

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0022053021](#)
Status: **Active**
Description: 2.54mm (.100") Pitch KK® Solid Header, Right Angle, with Friction Lock, 2 Circuits, Tin (Sn) Plating

Documents:
[3D Model](#)
[Drawing \(PDF\)](#)

[Product Specification PS-10-07 \(PDF\)](#)
[RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA	LR19980
UL	E29179

General

Product Family	PCB Headers
Series	7478
Application	Wire-to-Board
Product Name	KK®

Physical

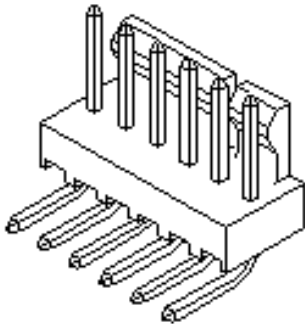
Breakaway	No
Circuits (Loaded)	2
Circuits (maximum)	2
Color - Resin	Natural (White)
Durability (mating cycles max)	25
Flammability	94V-0
Glow-Wire Compliant	No
Lock to Mating Part	Yes
Material - Metal	Brass
Material - Plating Mating	Tin
Material - Resin	Nylon
Number of Rows	1
Orientation	Right Angle
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
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Shrouded	Partial
Stackable	Yes
Temperature Range - Operating	0°C to +75°C
Termination Interface: Style	Through Hole

Electrical

Current - Maximum per Contact	4A
Voltage - Maximum	250V

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



*Series
image - Reference only*

EU RoHS
ELV and RoHS
Compliant
REACH SVHC
Contains SVHC: No
Halogen-Free
Status
Halogen-Free

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
[7478Series](#)

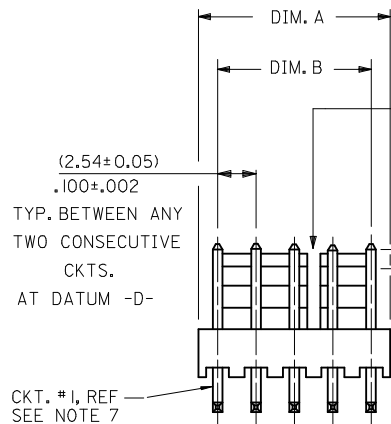
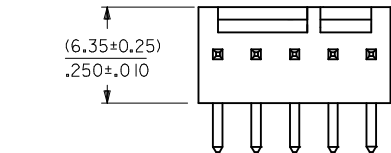
Mates With
[2695](#) , [6471](#) , [7880](#) , [4455](#) , [7720](#)

Process Temperature max. C	235
Material Info	
Old Part Number	A-7478-02A102
Reference - Drawing Numbers	
Packaging Specification	PK-7478-001
Product Specification	PS-10-07, RPS-7478-001
Sales Drawing	SDA-7478

This document was generated on 05/10/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

	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									
	26	(66.04 / 65.53) 2.600 / 2.580	(63.50 ± 0.25) 2.500 ± .010	4 , 5 20 , 21									
I	25	(63.50 / 62.99) 2.500 / 2.480	(60.96 ± 0.25) 2.400 ± .010	4 , 5 20 , 21									
	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									
	22	(55.88 / 55.42) 2.200 / 2.182	(53.34 ± 0.23) 2.100 ± .009	4 , 5 16 , 17									
H	21	(53.34 / 52.88) 2.100 / 2.082	(50.80 ± 0.23) 2.000 ± .009	4 , 5 16 , 17									
	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									
G	18	(45.72 / 45.31) 1.800 / 1.784	(43.18 ± 0.20) 1.700 ± .008	4 , 5 12 , 13									
	17	(43.18 / 42.77) 1.700 / 1.684	(40.64 ± 0.20) 1.600 ± .008	4 , 5 12 , 13									
	16	(40.64 / 40.23) 1.600 / 1.584	(38.10 ± 0.20) 1.500 ± .008	4 , 5 12 , 13									
F	15	(38.10 / 37.69) 1.500 / 1.484	(35.56 ± 0.20) 1.400 ± .008	4 , 5 12 , 13									
	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									
E	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									
D	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									
C	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									
B	2	(5.08 / 4.78) .200 / .188	(2.54 ± 0.05) .100 ± .002	NONE									
A		NO. OF CKTS.											
		DIM. A	DIM. B	SLOTS LOC.									

