

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0469911006](#)  
**Status:** **Active**  
**Description:** 4.20mm (.165") Pitch Mini-Fit RTC™ Reflow High Temperature Compatible Header, Right Angle, Dual Row, 6 Circuits, without Mounting Peg, Tin (Sn) Over Nickel (Ni) Plating

**Documents:**

[3D Model](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Drawing \(PDF\)](#)

**Agency Certification**

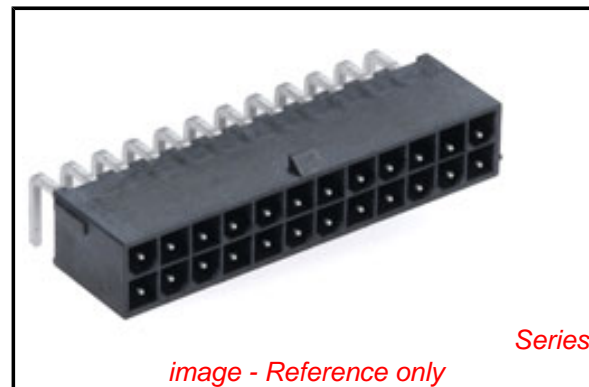
CSA LR19980  
 UL E29179

**General**

Product Family PCB Headers  
 Series [46991](#)  
 Application Board-to-Board, Wire-to-Board  
 Comments Current = 13A max. per circuit when header is mated to a receptacle loaded with [45750](#) Mini-Fit Plus HCS™ Crimp Terminal Crimped to to 16 AWG wire. . See Molex product specification PS-45750-001 for additional current de-rating information.  
 Product Name Mini-Fit RTC™

**Physical**

Breakaway No  
 Circuits (Loaded) 6  
 Circuits (maximum) 6  
 Color - Resin Black  
 Durability (mating cycles max) 75  
 First Mate / Last Break No  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Guide to Mating Part No  
 Keying to Mating Part None  
 Lock to Mating Part Yes  
 Material - Metal Brass  
 Material - Plating Mating Tin  
 Material - Plating Termination Nickel  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 2  
 Orientation Right Angle  
 PC Tail Length (in) 0.130 In  
 PC Tail Length (mm) 3.30 mm  
 PCB Locator Yes  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.070 In  
 PCB Thickness Recommended (mm) 1.78 mm  
 Packaging Type Tray  
 Pitch - Mating Interface (in) 0.165 In  
 Pitch - Mating Interface (mm) 4.20 mm  
 Pitch - Term. Interface (in) 0.165 In  
 Pitch - Term. Interface (mm) 4.20 mm  
 Polarized to Mating Part Yes  
 Polarized to PCB Yes



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**Halogen-Free**  
**Status Not Reviewed**

**China RoHS**



**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto: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**  
[46991Series](#)

**Mates With**  
[5557](#) Mini Fit Jr.™ Receptacle

Shrouded	Fully
Stackable	No
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole

#### **Electrical**

Current - Maximum per Contact	13A
Voltage - Maximum	600V AC (RMS)/DC

#### **Solder Process Data**

Duration at Max. Process Temperature (seconds)	30
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

#### **Material Info**

#### **Reference - Drawing Numbers**

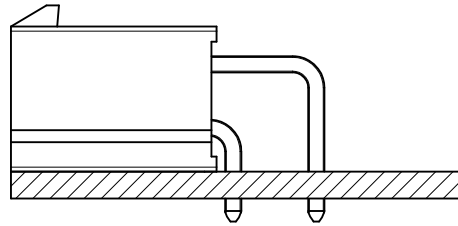
Packaging Specification	PK-5569-003
Sales Drawing	SD-46991-001

This document was generated on 05/17/2010

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13	12	11	10	9	8	7	6	5	4	3	2	1
CKT SIZE	TRAY PACK MATERIAL NUMBER	TAPE & REEL MATERIAL NUMBER	DIM "A"	DIM "B"								
J	4	46991-1004	46991-4004	.38/9.6	.165/4.20							
	6	46991-1006	X 46991-4006	.54/13.8	.331/8.40							
	8	46991-1008	X 46991-4008	.71/18.0	.496/12.60							
	10	46991-1010	X 46991-4010	.87/22.2	.661/16.80							
	12	46991-1012	X 46991-4012	1.04/26.4	.827/21.00							
	14	X 46991-1014	X 46991-4014	1.21/30.6	.992/25.20							
	16	X 46991-1016	X 46991-4016	1.37/34.8	1.160/29.40							
I	18	X 46991-1018	X 46991-4018	1.54/39.0	1.323/33.60							
	20	X 46991-1020	X 46991-4020	1.70/43.2	1.488/37.80							
	22	X 46991-1022	X 46991-4022	1.87/47.4	1.654/42.00							
	24	46991-1024	X 46991-4024	2.03/51.6	1.819/46.20							

