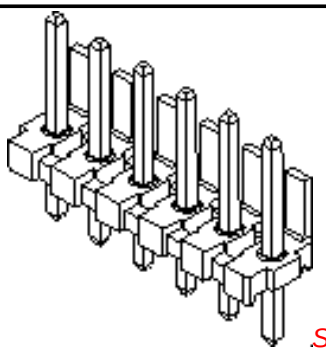
This document was generated on 04/12/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: 0416810003

Status: Active

Description: 3.96mm (.156") Pitch KK® Header, Breakaway, Vertical, Polarizing Wall, 4 Circuits, 0.38µm (15µ") Gold (Au) Selective Plating



Series image - Reference only

Documents:

3D Model
Packaging Specification (PDF)
Drawing (PDF)
Product Specification PS-08-50 (PDF)
RoHS Certificate of Compliance (PDF)

Agency Certification

CSA	LR19980
UL	E29179

General

Product Family	PCB Headers
Series	41681
Application	Wire-to-Board
Product Name	KK®

Physical

Breakaway	Yes
Circuits (Loaded)	4
Circuits (maximum)	4
Color - Resin	Black
Durability (mating cycles max)	50
Flammability	94V-0
Glow-Wire Compliant	No
Lock to Mating Part	None
Material - Metal	Brass
Material - Plating Mating	Gold
Material - Resin	Polyester
Number of Rows	1
Orientation	Vertical
PC Tail Length (in)	0.172 In
PC Tail Length (mm)	4.37 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)	0.156 In
Pitch - Mating Interface (mm)	3.96 mm
Plating min: Mating (µin)	15
Plating min: Mating (µm)	0.38
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	7A
Voltage - Maximum	250V

Solder Process Data

EU RoHS
ELV and RoHS Compliant
REACH SVHC
Contains SVHC: No
Halogen-Free Status
Not Reviewed

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
41681Series

Mates With
3069 , 2139 , 2145 , 6442 , 7674 , 7675 , 41695 , L ink:41815

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

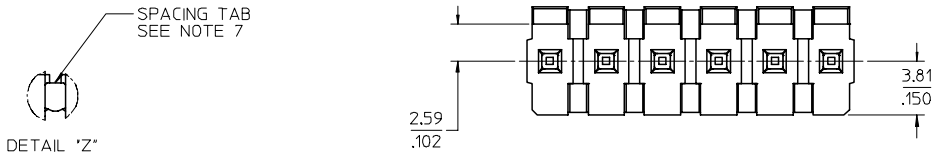
Old Part Number	A-41681-B04A208

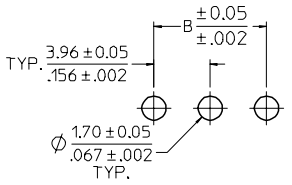
Reference - Drawing Numbers

Product Specification	PS-08-50
Sales Drawing	SD-41681-001

This document was generated on 04/12/2010

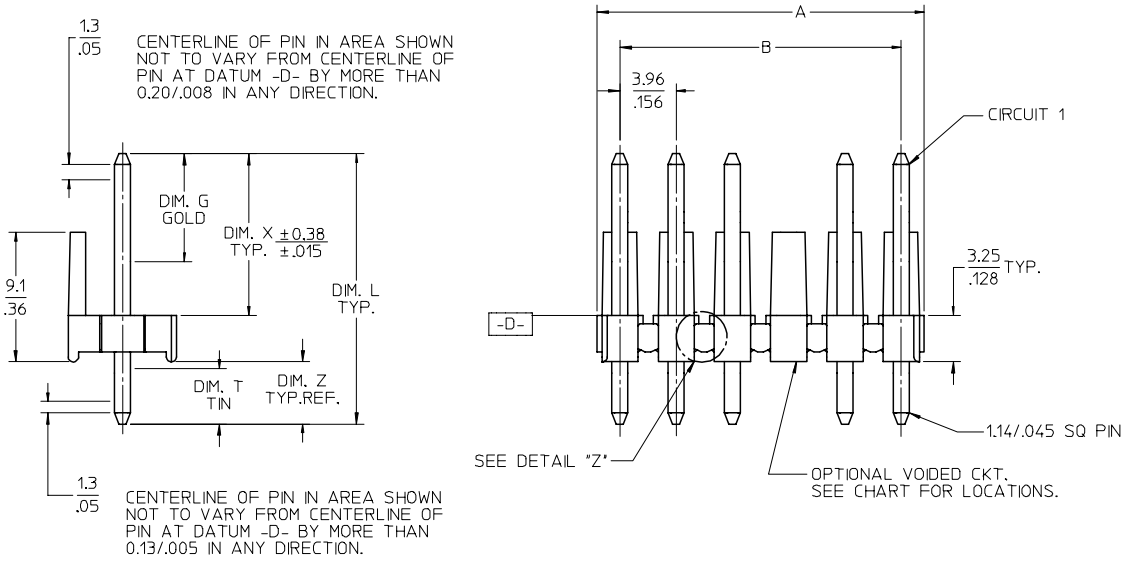
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION





