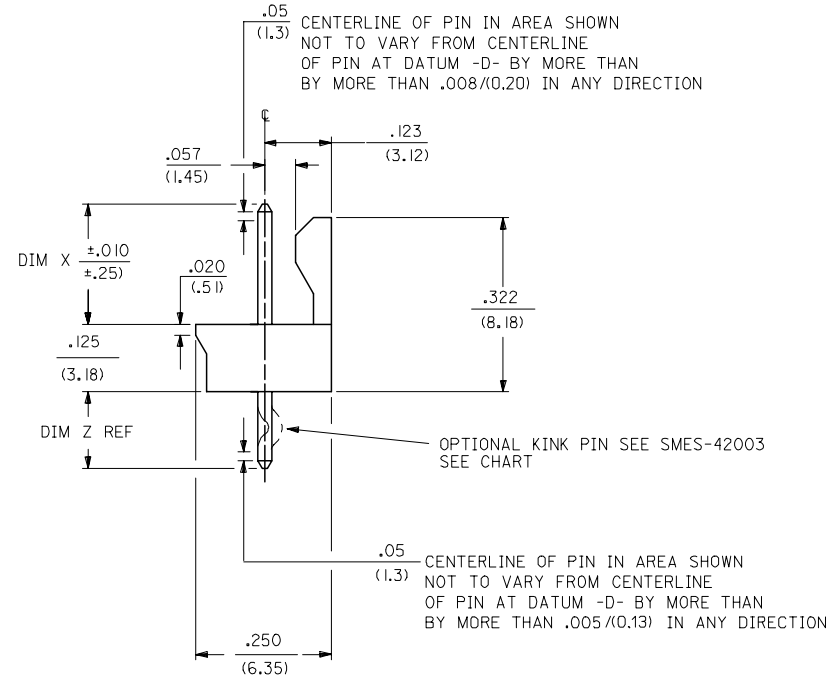
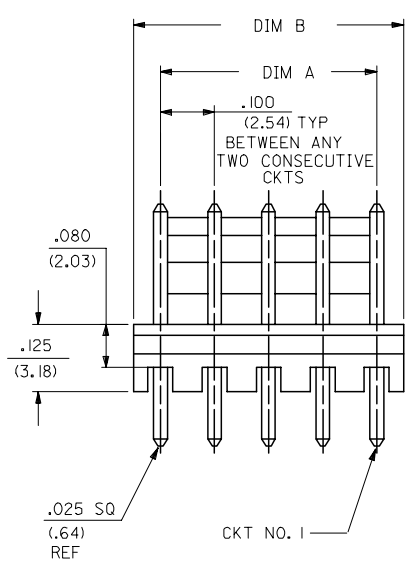
Old Part Number	A-43009-0013
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**Reference - Drawing Numbers**

Sales Drawing	SDA-43009
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This document was generated on 03/19/2010

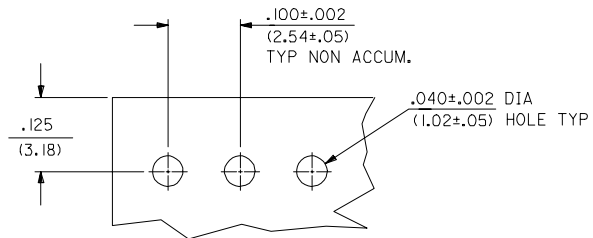
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CKTS	DIM A	DIM B
2	.100 (2.54)	.195 (4.95)
3	.200 (5.08)	.295 (7.49)
4	.300 (7.62)	.395 (10.03)
5	.400 (10.16)	.495 (12.57)
6	.500 (12.70)	.595 (15.11)
7	.600 (15.24)	.695 (17.65)
8	.700 (17.78)	.795 (20.19)
9	.800 (20.32)	.895 (22.73)
10	.900 (22.86)	.995 (25.27)

NOTES:

