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Part Number: 0022053051

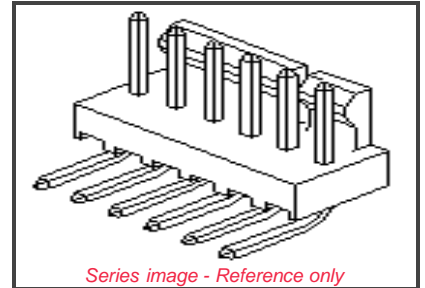
Status: Active

Description: 2.54mm (.100") Pitch KK® Solid Header, Right Angle, with Friction Lock, 5 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	7478
Application	Wire-to-Board
Product Name	KK®

Physical

Breakaway	No
Circuits (Loaded)	5
Circuits (maximum)	5
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 **China RoHS**
ELV and RoHS Compliant



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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-7478-05A102
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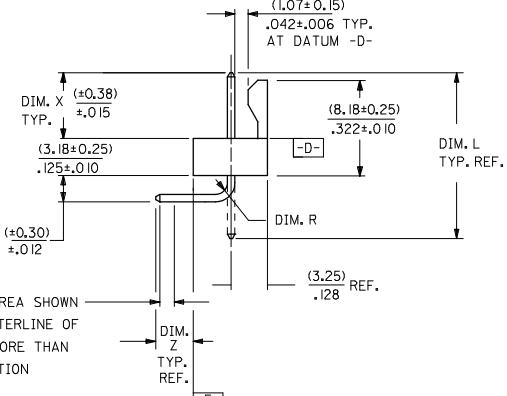
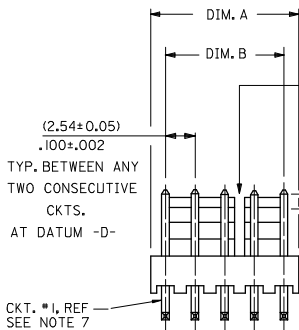
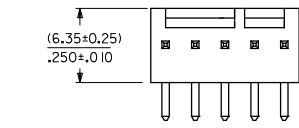
Reference - Drawing Numbers

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:

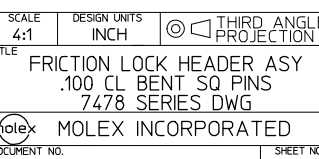
- MATERIAL: NYLON, UL94V-0, COLOR WHITE
- FINISH:
 - (102) - OVERALL TIN: (0.00508)/.000200 MIN., OVERALL COPPER UNDERPLATE: (0.00254)/.000100 MIN.
 - (154) - OVERALL TIN: (0.00254)/.000100 MIN., OVERALL NICKEL UNDERPLATE: (0.00127)/.000050 MIN.
 - (501) - OVERALL GOLD: (0.00051)/.000020 MIN., OVERALL 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 HOUSING.
- 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: KPPR	2008/08/14
APPR: ESMITH	2008/08/14
REV	

