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Part Number: [0022122074](#)
Status: **Active**
Description: 2.54mm (.100") Pitch KK® Solid Header, Right Angle, with Friction Lock, 7 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

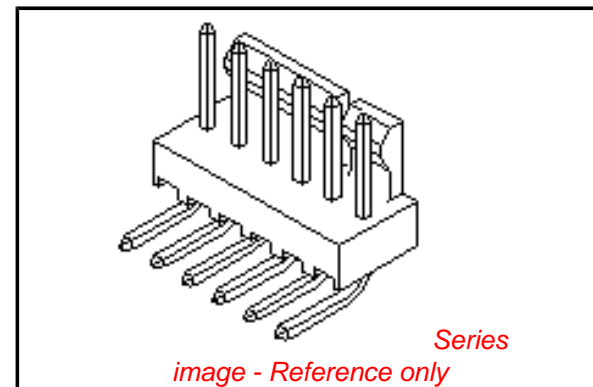
Product Family PCB Headers
 Series [7478](#)
 Application Wire-to-Board
 Product Name KK®

Physical

Breakaway No
 Circuits (Loaded) 7
 Circuits (maximum) 7
 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



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-7478-07A501

Reference - Drawing Numbers

Product Specification PS-10-07, RPS-6373-001
Sales Drawing SDA-7478

This document was generated on 04/09/2010

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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									
	25	(63.50 / 62.99) 2.500 / 2.480	(60.96 ± 0.25) 2.400 ± .010	4 , 5 20 , 21									
I	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									
	21	(53.34 / 52.88) 2.100 / 2.082	(50.80 ± 0.23) 2.000 ± .009	4 , 5 16 , 17									
H	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									
	18	(45.72 / 45.31) 1.800 / 1.784	(43.18 ± 0.20) 1.700 ± .008	4 , 5 12 , 13									
G	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									
	15	(38.10 / 37.69) 1.500 / 1.484	(35.56 ± 0.20) 1.400 ± .008	4 , 5 12 , 13									
F	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									
E	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									
	5	(12.70 / 12.40) .500 / .488	(10.16 ± 0.13) .400 ± .005	NONE									
C	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									



CT. #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	2009/01/30	CHKD:SSOUSEK	2009/01/30	APPR:FSMITH	2009/01/30
REV	Z							

QUALITY SYMBOLS
▽=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	MM/IN
4 PLACES ±	± .010
3 PLACES ±	± .010
2 PLACES ±	± .015
1 PLACE ±	± .038
ANGULAR ±1/2°	

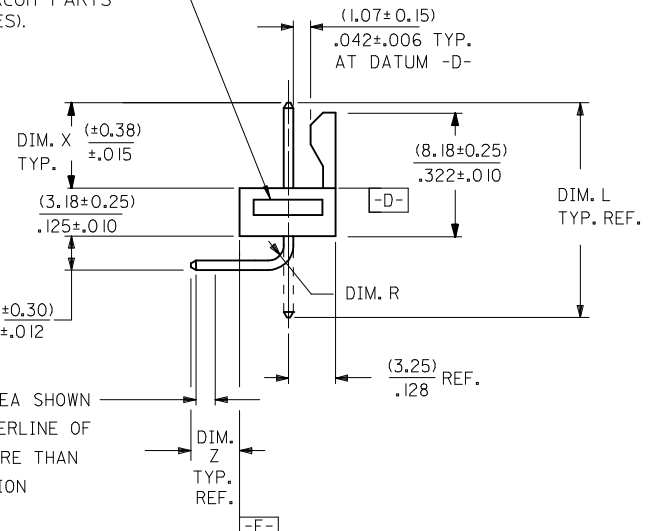
DIMENSION STYLE	
MM/IN	
DRAWN BY	DATE
GUZIC	1987/07/30
CHECKED BY	DATE
PATEL	1987/07/30
APPROVED BY	DATE
LENZ	1987/07/30

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
4:1	INCH	☉
FRICION LOCK HEADER ASY .100 CL BENT SQ PINS 7478 SERIES DWG		
MOLEX INCORPORATED		
MATERIAL NO. SEE CHART	DOCUMENT NO. SDA-7478	SHEET NO. 1 OF 7
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

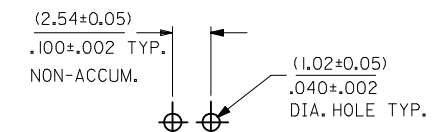
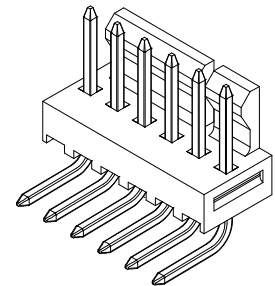
NOTES:

- MATERIAL: NYLON, UL94V-0, COLOR: WHITE
- 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.
- PARTS CONFORM TO PRODUCT SPECIFICATION PS-10-07.
- PACKAGING INFORMATION: SEE LEGEND.
- PARTS ARE STACKABLE END TO END ON (2.54)/.100 CENTERS.
- PIN PUSH OUT FORCE: 2 LBS. MIN.
- CIRCUIT ONE DESIGNATION IS USED TO DEFINE VOID LOCATION. CIRCUIT ONE MAY OR MAY NOT LINE UP WITH CIRCUIT ONE ON THE MATING HOUSING.
- 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



RECOMMENDED P.C. BOARD HOLE LAYOUT

	13	12	11	10	9	8	7	6	5	4	3	2	1				
J	ENG. NO.	PIN NO.	DIM. L	DIM. X	DIM. Z	DIM. Y	DIM. W	DIM. R	ENG. NO.	PIN NO.	DIM. L	DIM. X	DIM. Z	DIM. Y	DIM. W	DIM. T	J
	A-7478-NA102	2766-41(I102)	(18.69) .736	(6.60) .260	(3.58) .141	(3.05) .120	90°	(1.17) .046									
	A-7478-NA50I	2766-41(I50I)	(18.69) .736	(6.60) .260	(3.58) .141	(3.05) .120	90°	(1.17) .046									
I	A-7478-NA50IT	2766-41(I50IT)	(18.69) .736	(6.60) .260	(3.58) .141	(3.05) .120	90°	(1.17) .046									I
	A-7478-NA102T	2766-41(I102T)	(18.69) .736	(6.60) .260	(3.58) .141	(3.05) .120	90°	(1.17) .046									
H																	H
G																	G
F																	F
E																	E
D																	D
C																	C

B	ADD A-7478-NA102T EC NO: UCP2006-1815 DRAWN: ADERR 2006/02/06 CHKD: AELHAG 2006/02/06 APPR: FSM TH 2006/02/09	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE ---	DESIGN UNITS INCH	THIRD ANGLE PROJECTION		TITLE FRICTION LOCK HEADER ASY .100 CL BENT SQ PINS 7478 SERIES DWG
			mm	INCH	DRAWN BY GUZIK	DATE 1987/07/10	CHECKED BY PATEL	DATE 1987/07/10	APPROVED BY LENZ	DATE 1987/07/10	
A	Y9		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		MATERIAL NO. SDA-7478		DOCUMENT NO. SDA-7478		SHEET NO. 2 OF 7