- MATERIAL: 7 1/2% GLASS FILLED POLYESTER, 94V-0.  
HOUSING COLORS: 42009 - N = NATURAL COLOR - ND = YELLOW  
- NA = BLUE - NE = GREEN  
- NB = BROWN - NR = RED  
- NC = ORANGE - NG = GREY  
PIN MATERIAL: 260 BRASS.
- FINISH:  
(102) - OVERALL TIN: .000200/(0.00508) MIN., OVERALL COPPER UNDERPLATE: .000100/(0.00254) MIN.  
(154) - OVERALL TIN: .000100/(0.00254) MIN., OVERALL NICKEL UNDERPLATE: .000050/(0.00127) MIN.  
(501) - OVERALL GOLD: .000020/(0.00051) MIN., OVERALL NICKEL UNDERPLATE: .000030/(0.00076) MIN.  
(509) - OVERALL GOLD: .000050/(0.00127) MIN., OVERALL NICKEL UNDERPLATE: .000030/(0.00076) MIN.
- PRODUCT SPECIFICATIONS: PS-10-07.
- PACKAGING: OPTION 1: BULK PER PK-43009-001.  
OPTION 2: TUBE PER PK-44743-001.
- PIN PUSH OUT FORCE: 3 LBS. MIN. (PER CKT).
- PARTS ARE STACKABLE END TO END ON .100/(2.54) CENTERS.
- SOLDERABILITY PER ES-152.



RECOMMENDED PC BOARD LAYOUT  
(.062 THK)

GEN. DOC.	2-*	C1
ME 10	1	C1
DOC. TYPE	SHEET	REV.

ADD TUBE PKG FC NO: UCP2006-1787 DRW:NAELHAG 2006/02/13 CHKD:LSHMDT 2006/02/16 APPR:FSM TH 2006/02/17	DESCRIPTION REV
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QUALITY SYMBOLS =0 =0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± .014 1 PLACE ± 0.36 ± --- ANGULAR ±1/2°
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DRAWN BY SAMIEC	DATE 01/28/92
CHECKED BY PATEL	DATE 01/28/92
APPROVED BY LENZ	DATE 01/28/92
MATERIAL NO.	SIZE C

SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
HEADER ASSEMBLY FRICTION LOCK .100 CENTERS		
molex MOLEX INCORPORATED		
DOCUMENT NO. SDA-43009	SHEET NO. 1 OF 5	

