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**Part Number:** 0022053081

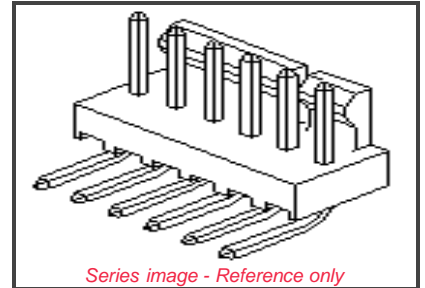
**Status:** Active

**Description:** 2.54mm (.100") Pitch KK® Solid Header, Right Angle, with Friction Lock, 8 Circuits, Tin (Sn) Plating

**Documents:**

*Note - Please disable browser pop-up blockers for documents on www.molex.com*

- [Drawing \(PDF\)](#)
- [Product Specification PS-10-07 \(PDF\)](#)
- [3D Model](#)
- [Packaging Specification \(PDF\)](#)
- [Related Catalog Page \(PDF\)](#)



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**Part Detail: (show all)**

[General](#)   [Physical](#)   [Electrical](#)   [Material Info](#)

**General**

Product Family	PCB Headers
Series	<a href="#">7478</a>
Application	Wire-to-Board
Product Name	KK®

**Physical**

Breakaway	No
Circuits (Loaded)	8
Circuits (maximum)	8
Color - Resin	Natural (White)
Durability (mating cycles) min	25 cycles
Flammability	94V-0
Lock to Mating Part	Yes
Material - Metal	Brass
Material - Plating Mating	Tin
Material - Plating Termination	Tin
Material - Resin	Nylon
Number of Rows	1
Orientation	Right Angle
PC Tail Length (in)	0.141 In
PC Tail Length (mm)	3.58 mm
PCB Locator	No
PCB Retention	None
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.60 mm
Packaging Type	Bag
Pitch - Mating Interface (in)	0.100 In
Pitch - Mating Interface (mm)	2.54 mm
Plating min: Mating (uin)	200
Plating min: Mating (um)	5
Plating min: Termination (uin)	200
Plating min: Termination (um)	5
Polarized to Mating Part	Yes
Polarized to PCB	Yes

**EU RoHS**  
ELV and RoHS Compliant

**China RoHS**



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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

**Search Parts in this Series**

[7478](#) Series

**Mates With**

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

Shrouded	Partial
Stackable	Yes
Temperature Range - Operating	0°C to +75°C
Termination Interface: Style	Through Hole

**Electrical**

CSA	LR19980
Current - Maximum	4.000 Amp
UL	E29179
Voltage - Maximum	250V

**Material Info**

Old Part Number	A-7478-08A102
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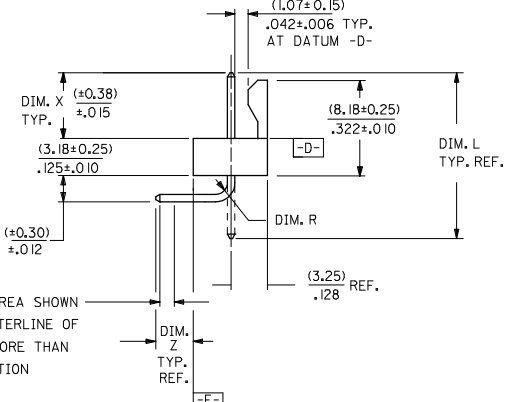
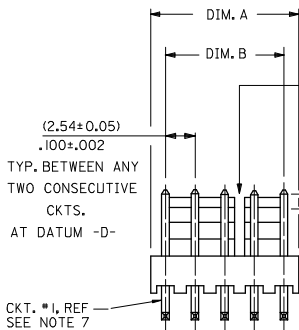
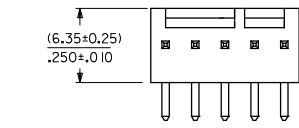
**Reference - Drawing Numbers**

