

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0022122144](#)
Status: **Active**
Description: 2.54mm (.100") Pitch KK® Solid Header, Right Angle, with Friction Lock, 14 Circuits, 0.51µm (20µ") Gold (Au) Plating

Documents:

3D Model	Product Specification PS-10-07 (PDF)
Drawing (PDF)	RoHS Certificate of Compliance (PDF)

Agency Certification

CSA	LR19980
UL	E29179

General

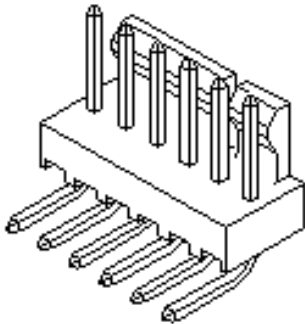
Product Family	PCB Headers
Series	7478
Application	Wire-to-Board
Product Name	KK®

Physical

Breakaway	No
Circuits (Loaded)	14
Circuits (maximum)	14
Color - Resin	Natural (White)
Durability (mating cycles max)	50
Flammability	94V-0
Glow-Wire Compliant	No
Lock to Mating Part	Yes
Material - Metal	Brass
Material - Plating Mating	Gold
Material - Plating Termination	Gold
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 (µin)	20
Plating min: Mating (µm)	0.5
Plating min: Termination (µin)	20
Plating min: Termination (µm)	0.5
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
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*Series
image - Reference only*

EU RoHS

**ELV and RoHS
Compliant**
REACH SVHC
Not Reviewed
**Halogen-Free
Status**

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

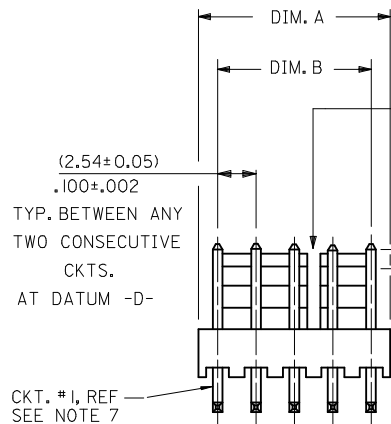
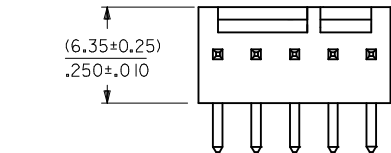
[2695](#) , [6471](#) , [7880](#) , [4455](#) , [7720](#)

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
Process Temperature max. C	235
Material Info	
Old Part Number	A-7478-14A501
Reference - Drawing Numbers	
Product Specification	PS-10-07, RPS-6373-001
Sales Drawing	SDA-7478

This document was generated on 04/12/2010

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	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

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:MKIPPER	CHKD:SSOUSEK	2009/01/30
APPR:FSMLTH	2009/01/30	
REV	DESCRIPTION	
Z		

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 (.254)/.100 CENTERS.

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

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

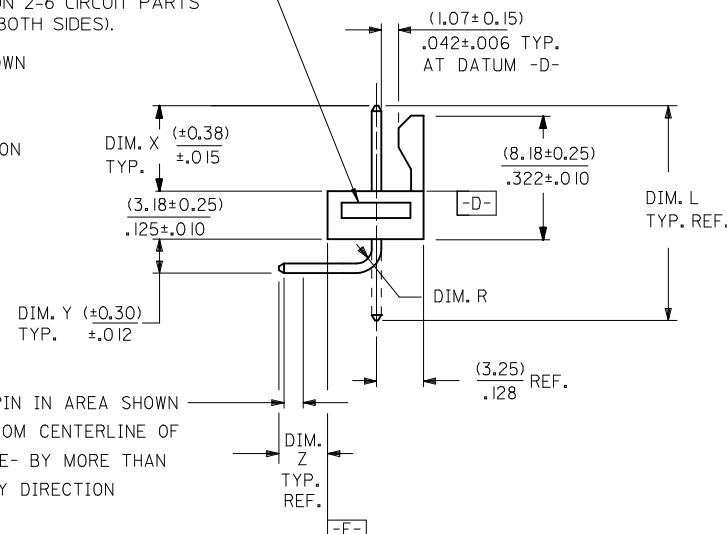
CIRCUIT ONE MAY OR MAY NOT LINE UP WITH CIRCUIT ONE ON THE MATING HOUSING.

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

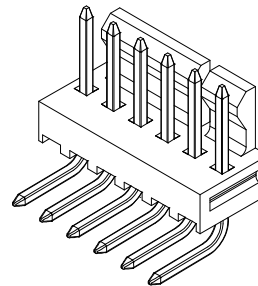
SLOTS LOCATED
BETWEEN CIRCUITS
(SEE CHART)

CENTERLINE OF PIN IN AREA SHOWN
NOT TO VARY FROM CENTERLINE
OF PIN AT DATUM -D- BY MORE
THAN (.020)/.008 IN ANY DIRECTION

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
(.013)/.005 IN ANY DIRECTION



(2.54±0.05)
.100±.002 TYP.
NON-ACCUM.
(.102±0.05)
.040±.002
DIA. HOLE TYP.