PCB LAYOUT:COMPONENT SIDE
RECOMMENDED PCB THICKNESS:
1.57±0.18/.062±.007

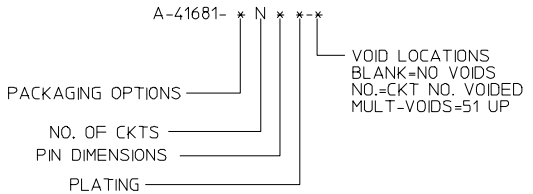
CIRCUIT	A	B
2	6.78/7.87 .267/.310	3.96 .156
3	10.74/11.84 .423/.466	7.92 .312
4	14.71/15.80 .579/.622	11.89 .468
5	18.67/19.76 .735/.778	15.85 .624
6	22.63/23.72 .891/.934	19.81 .780
7	26.59/27.69 1.047/1.090	23.77 .936
8	30.56/31.65 1.203/1.246	27.74 1.092
9	34.52/35.61 1.359/1.402	31.70 1.248
10	38.48/39.57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



NOTES:
1. MATERIAL: HEADER: GLASS FILLED POLYESTER, 94V-0, MOLDED BLACK
   PINS- BRASS
2. FINISH:
   (102) = OVERALL TIN: (0.00508)/.000200 MIN.
   OVERALL COPPER UNDERCOAT: (0.00254)/.000100 MIN.
   (208) = SELECT GOLD: (0.00038)/.000015 MIN. OVER
   SELECT TIN: (0.00254)/.000100 MIN. OVER
   NICKEL OVERALL: (0.000127)/.000050 MIN.
   (228) = SELECT GOLD: (0.00076)/.000030 MIN.
   SELECT TIN: (0.00254)/.000100 MIN.
   OVER NICKEL OVERALL: (0.00127)/.000050 MIN.
   (501) = OVERALL GOLD: (0.00051)/.000020 MIN.
   OVER NICKEL OVERALL: (0.00076)/.000030 MIN.
   (503) = OVERALL GOLD: (0.00076)/.000030 MIN.
   OVER NICKEL OVERALL: (0.00127)/.000050 MIN.

   * THE PRIMARY SHIPPING CARTON WILL BE LABELD "COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC". CARTONS WITHOUT MAY CONTAIN PRODUCT WITH TIN/LEAD PLATINGS.

3. PRODUCT SPECIFICATION: PS-08-50.
4. PACKAGING: SEE CHART
5. SOLDERABILITY: PER SMES-152.
6. PIN PUSH-OUT FORCE: PRIOR TO SOLDERING, A 3 LB. MINIMUM 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.)



2-*	S2
1	S2
SHT.	REV.

REVISED / REDRAWN
EC NO: UCP2006-2983 2006/08/02
DRWN:PRIDDER 2006/08/03
CHKD:ADERR 2006/08/04
APPR:FSMITH
DESCRIPTION
REV
S2

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .006
2 PLACES	± 0.15	± .010
1 PLACE	± 0.25	± ---
ANGULAR ±1/2°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM/IN
SCALE: 4:1
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY	SAMIEC	DATE 08/09/85
CHECKED BY	PATEL	DATE 08/09/85
APPROVED BY	LENZ	DATE 08/09/85

TITLE: KK .156 HEADER ASSEMBLY POLARIZING STRAIGHT 2-24 CKTS.

MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-41681-001
SHEET NO.: 1 OF *

SIZE C

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

ENG. NO: A-41681-ANA102-*	
PIN NUMBER	2161-1(102)
PLATING	102
DIM. L	(19.05)/.750
DIM. X	(11.43)/.450
DIM. G (GOLD)	N/A
DIM. Z	(4.37)/.172
DIM. T (TIN)	OVERALL
PACKAGING	PK-41681-001 (BULK)

CKTS	EDP NO.	ENG. NO.	VOIDS
02	26-48-1023	A-41681-A2A102	
03	26-48-1033	A-41681-A3A102	
04	26-48-1043	A-41681-A4A102	
05	26-48-1053	A-41681-A5A102	
06	26-48-1063	A-41681-A6A102	
07	26-48-1073	A-41681-A7A102	
08	26-48-1083	A-41681-A8A102	
09	26-48-1093	A-41681-A9A102	
10	26-48-1103	A-41681-A10A102	
11	26-48-1113	A-41681-A11A102	
12	26-48-1123	A-41681-A12A102	
13	26-48-1133	A-41681-A13A102	
14	26-48-1143	A-41681-A14A102	
15	26-48-1153	A-41681-A15A102	
16	26-48-1163	A-41681-A16A102	
17	26-48-1173	A-41681-A17A102	
18	26-48-1183	A-41681-A18A102	
19	26-48-1193	A-41681-A19A102	
20	26-48-1203	A-41681-A20A102	
21	26-48-1213	A-41681-A21A102	
22	26-48-1223	A-41681-A22A102	
23	26-48-1233	A-41681-A23A102	
24	26-48-1243	A-41681-A24A102	
13	26-49-6137	A-41681-A13A102-12	12
17	26-49-6177	A-41681-A17A102-2	2
20	26-49-6207	A-41681-A20A102-17	17

ENG. NO: A-41681-ANA501-*	
PIN NUMBER	2161-1(501)
PLATING	501
DIM. L	(19.05)/.750
DIM. X	(11.43)/.450
DIM. G (GOLD)	OVERALL
DIM. Z	(4.37)/.172
DIM. T (TIN)	N/A
PACKAGING	PK-41681-001 (BULK)

CKTS	EDP NO.	ENG. NO.	VOIDS
02	26-48-2023	A-41681-A2A501	
03	26-48-2033	A-41681-A3A501	
04	26-48-2043	A-41681-A4A501	
05	26-48-2053	A-41681-A5A501	
06	26-48-2063	A-41681-A6A501	
07	26-48-2073	A-41681-A7A501	
08	26-48-2083	A-41681-A8A501	
09	26-48-2093	A-41681-A9A501	
10	26-48-2103	A-41681-A10A501	
11	26-48-2113	A-41681-A11A501	
12	26-48-2123	A-41681-A12A501	
13	26-48-2133	A-41681-A13A501	
14	26-48-2143	A-41681-A14A501	
15	26-48-2153	A-41681-A15A501	
16	26-48-2163	A-41681-A16A501	
17	26-48-2173	A-41681-A17A501	
18	26-48-2183	A-41681-A18A501	
19	26-48-2193	A-41681-A19A501	
20	26-48-2203	A-41681-A20A501	
21	26-48-2213	A-41681-A21A501	
22	26-48-2223	A-41681-A22A501	
23	26-48-2233	A-41681-A23A501	
24	26-48-2243	A-41681-A24A501	

ENG. NO: A-41681-ANC102-*	
PIN NUMBER	2161-56(102)
PLATING	102
DIM. L	(17.86)/.703
DIM. X	(11.43)/.450
DIM. G (GOLD)	N/A
DIM. Z	(3.18)/.125
DIM. T (TIN)	OVERALL
PACKAGING	PK-41681-001 (BULK)

CKTS	EDP NO.	ENG. NO.	VOIDS
02	26-48-7025	A-41681-A2C102	
03	26-48-7035	A-41681-A3C102	
04	26-48-7045	A-41681-A4C102	
05	26-48-7055	A-41681-A5C102	
06	26-48-7065	A-41681-A6C102	
07	26-48-7075	A-41681-A7C102	
08	26-48-7085	A-41681-A8C102	
09	26-48-7095	A-41681-A9C102	
10	26-48-7105	A-41681-A10C102	
11	26-48-7115	A-41681-A11C102	
12	26-48-7125	A-41681-A12C102	
13	26-48-7135	A-41681-A13C102	
14	26-48-7145	A-41681-A14C102	
15	26-48-7155	A-41681-A15C102	
16	26-48-7165	A-41681-A16C102	
17	26-48-7175	A-41681-A17C102	
18	26-48-7185	A-41681-A18C102	
19	26-48-7195	A-41681-A19C102	
20	26-48-7205	A-41681-A20C102	
21	26-48-7215	A-41681-A21C102	
22	26-48-7225	A-41681-A22C102	
23	26-48-7235	A-41681-A23C102	
24	26-48-7245	A-41681-A24C102	