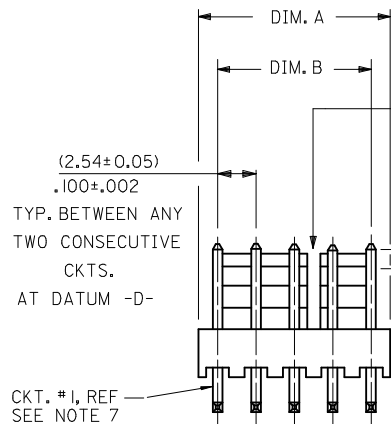


CKT. #1, REF
SEE NOTE 7

TYP. BETWEEN ANY
TWO CONSECUTIVE
CKTS.
AT DATUM -D-

(2.54±0.05)
.100±.002

SLOTS LOCATED
BETWEEN CIRCUITS
(SEE CHART)



CENTERLINE OF PIN IN AREA SHOWN
NOT TO VARY FROM CENTERLINE
OF PIN AT DATUM -D- BY MORE
THAN (0.20)/.008 IN ANY DIRECTION

SLOTS LOCATED
BETWEEN CIRCUITS
(SEE CHART)

CENTERLINE OF PIN IN AREA SHOWN
NOT TO VARY FROM CENTERLINE
OF PIN AT DATUM -D- BY MORE
THAN (0.20)/.008 IN ANY DIRECTION

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.

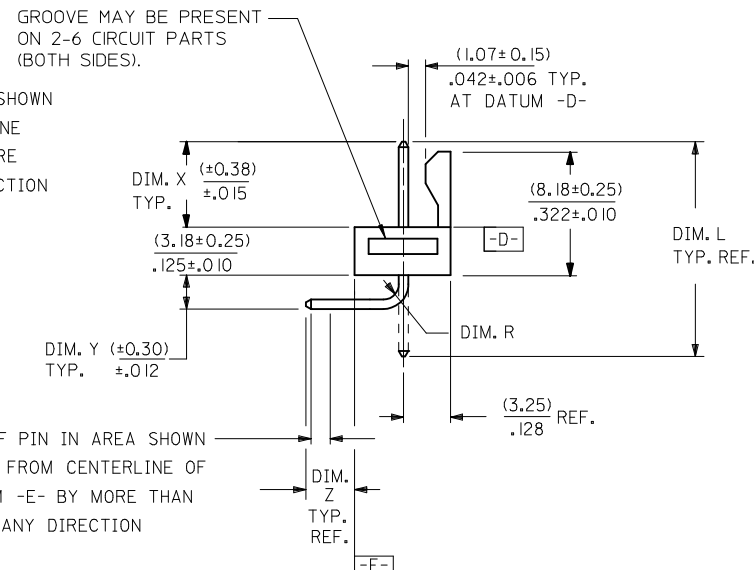
6. PIN PUSH OUT FORCE: 2 LBS. MIN.

7. CIRCUIT ONE DESIGNATION IS USED TO DEFINE VOID LOCATION.

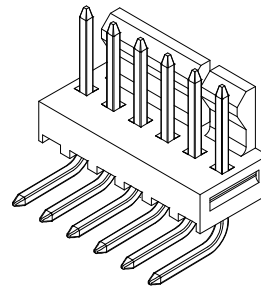
CIRCUIT ONE MAY OR MAY NOT LINE UP WITH CIRCUIT ONE ON THE MATING HOUSING.

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

GROOVE MAY BE PRESENT
ON 2-6 CIRCUIT PARTS
(BOTH SIDES).



CENTERLINE OF PIN IN AREA SHOWN
NOT TO VARY FROM CENTERLINE OF
PIN AT DATUM -E- BY MORE THAN
(0.13)/.005 IN ANY DIRECTION



(2.54±0.05)
.100±.002 TYP.
NON-ACCUM.