Product Specification	PS-10-07
Sales Drawing	SDA-7478

	13	12	11	10	9	8	7	6	5	4	3	2	1
J	28	( 71.12 / 70.61 ) 2.800 / 2.780	( 68.58 ± 0.25 ) 2.700 ± .010	4 , 5 24 , 25									
	27	( 68.58 / 68.07 ) 2.700 / 2.680	( 66.04 ± 0.25 ) 2.600 ± .010	4 , 5 24 , 25									
I	26	( 66.04 / 65.53 ) 2.600 / 2.580	( 63.50 ± 0.25 ) 2.500 ± .010	4 , 5 20 , 21									
	25	( 63.50 / 62.99 ) 2.500 / 2.480	( 60.96 ± 0.25 ) 2.400 ± .010	4 , 5 20 , 21									
H	24	( 60.96 / 60.45 ) 2.400 / 2.380	( 58.42 ± 0.25 ) 2.300 ± .010	4 , 5 20 , 21									
	23	( 58.42 / 57.96 ) 2.300 / 2.282	( 55.88 ± 0.23 ) 2.200 ± .009	4 , 5 20 , 21									
G	22	( 55.88 / 55.42 ) 2.200 / 2.182	( 53.34 ± 0.23 ) 2.100 ± .009	4 , 5 16 , 17									
	21	( 53.34 / 52.88 ) 2.100 / 2.082	( 50.80 ± 0.23 ) 2.000 ± .009	4 , 5 16 , 17									
F	20	( 50.80 / 50.34 ) 2.000 / 1.982	( 48.26 ± 0.23 ) 1.900 ± .009	4 , 5 16 , 17									
	19	( 48.26 / 47.80 ) 1.900 / 1.882	( 45.72 ± 0.23 ) 1.800 ± .009	4 , 5 16 , 17									
E	18	( 45.72 / 45.31 ) 1.800 / 1.784	( 43.18 ± 0.20 ) 1.700 ± .008	4 , 5 12 , 13									
D	17	( 43.18 / 42.77 ) 1.700 / 1.684	( 40.64 ± 0.20 ) 1.600 ± .008	4 , 5 12 , 13									
C	16	( 40.64 / 40.23 ) 1.600 / 1.584	( 38.10 ± 0.20 ) 1.500 ± .008	4 , 5 12 , 13									
B	15	( 38.10 / 37.69 ) 1.500 / 1.484	( 35.56 ± 0.20 ) 1.400 ± .008	4 , 5 12 , 13									
A	14	( 35.56 / 35.20 ) 1.400 / 1.386	( 33.02 ± 0.18 ) 1.300 ± .007	4 , 5 8 , 9									
	13	( 33.02 / 32.66 ) 1.300 / 1.286	( 30.48 ± 0.18 ) 1.200 ± .007	4 , 5 8 , 9									
	12	( 30.48 / 30.12 ) 1.200 / 1.186	( 27.94 ± 0.18 ) 1.100 ± .007	4 , 5 8 , 9									
	11	( 27.94 / 27.58 ) 1.100 / 1.086	( 25.40 ± 0.18 ) 1.000 ± .007	4 , 5 8 , 9									
	10	( 25.40 / 25.04 ) 1.000 / .986	( 22.86 ± 0.15 ) .900 ± .006	4 , 5									
	9	( 22.86 / 22.50 ) .900 / .886	( 20.32 ± 0.15 ) .800 ± .006	4 , 5									
	8	( 20.32 / 19.96 ) .800 / .786	( 17.78 ± 0.15 ) .700 ± .006	4 , 5									
	7	( 17.78 / 17.42 ) .700 / .686	( 15.24 ± 0.13 ) .600 ± .005	4 , 5									
	6	( 15.24 / 14.88 ) .600 / .586	( 12.70 ± 0.13 ) .500 ± .005	4 , 5									
	5	( 12.70 / 12.40 ) .500 / .488	( 10.16 ± 0.13 ) .400 ± .005	NONE									
	4	( 10.16 / 9.86 ) .400 / .388	( 7.62 ± 0.13 ) .300 ± .005	NONE									
	3	( 7.62 / 7.32 ) .300 / .288	( 5.08 ± 0.10 ) .200 ± .004	NONE									
	2	( 5.08 / 4.78 ) .200 / .188	( 2.54 ± 0.05 ) .100 ± .002	NONE									

NOTES:

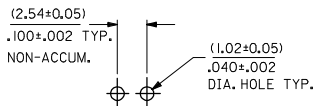
1. MATERIAL: NYLON, UL94V-0, COLOR WHITE
2. FINISH:
  - (102) - OVERALL TIN: (0.00508)/.000200 MIN., OVERALL COPPER UNDERPLATE: (0.00254)/.000100 MIN.
  - (154) - OVERALL TIN: (0.00254)/.000100 MIN., OVERALL NICKEL UNDERPLATE: (0.00127)/.000050 MIN.
  - (501) - OVERALL GOLD: (0.00051)/.000020 MIN., OVERALL NICKEL UNDERPLATE: (0.00076)/.000030 MIN.
  - (503) - OVERALL GOLD: (0.00076)/.000030 MIN., OVERALL NICKEL UNDERPLATE: (0.00127)/.000050 MIN.
  - (531) - OVERALL GOLD: (0.00038)/.000015 MIN., OVERALL NICKEL UNDERPLATE: (0.00076)/.000030 MIN.
3. PARTS CONFORM TO PRODUCT SPECIFICATION PS-10-07.
4. PACKAGING INFORMATION: SEE LEGEND.
5. PARTS ARE STACKABLE END TO END ON (2.54)/.100 CENTERS.
6. PIN PUSH OUT FORCE: 2 LBS. MIN.
7. CIRCUIT ONE DESIGNATION IS USED TO DEFINE VOID LOCATION. CIRCUIT ONE MAY OR MAY NOT LINE UP WITH CIRCUIT ONE ON THE HOUSING.
8. THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.



SECONDARY OPERATIONS	
CODE	PACKAGE
BLANK	BULK PK-7478-001
T	TUBE PER PK-44743-001

A-7478-N\*\*\*  
 NO. OF CKTS. →  
 VERSION LETTER CHANGES WHEN PIN NO. OR PRESS DIM. CHANGES  
 PLATING SEE NOTE 2

RECOMMENDED P.C. BOARD HOLE LAYOUT



7	Y4
6	W1
5	Y8
4	Y7
3	Y9
2	Y9
1	Y11
REV	

REMOVE ES-42003	2008/08/12
EC NO. UCP2009-0359	2008/08/12
DRAWING REVISION	2008/08/14
CHKOR PPR	2008/08/14
APPR: ESMITH	

QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm	INCH
▽=0	4 PLACES ±.005	±.005
▽=0	3 PLACES ±.010	±.010
	2 PLACES ±.025	±.015
	1 PLACE ±.038	±.015
	ANGULAR ±1/2°	

DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM/IN		4:1	INCH	☉
DRAWN BY	DATE	TITLE		
GUZIC	1987/07/30	FRICTION LOCK HEADER ASY		
CHECKED BY	DATE	.100 CL BENT SQ PINS		
PATEL	1987/07/30	7478 SERIES DWG		
APPROVED BY	DATE	MOLEX INCORPORATED		
LENZ	1987/07/30	MATERIAL NO. SDA-7478		
DOCUMENT NO.		SHEET NO.		
SEE CHART		1 OF 7		