RECOMMENDED P.C. BOARD HOLE LAYOUT

GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM/IN		SCALE 4:1	DESIGN UNITS INCH	 THIRD ANGLE PROJECTION	
	mm	INCH	DRAWN BY	DATE	TITLE FRICTION LOCK HEADER ASY .100 CL BENT SQ PINS 7478 SERIES DWG			
4 PLACES	± ---	± ---	GUZIC	1987/07/30				
3 PLACES	± ---	± .010	CHECKED BY	DATE	MOLEX INCORPORATED			
2 PLACES	± 0.25	± .015	PATEL	1987/07/30				
1 PLACE	± 0.38	± ---	APPROVED BY	DATE	 MOLEX INCORPORATED			
ANGULAR ± 1/2°		LENZ	1987/07/30					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NO. SEE CHART		DOCUMENT NO. SDA-7478		SHEET NO. 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-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.	J																																																					
	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																																																										
	22-05-3041	A-7478-4A102	22-12-2044	A-7478-4A501	50-29-1705	A-7478-4A501T	50-34-8502	A-7478-4A102T																																																										
I	22-05-3051	A-7478-5A102	22-12-2054	A-7478-5A501	50-29-1712	A-7478-5A501T							I																																																					
	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							H																																																					
	22-05-3111	A-7478-11A102	22-12-2114	A-7478-11A501	50-29-1718	A-7478-11A501T																																																												
	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							G																																																					
	22-05-3171	A-7478-17A102	22-12-2174	A-7478-17A501	50-29-1724	A-7478-17A501T																																																												
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F	22-05-3211	A-7478-21A102	22-12-2214	A-7478-21A501	50-29-1728	A-7478-21A501T							F																																																					
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	22-05-3261	A-7478-26A102	22-12-2264	A-7478-26A501	50-29-1733	A-7478-26A501T																																																												
E	22-05-3271	A-7478-27A102	22-12-2274	A-7478-27A501	50-29-1734	A-7478-27A501T							E																																																					
	22-05-3281	A-7478-28A102	22-12-2284	A-7478-28A501	50-29-1735	A-7478-28A501T																																																												
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<table><tr><td rowspan="6">ADD P/N'S EC NO: UCP2006-1815 DRAWN:ADERR CHKD:AEHAG APPR:FSM TH Y9</td><td rowspan="6">DESCRIPTION 2006/02/06 2006/02/06 2006/02/09</td><td rowspan="6">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="2">THIRD ANGLE PROJECTION</td></tr><tr><td>mm</td><td>INCH</td><td>DRAWN BY GUZIK</td><td>DATE 1987/07/10</td><td colspan="2">TITLE FRICTION LOCK HEADER ASY .100 CL BENT SQ PINS 7478 SERIES DWG.</td></tr><tr><td>4 PLACES</td><td>± ---</td><td>± ---</td><td>CHECKED BY PATEL</td><td>DATE 1987/07/10</td><td colspan="2">MOLEX INCORPORATED</td></tr><tr><td>3 PLACES</td><td>± ---</td><td>± ---</td><td>APPROVED BY LENZ</td><td>DATE 1987/07/10</td><td colspan="2" rowspan="3">DOCUMENT NO. SDA-7478</td></tr><tr><td>2 PLACES</td><td>± ---</td><td>± ---</td><td colspan="2" rowspan="2">MATERIAL NO.</td></tr><tr><td>1 PLACE</td><td>± ---</td><td>± ---</td></tr><tr><td colspan="2">ANGULAR ± ---°</td><td colspan="2">SEE CHART</td><td colspan="2">SHEET NO. 3 OF 7</td></tr><tr><td colspan="2">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td><td colspan="2">SIZE C</td><td colspan="4">THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</td></tr></table>														ADD P/N'S EC NO: UCP2006-1815 DRAWN:ADERR CHKD:AEHAG APPR:FSM TH Y9	DESCRIPTION 2006/02/06 2006/02/06 2006/02/09	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE ---	DESIGN UNITS INCH	THIRD ANGLE PROJECTION		mm	INCH	DRAWN BY GUZIK	DATE 1987/07/10	TITLE FRICTION LOCK HEADER ASY .100 CL BENT SQ PINS 7478 SERIES DWG.		4 PLACES	± ---	± ---	CHECKED BY PATEL	DATE 1987/07/10	MOLEX INCORPORATED		3 PLACES	± ---	± ---	APPROVED BY LENZ	DATE 1987/07/10	DOCUMENT NO. SDA-7478		2 PLACES	± ---	± ---	MATERIAL NO.		1 PLACE	± ---	± ---	ANGULAR ± ---°		SEE CHART		SHEET NO. 3 OF 7		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE C		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
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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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- Гарантия качества поставляемой продукции
- Широкий ассортимент
- Минимальные сроки поставок
- Техническая поддержка
- Подбор комплектации
- Индивидуальный подход
- Гибкое ценообразование

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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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качества выпускаемой продукции

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manager28@tradeelectronics.ru

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