RECOMMENDED P.C. BOARD HOLE LAYOUT

(1.02±0.05)
.040±.002
DIA. HOLE TYP.

A-7478-N***

NO. OF CKTS.

VERSION
LETTER CHANGES WHEN
PIN NO. OR PRESS
DIM. CHANGES

SECONDARY OPERATIONS

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

PLATING
SEE NOTE 2

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

ADD GROOVE	EC NO: UCP2009-0785	2008/12/29	DRWN:KIPPER	2009/01/30	CHKD:SSOUSEK	2009/01/30	APPR:FSMITH	2009/01/30
REV	DESCRIPTION	REV	DESCRIPTION	REV	DESCRIPTION	REV	DESCRIPTION	REV

GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM/IN	SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
4 PLACES ± --- ± ---	DRAWN BY GUZIC	DATE 1987/07/30	TITLE FRICTION LOCK HEADER ASY	
3 PLACES ± --- ± .010	CHECKED BY PATEL	DATE 1987/07/30	.100 CL BENT SQ PINS	
2 PLACES ± 0.25 ± .015	APPROVED BY LENZ	DATE 1987/07/30	7478 SERIES DWG	
1 PLACE ± 0.38 ± ---	MATERIAL NO. SEE CHART	DOCUMENT NO. SDA-7478	MOLEX INCORPORATED	
ANGULAR ± 1/2°	SIZE C	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SHEET NO. 1 OF 7			

