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Part Number: [0469914004](#)
Status: **Active**
Description: 4.20mm (.165") Pitch Mini-Fit RTC™ Reflow High Temperature Compatible Header, Right Angle, Dual Row, 4 Circuits, without Mounting Peg, Tin (Sn) Over Nickel (Ni) Plating

Documents:

[Drawing \(PDF\)](#)

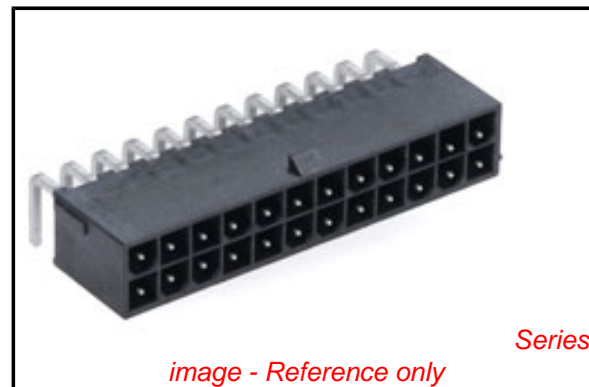
[RoHS Certificate of Compliance \(PDF\)](#)

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)	4
Circuits (maximum)	4
Color - Resin	Black
Durability (mating cycles max)	75
First Mate / Last Break	No
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
Shrouded	Fully
Stackable	No
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole



EU RoHS

ELV and RoHS Compliant
REACH SVHC Contains SVHC: No
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

[46991Series](#)

Mates With

[5557](#) Mini Fit Jr.™ Receptacle

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**

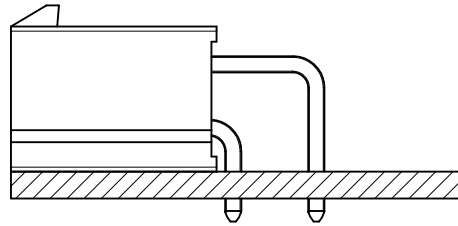
Packaging Specification	PK-46991-001
Sales Drawing	SD-46991-001
Test Summary	TS-46991-001

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

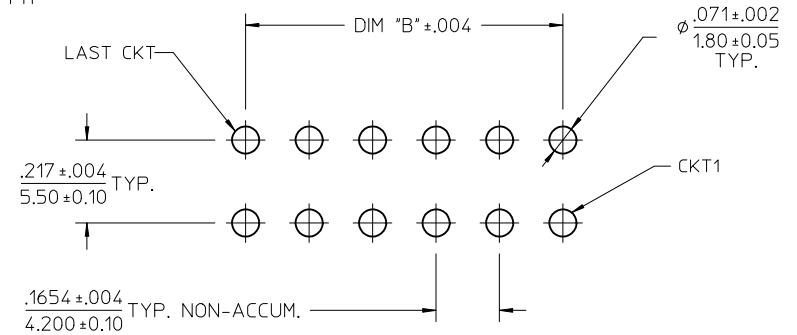
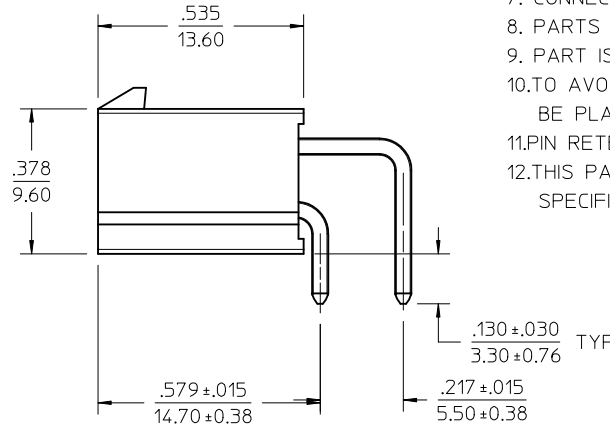
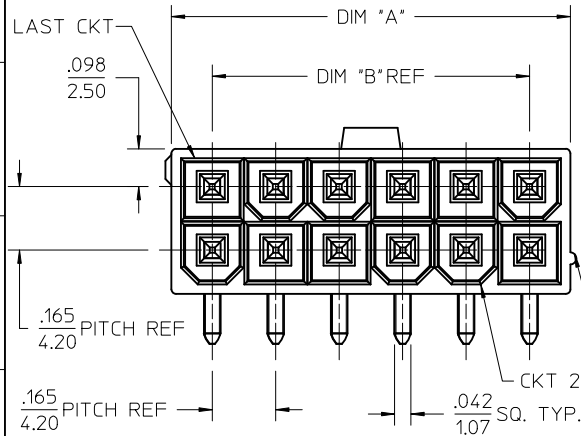
X DESIGNATES NOT TOOLED



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.



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 ± ---	DRAWN BY JKLOSTERMEIE 2008/12/9	DATE 2008/12/9	CHECKED BY JBELL 2008/12/10	DATE 2008/12/10	MINIFIT JR RIGHT ANGLE HEADER ASSEMBLY W/O MOUNTING PEGS		
		ANGULAR ± 1/2°	APPROVED BY FSMITH 2008/12/15	DATE 2008/12/15	MOLEX INCORPORATED				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-46991-001	SHEET NO. 1 OF 1				