REV:	ECR/ECN INFORMATION	TITLE:	SHEET No.
S2	EC No: **UCP2006-2983** DATE: **2006-06-13**	KK .156 HEADER ASSEMBLY POLARIZING STRAIGHT 2-24 CKTS	**- 2 -**

DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
SD-41681-001	**PRIDDER**	**ADERR**	**FSMITH**

ENG. NO: A-41681-ANC503-*	
PIN NUMBER	2161-56(503)
PLATING	503
DIM. L	(17.86)/.703
DIM. X	(11.43)/.450
DIM. G (GOLD)	OVERALL
DIM. Z	(3.18)/.125
DIM. T (TIN)	N/A
PACKAGING	PK-41681-001 (BULK)

CKTS	EDP NO.	ENG. NO.	VOIDS
02	26-48-7028	A-41681-A2C503	
03	26-48-7038	A-41681-A3C503	
04	26-48-7048	A-41681-A4C503	
05	26-48-7058	A-41681-A5C503	
06	26-48-7068	A-41681-A6C503	
07	26-48-7078	A-41681-A7C503	
08	26-48-7088	A-41681-A8C503	
09	26-48-7098	A-41681-A9C503	
10	26-48-7108	A-41681-A10C503	
11	26-48-7118	A-41681-A11C503	
12	26-48-7128	A-41681-A12C503	
13	26-48-7138	A-41681-A13C503	
14	26-48-7148	A-41681-A14C503	
15	26-48-7158	A-41681-A15C503	
16	26-48-7168	A-41681-A16C503	
17	26-48-7178	A-41681-A17C503	
18	26-48-7188	A-41681-A18C503	
19	26-48-7198	A-41681-A19C503	
20	26-48-7208	A-41681-A20C503	
21	26-48-7218	A-41681-A21C503	
22	26-48-7228	A-41681-A22C503	
23	26-48-7238	A-41681-A23C503	
24	26-48-7248	A-41681-A24C503	

ENG. NO: A-41681-BNA208-*	
PIN NUMBER	43294-0236
PLATING	208
DIM. L	(19.05)/.750
DIM. X	(11.43)/.450
DIM. G (GOLD)	(6.86)/.270
DIM. Z	(4.37)/.172
DIM. T (TIN)	(4.06)/.160
PACKAGING	PK-41681-001 (BULK)

CKTS	EDP NO.	ENG. NO.	VOIDS
02	41681-0001	A-41681-B02A208	
03	41681-0002	A-41681-B03A208	
04	41681-0003	A-41681-B04A208	
05	41681-0004	A-41681-B05A208	
06	41681-0005	A-41681-B06A208	
07	41681-0006	A-41681-B07A208	
08	41681-0007	A-41681-B08A208	
09	41681-0008	A-41681-B09A208	
10	41681-0009	A-41681-B10A208	
11	41681-0010	A-41681-B11A208	
12	41681-0011	A-41681-B12A208	
13	41681-0012	A-41681-B13A208	
14	41681-0013	A-41681-B14A208	
15	41681-0014	A-41681-B15A208	
16	41681-0015	A-41681-B16A208	
17	41681-0016	A-41681-B17A208	
18	41681-0017	A-41681-B18A208	
19	41681-0018	A-41681-B19A208	
20	41681-0019	A-41681-B20A208	
21	41681-0020	A-41681-B21A208	
22	41681-0021	A-41681-B22A208	
23	41681-0022	A-41681-B23A208	
24	41681-0023	A-41681-B24A208	

ENG. NO: A-41681-BNA228-*	
PIN NUMBER	43294-0237
PLATING	228
DIM. L	(19.05)/.750
DIM. X	(11.43)/.450
DIM. G (GOLD)	(6.86)/.270
DIM. Z	(4.37)/.172
DIM. T (TIN)	(4.06)/.160
PACKAGING	PK-41681-001 (BULK)