A-43009-0002/0010			A-43009-001/0019			A-43009-0020/0028			A-43009-0029/0037		
OPTIONS	Header No.	42009-N	OPTIONS	Header No.	42009-N	OPTIONS	Header No.	42009-NE	OPTIONS	Header No.	42009-NR
	Pin No.	2766-1(102)		Pin No.	2766-1(102)		Pin No.	2766-1(102)		Pin No.	2766-1(102)
	Dim. L	.560/(14.22)		Dim. L	.560/(14.22)		Dim. L	.560/(14.22)		Dim. L	.560/(14.22)
	Dim. X	.295/(7.49)		Dim. X	.295/(7.49)		Dim. X	.295/(7.49)		Dim. X	.295/(7.49)
	Dim. Z	.140/(3.56)		Dim. Z	.140/(3.56)		Dim. Z	.140/(3.56)		Dim. Z	.140/(3.56)
	No. of Ckts	2-10		No. of Ckts	2-10		No. of Ckts	2-10		No. of Ckts	2-10
	Void Ckts	None		Void Ckts	None		Void Ckts	None		Void Ckts	None
	Kink Pins	No		Kink Pins	Yes		Kink Pins	Yes		Kink Pins	Yes
	Color	-		Color	-		Color	Green		Color	Red
	Packaging	PK-43009-001		Packaging	PK-43009-001		Packaging	PK-43009-001		Packaging	PK-43009-001
Ckt	EDP No.	Engineering No.	Ckt	EDP No.	Engineering No.	Ckt	EDP No.	Engineering No.	Ckt	EDP No.	Engineering No.
2	22-23-5024	A-43009-0002	2	22-23-5021	A-43009-0011	2	22-23-5022	A-43009-0020	2	22-23-5023	A-43009-0029
3	22-23-5034	A-43009-0003	3	22-23-5031	A-43009-0012	3	22-23-5032	A-43009-0021	3	22-23-5033	A-43009-0030
4	22-23-5044	A-43009-0004	4	22-23-5041	A-43009-0013	4	22-23-5042	A-43009-0022	4	22-23-5043	A-43009-0031
5	22-23-5054	A-43009-0005	5	22-23-5051	A-43009-0014	5	22-23-5052	A-43009-0023	5	22-23-5053	A-43009-0032
6	22-23-5064	A-43009-0006	6	22-23-5061	A-43009-0015	6	22-23-5062	A-43009-0024	6	22-23-5063	A-43009-0033
7	22-23-5074	A-43009-0007	7	22-23-5071	A-43009-0016	7	22-23-5072	A-43009-0025	7	22-23-5073	A-43009-0034
8	22-23-5084	A-43009-0008	8	22-23-5081	A-43009-0017	8	22-23-5082	A-43009-0026	8	22-23-5083	A-43009-0035
9	22-23-5094	A-43009-0009	9	22-23-5091	A-43009-0018	9	22-23-5092	A-43009-0027	9	22-23-5093	A-43009-0036
10	22-23-5104	A-43009-0010	10	22-23-5101	A-43009-0019	10	22-23-5102	A-43009-0028	10	22-23-5103	A-43009-0037
11			11			11			11		
12			12			12			12		
13			13			13			13		
14			14			14			14		
15			15			15			15		

REV: <b>C1</b>	<b>SEE SHEET 1</b> <b>2/17/2006</b>	TITLE: <b>HEADER ASSEMBLY FRICTION LOCK</b> <b>.100 CENTERS</b>	SHEET No. <b>- 2 -</b>
DOCUMENT NUMBER: <b>SDA-43009</b>		CREATED / REVISED BY: <b>DRATNOL</b>	CHECKED BY: <b>SAMIEC</b>
		APPROVED BY: <b>MARGULIS</b>	

A-43009-0038/0046			A-43009-047/0055			A-43009-0056/0064			A-43009-0066/0073		
OPTIONS	Header No.	42009-ND	OPTIONS	Header No.	42009-N	OPTIONS	Header No.	42009-N	OPTIONS	Header No.	42009-N
	Pin No.	2766-1(102)		Pin No.	2766-1(501)		Pin No.	2766-1(509)		Pin No.	2766-1(102)
	Dim. L	.560/(14.22)		Dim. L	.560/(14.22)		Dim. L	.560/(14.22)		Dim. L	.560/(14.22)
	Dim. X	.295/(7.49)		Dim. X	.295/(7.49)		Dim. X	.295/(7.49)		Dim. X	.295/(7.49)
	Dim. Z	.140/(3.56)		Dim. Z	.140/(3.56)		Dim. Z	.140/(3.56)		Dim. Z	.140/(3.56)
	No. of Ckts	2-10		No. of Ckts	2-10		No. of Ckts	2-10		No. of Ckts	3-10
	Void Ckts	None		Void Ckts	None		Void Ckts	None		Void Ckts	1
	Kink Pins	Yes		Kink Pins	Yes		Kink Pins	Yes		Kink Pins	Yes
	Color	Yellow		Color	-		Color	-		Color	-
	Packaging	PK-43009-001		Packaging	PK-43009-001		Packaging	PK-43009-001		Packaging	PK-43009-001
Ckt	EDP No.	Engineering No.	Ckt	EDP No.	Engineering No.	Ckt	EDP No.	Engineering No.	Ckt	EDP No.	Engineering No.
2	22-23-5025	A-43009-0038	2		A-43009-0047	2	43009-0056	A-43009-0056	2		
3	22-23-5035	A-43009-0039	3		A-43009-0048	3	43009-0057	A-43009-0057	3	43009-0066	A-43009-0066
4	22-23-5045	A-43009-0040	4		A-43009-0049	4	43009-0058	A-43009-0058	4	43009-0067	A-43009-0067
5	22-23-5055	A-43009-0041	5		A-43009-0050	5	43009-0059	A-43009-0059	5	43009-0068	A-43009-0068
6	22-23-5065	A-43009-0042	6		A-43009-0051	6	43009-0060	A-43009-0060	6	43009-0069	A-43009-0069
7	22-23-5075	A-43009-0043	7		A-43009-0052	7	43009-0061	A-43009-0061	7	43009-0070	A-43009-0070
8	22-23-5085	A-43009-0044	8		A-43009-0053	8	43009-0062	A-43009-0062	8	43009-0071	A-43009-0071
9	22-23-5095	A-43009-0045	9		A-43009-0054	9	43009-0063	A-43009-0063	9	43009-0072	A-43009-0072
10	22-23-5105	A-43009-0046	10		A-43009-0055	10	43009-0064	A-43009-0064	10	43009-0073	A-43009-0073
11			11			11			11		
12			12			12			12		
13			13			13			13		
14			14			14			14		
15			15			15			15		