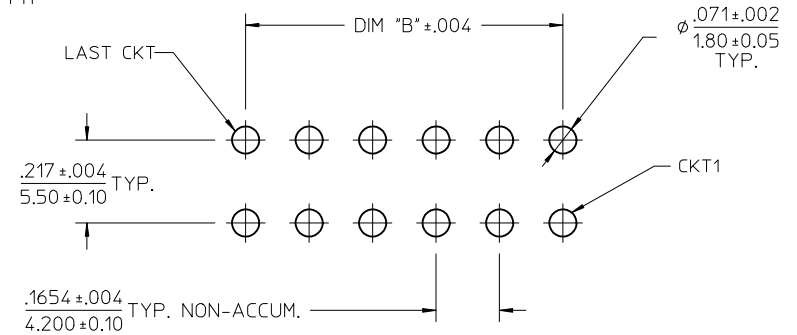
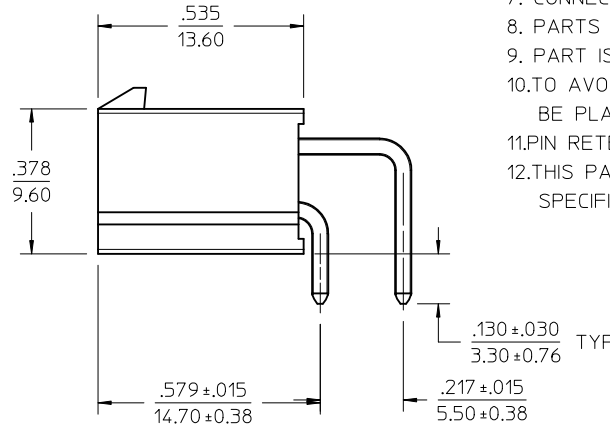
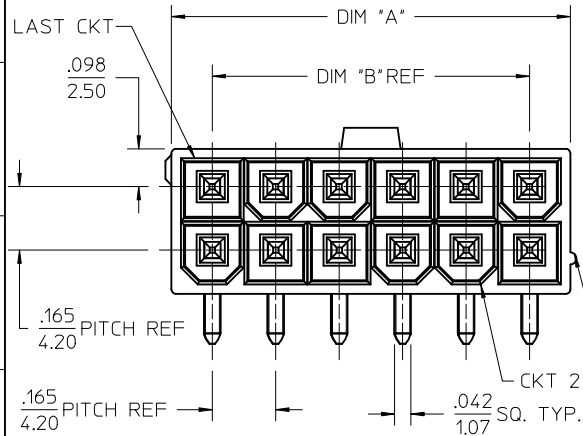
X DESIGNATES NOT TOOLED



SEE NOTE 10

NOTES:

- MATERIAL:  
HOUSING - LIQUID CRYSTAL POLYMER (LCP), COLOR: BLACK.  
TERMINAL - BRASS
- TERMINAL PLATING: .000100/0.00254 MATTE TIN OVER  
.000050/0.00127 NICKEL OVERALL
- PRODUCT SPECIFICATION: PS-46207-001.
- PACKAGING SPECIFICATION: TRAY PACKED PER PK-5569-003 OR  
TAPE AND REEL PACKAGED PER PK-46991-001.
- PART MATES WITH MINIFIT JR RECEPTACLE SERIES 5557
- DISCOLORIZATION IN THE BANDOLIER CARRIER AREA OF THE PIN IS  
INHERENT TO THE PLATING PROCESS AND IS DUE TO THE MASKING EFFECT  
OF THE CARRIER. THIS DISCOLORIZATION IS A NON-FUNCTIONAL AREA OF  
THE PIN AND WILL NOT AFFECT THE PERFORMANCE OF THE HEADER ASSEMBLY.
- CONNECTORS ARE NOT TO BE MATED OR UNMATED WHILE CIRCUITS ARE LIVE.
- PARTS ARE NOT DESIGNED FOR CURRENT SHARING.
- PART IS INTENDED FOR PIN IN PASTE REFLOW SOLDER ONLY.
- TO AVOID INTERFERENCE BETWEEN THE RECEPTACLE AND PCB. HEADER MUST  
BE PLACED AT THE EDGE OF PCB AS SHOWN.
- PIN RETENTION IN HOUSING IS 2.2LBS/1KG MIN. BOTH DIRECTIONS.
- THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC  
SPECIFICATION PS-45499-002.



RECOMMENDED PCB HOLE LAYOUT FOR .070/1.78 MAX THICK P.C. BOARD  
VIEWED FROM COMPONENT SIDE

<b>ADD TAPE &amp; REEL #'S</b> EC NO: UCP2010-1398 DRWNG: JAGUILAR 2009/12/14 CHKD: JBELL 2009/12/16 APPR: FSMITH 2009/12/16	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
		4 PLACES ± --- ± ---	3 PLACES ± --- ± .010	2 PLACES ± 0.25 ± .015	1 PLACE ± 0.38 ± ---	DRAWN BY JKLOSTERMEIE	DATE 2008/12/9	TITLE MINIFIT JR RIGHT ANGLE HEADER ASSEMBLY W/O MOUNTING PEGS			
		ANGULAR ± 1/2°				CHECKED BY JBELL	DATE 2008/12/10	MOLEX INCORPORATED			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				APPROVED BY FSMITH	DATE 2008/12/15	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-46991-001	SHEET NO. 1 OF 1	