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



	13	12	11	10	9	8	7	6	5	4	3	2	1																			
	A-7478-NA I02		A-7478-NA501		A-7478-NA501T		A-7478-NA I02T																									
J	PART NO.	ENG. NO.	PART NO.	ENG. NO.	PART NO.	ENG. NO.	PART NO.	ENG. NO.	PART NO.	ENG. NO.	PART NO.	ENG. NO.	PART NO.	ENG. NO.																		
	22-05-3021	A-7478-2A I02	22-12-2024	A-7478-2A501	50-29-1710	A-7478-2A501T	50-34-8500	A-7478-2A I02T																								
	22-05-3031	A-7478-3A I02	22-12-2034	A-7478-3A501	50-29-1711	A-7478-3A501T	50-34-8501	A-7478-3A I02T																								
	22-05-3041	A-7478-4A I02	22-12-2044	A-7478-4A501	50-29-1705	A-7478-4A501T	50-34-8502	A-7478-4A I02T																								
I	22-05-3051	A-7478-5A I02	22-12-2054	A-7478-5A501	50-29-1712	A-7478-5A501T																										
	22-05-3061	A-7478-6A I02	22-12-2064	A-7478-6A501	50-29-1713	A-7478-6A501T																										
	22-05-3071	A-7478-7A I02	22-12-2074	A-7478-7A501	50-29-1714	A-7478-7A501T																										
	22-05-3081	A-7478-8A I02	22-12-2084	A-7478-8A501	50-29-1715	A-7478-8A501T																										
H	22-05-3091	A-7478-9A I02	22-12-2094	A-7478-9A501	50-29-1716	A-7478-9A501T																										
	22-05-3101	A-7478-10A I02	22-12-2104	A-7478-10A501	50-29-1717	A-7478-10A501T																										
	22-05-3111	A-7478-11A I02	22-12-2114	A-7478-11A501	50-29-1718	A-7478-11A501T																										
	22-05-3121	A-7478-12A I02	22-12-2124	A-7478-12A501	50-29-1719	A-7478-12A501T																										
	22-05-3131	A-7478-13A I02	22-12-2134	A-7478-13A501	50-29-1720	A-7478-13A501T																										
	22-05-3141	A-7478-14A I02	22-12-2144	A-7478-14A501	50-29-1721	A-7478-14A501T																										
G	22-05-3151	A-7478-15A I02	22-12-2154	A-7478-15A501	50-29-1722	A-7478-15A501T																										
	22-05-3161	A-7478-16A I02	22-12-2164	A-7478-16A501	50-29-1723	A-7478-16A501T																										
	22-05-3171	A-7478-17A I02	22-12-2174	A-7478-17A501	50-29-1724	A-7478-17A501T																										
	22-05-3181	A-7478-18A I02	22-12-2184	A-7478-18A501	50-29-1725	A-7478-18A501T																										
	22-05-3191	A-7478-19A I02	22-12-2194	A-7478-19A501	50-29-1726	A-7478-19A501T																										
F	22-05-3201	A-7478-20A I02	22-12-2204	A-7478-20A501	50-29-1727	A-7478-20A501T																										
	22-05-3211	A-7478-21A I02	22-12-2214	A-7478-21A501	50-29-1728	A-7478-21A501T																										
	22-05-3221	A-7478-22A I02	22-12-2224	A-7478-22A501	50-29-1729	A-7478-22A501T																										
	22-05-3231	A-7478-23A I02	22-12-2234	A-7478-23A501	50-29-1730	A-7478-23A501T																										
	22-05-3241	A-7478-24A I02	22-12-2244	A-7478-24A501	50-29-1731	A-7478-24A501T																										
	22-05-3251	A-7478-25A I02	22-12-2254	A-7478-25A501	50-29-1732	A-7478-25A501T																										
	22-05-3261	A-7478-26A I02	22-12-2264	A-7478-26A501	50-29-1733	A-7478-26A501T																										
E	22-05-3271	A-7478-27A I02	22-12-2274	A-7478-27A501	50-29-1734	A-7478-27A501T																										
	22-05-3281	A-7478-28A I02	22-12-2284	A-7478-28A501	50-29-1735	A-7478-28A501T																										
D																																
C																																
B																																
A																																
	ADD PINS EC NO. UCP2006-1815 2006/02/06 DRW:ADBR 2006/02/06 CHK:KJELHAG 2006/02/06 APP:RSMITH 2006/02/09 REV DESCRIPTION		QUALITY SYMBOLS ▽=0 ▽=0		GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <td></td> <td>mm</td> <td>INCH</td> </tr> <tr> <td>4 PLACES</td> <td>±.000</td> <td>±.000</td> </tr> <tr> <td>3 PLACES</td> <td>±.000</td> <td>±.000</td> </tr> <tr> <td>2 PLACES</td> <td>±.000</td> <td>±.000</td> </tr> <tr> <td>1 PLACE</td> <td>±.000</td> <td>±.000</td> </tr> <tr> <td>ANGULAR</td> <td>±.000°</td> <td></td> </tr> </table>			mm	INCH	4 PLACES	±.000	±.000	3 PLACES	±.000	±.000	2 PLACES	±.000	±.000	1 PLACE	±.000	±.000	ANGULAR	±.000°		DIMENSION STYLE IN/MM		SCALE ---		DESIGN UNITS INCH		THIRD ANGLE PROJECTION	
	mm	INCH																														
4 PLACES	±.000	±.000																														
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2 PLACES	±.000	±.000																														
1 PLACE	±.000	±.000																														
ANGULAR	±.000°																															
DRAWN BY SUZIK DATE 1987/07/10		CHECKED BY PATEL DATE 1987/07/10		APPROVED BY LENZ DATE 1987/07/10		MATERIAL NO. SEE CHART		DOCUMENT NO. SDA-7478		SHEET NO. 3 OF 7																						
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Rev. D 2004/04/02