REV: <b>C1</b>	SEE SHEET 1 2/17/2006	TITLE: <b>HEADER ASSEMBLY FRICTION LOCK .100 CENTERS</b>	SHEET No. <b>- 3 -</b>
DOCUMENT NUMBER: <b>SDA-43009</b>		CREATED / REVISED BY: <b>DRATNOL</b>	CHECKED BY: <b>SAMIEC</b>
		APPROVED BY: <b>MARGULIS</b>	

A-43009-0074/0081			A-43009-082/0089			A-43009-0090/0097			A-43009-0098/0106		
OPTIONS	Header No.	42009-N	OPTIONS	Header No.	42009-N	OPTIONS	Header No.	42009-N	OPTIONS	Header No.	42009-N
	Pin No.	2766-1(102)		Pin No.	2766-1(102)		Pin No.	2766-1(102)		Pin No.	2766-1(154)
	Dim. L	.560/(14.22)		Dim. L	.560/(14.22)		Dim. L	.560/(14.22)		Dim. L	.560/(14.22)
	Dim. X	.295/(7.49)		Dim. X	.295/(7.49)		Dim. X	.295/(7.49)		Dim. X	.295/(7.49)
	Dim. Z	.140/(3.56)		Dim. Z	.140/(3.56)		Dim. Z	.140/(3.56)		Dim. Z	.140/(3.56)
	No. of Ckts	3-10		No. of Ckts	3-10		No. of Ckts	3-10		No. of Ckts	2-10
	Void Ckts	2		Void Ckts	3		Void Ckts	3		Void Ckts	NONE
	Kink Pins	Yes		Kink Pins	Yes		Kink Pins	No		Kink Pins	NO
	Color	-		Color	-		Color	-		Color	-
	Packaging	PK-43009-001		Packaging	PK-43009-001		Packaging	PK-43009-001		Packaging	PK-43009-001
Ckt	EDP No.	Engineering No.	Ckt	EDP No.	Engineering No.	Ckt	EDP No.	Engineering No.	Ckt	EDP No.	Engineering No.
2			2			2			2	50-34-1986	A-43009-0098
3	43009-0074	A-43009-0074	3	43009-0082	A-43009-0082	3	43009-0090	A-43009-0090	3	50-34-1987	A-43009-0099
4	43009-0075	A-43009-0075	4	43009-0083	A-43009-0083	4	43009-0091	A-43009-0091	4	50-34-1988	A-43009-0100
5	43009-0076	A-43009-0076	5	43009-0084	A-43009-0084	5	43009-0092	A-43009-0092	5	50-34-1989	A-43009-0101
6	43009-0077	A-43009-0077	6	43009-0085	A-43009-0085	6	43009-0093	A-43009-0093	6	50-34-1990	A-43009-0102
7	43009-0078	A-43009-0078	7	43009-0086	A-43009-0086	7	43009-0094	A-43009-0094	7	50-34-1991	A-43009-0103
8	43009-0079	A-43009-0079	8	43009-0087	A-43009-0087	8	43009-0095	A-43009-0095	8	50-34-1992	A-43009-0104
9	43009-0080	A-43009-0080	9	43009-0088	A-43009-0088	9	43009-0096	A-43009-0096	9	50-34-1993	A-43009-0105
10	43009-0081	A-43009-0081	10	43009-0089	A-43009-0089	10	43009-0097	A-43009-0097	10	50-34-1994	A-43009-0106
11			11			11			11		
12			12			12			12		
13			13			13			13		
14			14			14			14		
15			15			15			15		