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		
SEE CHART		DOCUMENT NO. SDA-7478		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		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																																																																																			
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																																																																																	
	A-7478-NA I02	2766-4 (I02)	(18.69) .736	(6.60) .260	(3.58) .141	(3.05) .120	90°	(1.17) .046																																																																																									
	A-7478-NA50I	2766-4 (K50 I)	(18.69) .736	(6.60) .260	(3.58) .141	(3.05) .120	90°	(1.17) .046																																																																																									
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	A-7478-NA I02T	2766-4 (I02)	(18.69) .736	(6.60) .260	(3.58) .141	(3.05) .120	90°	(1.17) .046																																																																																									
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B	<table border="1"> <tr> <td rowspan="4"> ADD A-7478-NA I02T SEC NO: UCP2006-1815 DRW: WADERR CHK: KJELHAG APPR: SMITH Y9 </td> <td>QUALITY SYMBOLS</td> <td colspan="2">GENERAL TOLERANCES (UNLESS SPECIFIED)</td> <td colspan="2">DIMENSION STYLE</td> <td>SCALE</td> <td>DESIGN UNITS</td> <td>THIRD ANGLE PROJECTION</td> </tr> <tr> <td>▽=0</td> <td>mm</td> <td>INCH</td> <td colspan="2">IN/MM</td> <td>---</td> <td>INCH</td> <td></td> </tr> <tr> <td>▽=0</td> <td>4 PLACES ±</td> <td>±</td> <td>DRAWN BY</td> <td>DATE</td> <td colspan="3">TITLE</td> </tr> <tr> <td></td> <td>3 PLACES ±</td> <td>±</td> <td>SUZIK</td> <td>1987/07/10</td> <td colspan="3">FRICTION LOCK HEADER ASY</td> </tr> <tr> <td></td> <td>2 PLACES ±</td> <td>±</td> <td>CHECKED BY</td> <td>DATE</td> <td colspan="3">.100 CL BENT SQ PINS</td> </tr> <tr> <td></td> <td>1 PLACE ±</td> <td>±</td> <td>PATEL</td> <td>1987/07/10</td> <td colspan="3">7478 SERIES DWG</td> </tr> <tr> <td></td> <td>ANGULAR ±</td> <td>±</td> <td>APPROVED BY</td> <td>DATE</td> <td colspan="3">MOLEX INCORPORATED</td> </tr> <tr> <td></td> <td></td> <td></td> <td>LENZ</td> <td>1987/07/10</td> <td colspan="3">MATERIAL NO. DOCUMENT NO.</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="2">SEE CHART</td> <td>SDA-7478</td> <td>SHEET NO.</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="3">THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</td> <td>2 OF 7</td> </tr> </table>							ADD A-7478-NA I02T SEC NO: UCP2006-1815 DRW: WADERR CHK: KJELHAG APPR: SMITH Y9	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	▽=0	mm	INCH	IN/MM		---	INCH		▽=0	4 PLACES ±	±	DRAWN BY	DATE	TITLE				3 PLACES ±	±	SUZIK	1987/07/10	FRICTION LOCK HEADER ASY				2 PLACES ±	±	CHECKED BY	DATE	.100 CL BENT SQ PINS				1 PLACE ±	±	PATEL	1987/07/10	7478 SERIES DWG				ANGULAR ±	±	APPROVED BY	DATE	MOLEX INCORPORATED						LENZ	1987/07/10	MATERIAL NO. DOCUMENT NO.								SEE CHART		SDA-7478	SHEET NO.						THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			2 OF 7							
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A	<table border="1"> <tr> <td>ib_frame_C_P_ME_T</td> <td>12</td> <td>11</td> <td>10</td> <td>9</td> <td>8</td> <td>7</td> <td>6</td> <td>5</td> <td>4</td> <td>3</td> <td>2</td> <td>1</td> </tr> <tr> <td>Rev. D 2004/04/02</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>							ib_frame_C_P_ME_T	12	11	10	9	8	7	6	5	4	3	2	1	Rev. D 2004/04/02																																																																												
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	ADD PINS EC NO. UCP2006-1815 2006/02/06 DRW:ADBR 2006/02/06 CHK:KJELHAG 2006/02/06 APP:RSMITH 2006/02/09		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>± .005</td> <td>± .0004</td> </tr> <tr> <td>3 PLACES</td> <td>± .005</td> <td>± .0004</td> </tr> <tr> <td>2 PLACES</td> <td>± .005</td> <td>± .0004</td> </tr> <tr> <td>1 PLACE</td> <td>± .005</td> <td>± .0004</td> </tr> <tr> <td>ANGULAR</td> <td>± .005°</td> <td></td> </tr> </table>			mm	INCH	4 PLACES	± .005	± .0004	3 PLACES	± .005	± .0004	2 PLACES	± .005	± .0004	1 PLACE	± .005	± .0004	ANGULAR	± .005°		DIMENSION STYLE IN/MM		SCALE ---		DESIGN UNITS INCH		THIRD ANGLE PROJECTION	
	mm	INCH																														
4 PLACES	± .005	± .0004																														
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1 PLACE	± .005	± .0004																														
ANGULAR	± .005°																															
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																						
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																				

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