CKTS	EDP NO.	ENG. NO.	VOIDS
02	41681-0024	A-41681-B02A228	
03	41681-0025	A-41681-B03A228	
04	41681-0026	A-41681-B04A228	
05	41681-0027	A-41681-B05A228	
06	41681-0028	A-41681-B06A228	
07	41681-0029	A-41681-B07A228	
08	41681-0030	A-41681-B08A228	
09	41681-0031	A-41681-B09A228	
10	41681-0032	A-41681-B10A228	
11	41681-0033	A-41681-B11A228	
12	41681-0034	A-41681-B12A228	
13	41681-0035	A-41681-B13A228	
14	41681-0036	A-41681-B14A228	
15	41681-0037	A-41681-B15A228	
16	41681-0038	A-41681-B16A228	
17	41681-0039	A-41681-B17A228	
18	41681-0040	A-41681-B18A228	
19	41681-0041	A-41681-B19A228	
20	41681-0042	A-41681-B20A228	
21	41681-0043	A-41681-B21A228	
22	41681-0044	A-41681-B22A228	
23	41681-0045	A-41681-B23A228	
24	41681-0046	A-41681-B24A228	

REV:	ECR/ECN INFORMATION	TITLE:	SHEET No.
S2	EC No: **UCP2006-2983** DATE: **2006-06-13**	KK .156 HEADER ASSEMBLY POLARIZING STRAIGHT 2-24 CKTS	**- 3 -**

DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
SD-41681-001	**PRIDDER**	**ADERR**	**FSMITH**

ENG. NO: A-41681-ANB102-*	
PIN NUMBER	2161-1(102)
PLATING	102
DIM. L	(19.05)/.750
DIM. X	(12.62)/.497
DIM. G (GOLD)	N/A
DIM. Z	(3.18)/.125
DIM. T (TIN)	OVERALL
PACKAGING	PK-41681-001 (BULK)

CKTS	EDP NO.	ENG. NO.	VOIDS
02	41681-0047	A-41681-A2B102	
03	41681-0048	A-41681-A3B102	
04	41681-0049	A-41681-A4B102	
05	41681-0050	A-41681-A5B102	
06	41681-0051	A-41681-A6B102	
07	41681-0052	A-41681-A7B102	
08	41681-0053	A-41681-A8B102	
09	41681-0054	A-41681-A9B102	
10	41681-0055	A-41681-A10B102	
11	41681-0056	A-41681-A11B102	
12	41681-0057	A-41681-A12B102	
13	41681-0058	A-41681-A13B102	
14	41681-0059	A-41681-A14B102	
15	41681-0060	A-41681-A15B102	
16	41681-0061	A-41681-A16B102	
17	41681-0062	A-41681-A17B102	
18	41681-0063	A-41681-A18B102	
19	41681-0064	A-41681-A19B102	
20	41681-0065	A-41681-A20B102	
21	41681-0066	A-41681-A21B102	
22	41681-0067	A-41681-A22B102	
23	41681-0068	A-41681-A23B102	
24	26-48-6248	A-41681-A24B102	

ENG. NO	
PIN NUMBER	
PLATING	
DIM. L	
DIM. X	
DIM. G (GOLD)	
DIM. Z	
DIM. T (TIN)	
PACKAGING	PK-41681-001 (BULK)

CKTS	EDP NO.	ENG. NO.	VOIDS
02			
03			
04			
05			
06			
07			
08			
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			

ENG. NO	
PIN NUMBER	
PLATING	
DIM. L	
DIM. X	
DIM. G (GOLD)	
DIM. Z	
DIM. T (TIN)	
PACKAGING	PK-41681-001 (BULK)

CKTS	EDP NO.	ENG. NO.	VOIDS
02			
03			
04			
05			
06			
07			
08			
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			

REV:	ECR/ECN INFORMATION	TITLE:	SHEET No.
S2	EC No: **UCP2006-2983** DATE: **2006-06-13**	KK .156 HEADER ASSEMBLY POLARIZING STRAIGHT 2-24 CKTS	**- 4 -**

DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
SD-41681-001	**PRIDDER**	**ADERR**	**FSMITH**