REV: <b>C1</b>	<b>SEE SHEET 1</b> <b>2/17/2006</b>	TITLE: <b>HEADER ASSEMBLY FRICTION LOCK</b> <b>.100 CENTERS</b>	SHEET No. <b>- 4 -</b>
DOCUMENT NUMBER: <b>SDA-43009</b>		CREATED / REVISED BY: <b>DRATNOL</b>	CHECKED BY: <b>SAMIEC</b>
		APPROVED BY: <b>MARGULIS</b>	

A-43009-0107/0115											
OPTIONS	Header No.	42009-N	OPTIONS	Header No.		OPTIONS	Header No.		OPTIONS	Header No.	
	Pin No.	2766-1(154)		Pin No.			Pin No.			Pin No.	
	Dim. L	.560/(14.22)		Dim. L			Dim. L			Dim. L	
	Dim. X	.295/(7.49)		Dim. X			Dim. X			Dim. X	
	Dim. Z	.140/(3.56)		Dim. Z			Dim. Z			Dim. Z	
	No. of Ckts	2-10		No. of Ckts			No. of Ckts			No. of Ckts	
	Void Ckts	NONE		Void Ckts			Void Ckts			Void Ckts	
	Kink Pins	Yes		Kink Pins			Kink Pins			Kink Pins	
	Color	-		Color			Color			Color	
	Packaging	PK-43009-001		Packaging	PK-43009-001		Packaging	PK-43009-001		Packaging	PK-43009-001
Ckt	EDP No.	Engineering No.	Ckt	EDP No.	Engineering No.	Ckt	EDP No.	Engineering No.	Ckt	EDP No.	Engineering No.
2	50-34-1995	A-43009-0107	2			2			2		
3	50-34-1996	A-43009-0108	3			3			3		
4	50-34-1997	A-43009-0109	4			4			4		
5	50-34-1998	A-43009-0110	5			5			5		
6	50-34-1999	A-43009-0111	6			6			6		
7	50-30-4401	A-43009-0112	7			7			7		
8	50-30-4402	A-43009-0113	8			8			8		
9	50-30-4403	A-43009-0114	9			9			9		
10	50-30-4404	A-43009-0115	10			10			10		
11			11			11			11		
12			12			12			12		
13			13			13			13		
14			14			14			14		
15			15			15			15		

REV: <b>C1</b>	<b>SEE SHEET 1</b> <b>2/17/2006</b>	TITLE: <b>HEADER ASSEMBLY FRICTION LOCK</b> <b>.100 CENTERS</b>	SHEET No. <b>- 5 -</b>
DOCUMENT NUMBER: <b>SDA-43009</b>	CREATED / REVISED BY: <b>DRATNOL</b>	CHECKED BY: <b>SAMIEC</b>	APPROVED BY: <b>MARGULIS</b>