	13	12	11	10	9	8	7	6	5	4	3	2	1																																																																																	
	A-7478-NA102		A-7478-NA501		A-7478-NA501T		A-7478-NA102T																																																																																							
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-7478-2A102	22-12-2024	* A-7478-2A501	50-29-1710	A-7478-2A501T	50-34-8500	A-7478-2A102T																																																																																						
	22-05-3031	* A-7478-3A102	22-12-2034	* A-7478-3A501	50-29-1711	A-7478-3A501T	50-34-8501	A-7478-3A102T																																																																																						
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I	22-05-3051	* A-7478-5A102	22-12-2054	* A-7478-5A501	50-29-1712	A-7478-5A501T																																																																																								
	22-05-3061	* A-7478-6A102	22-12-2064	* A-7478-6A501	50-29-1713	A-7478-6A501T																																																																																								
	22-05-3071	* A-7478-7A102	22-12-2074	* A-7478-7A501	50-29-1714	A-7478-7A501T																																																																																								
	22-05-3081	* A-7478-8A102	22-12-2084	* A-7478-8A501	50-29-1715	A-7478-8A501T																																																																																								
	22-05-3091	* A-7478-9A102	22-12-2094	* A-7478-9A501	50-29-1716	A-7478-9A501T																																																																																								
H	22-05-3101	* A-7478-10A102	22-12-2104	* A-7478-10A501	50-29-1717	A-7478-10A501T																																																																																								
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	22-05-3121	* A-7478-12A102	22-12-2124	* A-7478-12A501	50-29-1719	A-7478-12A501T																																																																																								
	22-05-3131	* A-7478-13A102	22-12-2134	* A-7478-13A501	50-29-1720	A-7478-13A501T																																																																																								
	22-05-3141	* A-7478-14A102	22-12-2144	* A-7478-14A501	50-29-1721	A-7478-14A501T																																																																																								
	22-05-3151	* A-7478-15A102	22-12-2154	* A-7478-15A501	50-29-1722	A-7478-15A501T																																																																																								
G	22-05-3161	* A-7478-16A102	22-12-2164	* A-7478-16A501	50-29-1723	A-7478-16A501T																																																																																								
	22-05-3171	* A-7478-17A102	22-12-2174	* A-7478-17A501	50-29-1724	A-7478-17A501T																																																																																								
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<table><tr><td rowspan="4">ADD P/N'S EC NO: UCP2006-1815 2006/02/06 DRAWN:ADERR CHKD:AEHAG 2006/02/06 APPR:FSM TH 2006/02/09 REV Y9</td><td rowspan="8">DESCRIPTION</td><td>QUALITY SYMBOLS ▽=0 ▽=0</td><td colspan="2">GENERAL TOLERANCES (UNLESS SPECIFIED)</td><td colspan="2">DIMENSION STYLE IN/MM</td><td>SCALE ---</td><td>DESIGN UNITS INCH</td><td colspan="2" rowspan="4"> THIRD ANGLE PROJECTION</td><td colspan="2" rowspan="4">FRICION LOCK HEADER ASY .100 CL BENT SQ PINS 7478 SERIES DWG.</td><td rowspan="4"> MOLEX INCORPORATED</td></tr><tr><td>mm</td><td>INCH</td><td>DRAWN BY GUZIK</td><td>DATE 1987/07/10</td></tr><tr><td>4 PLACES ± ---</td><td>± ---</td><td>CHECKED BY PATEL</td><td>DATE 1987/07/10</td></tr><tr><td>3 PLACES ± ---</td><td>± ---</td><td>APPROVED BY LENZ</td><td>DATE 1987/07/10</td></tr><tr><td colspan="3"></td><td>2 PLACES ± ---</td><td>± ---</td><td colspan="2">MATERIAL NO.</td><td colspan="2">DOCUMENT NO.</td><td colspan="2">SHEET NO.</td><td rowspan="2">3 OF 7</td><td rowspan="2">A</td></tr><tr><td colspan="3"></td><td>1 PLACE ± ---</td><td>± ---</td><td colspan="2">SEE CHART</td><td colspan="2">SDA-7478</td><td colspan="5"></td></tr><tr><td colspan="3"></td><td colspan="2">ANGULAR ± ---°</td><td colspan="8">THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</td><td></td></tr><tr><td colspan="3"></td><td colspan="2">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td><td colspan="9"></td></tr></table>														ADD P/N'S EC NO: UCP2006-1815 2006/02/06 DRAWN:ADERR CHKD:AEHAG 2006/02/06 APPR:FSM TH 2006/02/09 REV Y9	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE ---	DESIGN UNITS INCH	THIRD ANGLE PROJECTION		FRICION LOCK HEADER ASY .100 CL BENT SQ PINS 7478 SERIES DWG.		MOLEX INCORPORATED	mm	INCH	DRAWN BY GUZIK	DATE 1987/07/10	4 PLACES ± ---	± ---	CHECKED BY PATEL	DATE 1987/07/10	3 PLACES ± ---	± ---	APPROVED BY LENZ	DATE 1987/07/10				2 PLACES ± ---	± ---	MATERIAL NO.		DOCUMENT NO.		SHEET NO.		3 OF 7	A				1 PLACE ± ---	± ---	SEE CHART		SDA-7478										ANGULAR ± ---°		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS										
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		mm	INCH	DRAWN BY GUZIK	DATE 1987/07/10																																																																																									
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		3 PLACES ± ---	± ---	APPROVED BY LENZ	DATE 1987/07/10																																																																																									
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О компании

ООО "ТрейдЭлектроникс" - это оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов. Реализуемая нашей компанией продукция насчитывает более полумиллиона наименований.

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Срок поставки со стоков в **Европе и Америке – от 3 до 14 дней.**

Срок поставки из **Азии – от 10 дней.**

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Предоставляем спец цены на элементы для создания инженерных сэмплов.

Упорный труд, качественный результат дают нам право быть уверенными в себе и надежными для наших клиентов.

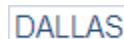
Наша компания это:

- Гарантия качества поставляемой продукции
- Широкий ассортимент
- Минимальные сроки поставок
- Техническая поддержка
- Подбор комплектации
- Индивидуальный подход
- Гибкое ценообразование

Наша организация особенно сильна в поставках модулей, микросхем, пассивных компонентов, ксайленсах (XC), EPF, EPM и силовой электроники.

Большой выбор предлагаемой продукции, различные виды оплаты и доставки, позволят Вам сэкономить время и получить максимум выгоды от сотрудничества с нами!

Перечень производителей, продукцию которых мы поставляем на российский рынок





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С удовольствием будем прорабатывать для Вас поставки всех необходимых компонентов по текущим запросам для скорейшего выявления групп элементов, по которым сотрудничество именно с нашей компанией будет для Вас максимально выгодным!

С уважением,

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