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Part Number: [0469911012](#)
Status: **Active**
Description: 4.20mm (.165") Pitch Mini-Fit RTC™ Reflow High Temperature Compatible Header, Right Angle, Dual Row, 12 Circuits, without Mounting Peg, Tin (Sn) Over Nickel (Ni) Plating

Documents:

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

Agency Certification

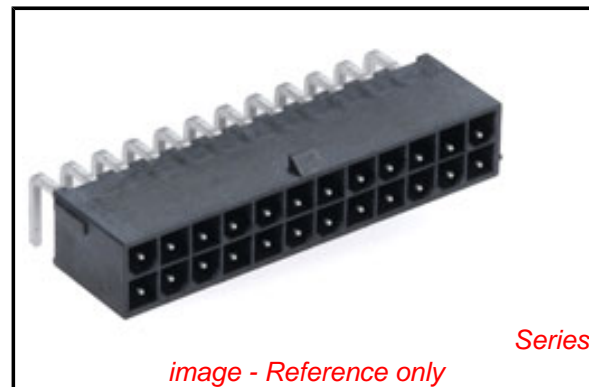
CSA LR19980
 UL E29179

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) 12
 Circuits (maximum) 12
 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
 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

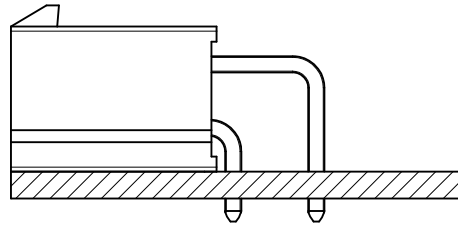
Packaging Specification	PK-5569-003
Sales Drawing	SD-46991-001

This document was generated on 05/17/2010

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

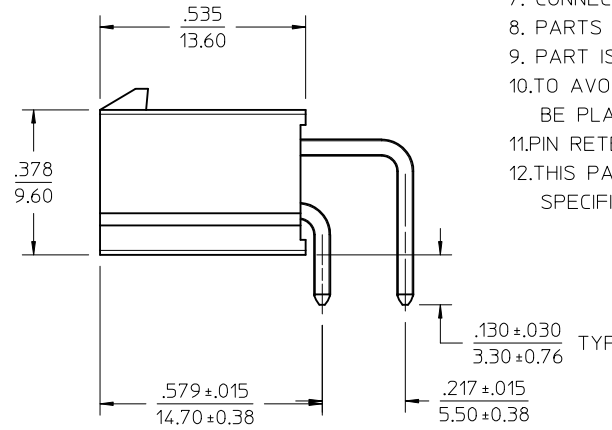
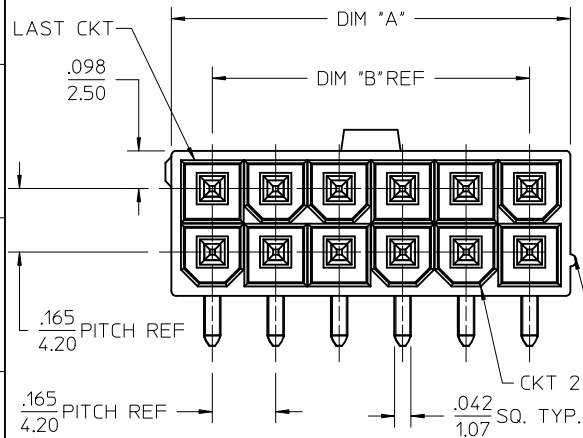
X DESIGNATES NOT TOOLED



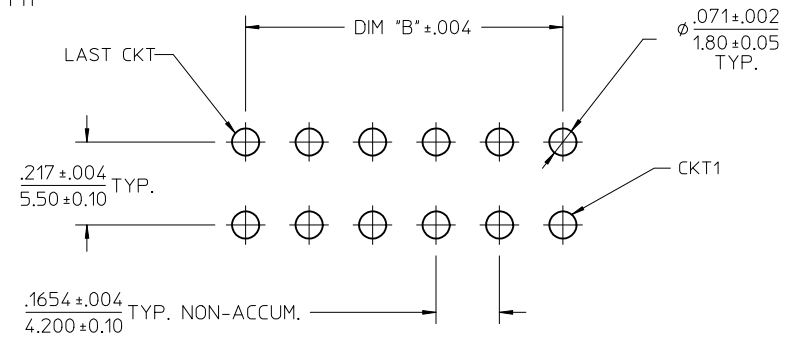
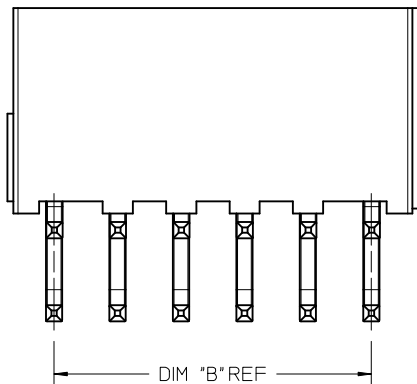
SEE NOTE 10

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.



CKT 1 INDICATOR



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

ADD TAPE & REEL #'S EC NO: UCP2010-1398 DRWNG: JAGUILAR 2009/12/14 CHKD: JBELL 2009/12/16 APPR: FSMITH 2009/12/16	QUALITY SYMBOLS 	GENERAL TOLERANCES (UNLESS SPECIFIED)		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 ± ---	mm INCH DRAWN BY JKLOSTERMEIE DATE 2008/12/9 CHECKED BY JBELL DATE 2008/12/10 APPROVED BY FSMITH DATE 2008/12/15	TITLE MINIFIT JR RIGHT ANGLE HEADER ASSEMBLY W/O MOUNTING PEGS		MOLEX INCORPORATED	
		ANGULAR ± 1/2°	MATERIAL NO. SEE CHART DOCUMENT NO. SD-46991-001	SHEET NO. 1 OF 1			
		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			