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Part Number: [0469911024](#)
Status: **Active**
Description: 4.20mm (.165") Pitch Mini-Fit RTC™ Reflow High Temperature Compatible Header, Right Angle, Dual Row, 24 Circuits, without Mounting Peg, Tin (Sn) Over Nickel (Ni) Plating

Documents:

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

Agency Certification

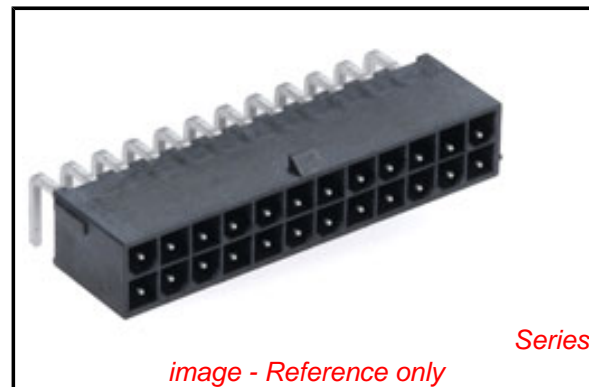
CSA LR19980
 UL E29179

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) 24
 Circuits (maximum) 24
 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

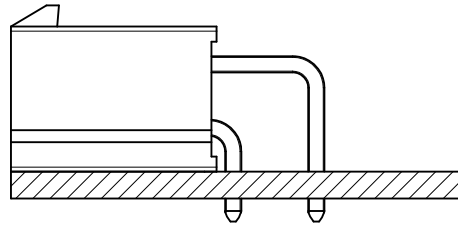
| | |
|-------------------------|--------------|
| Packaging Specification | PK-5569-003 |
| Sales Drawing | SD-46991-001 |

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 |

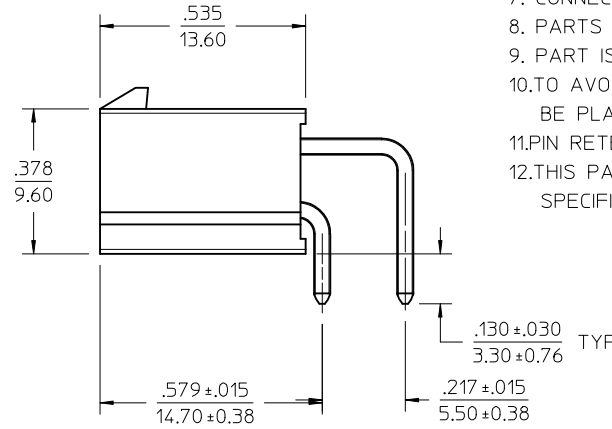
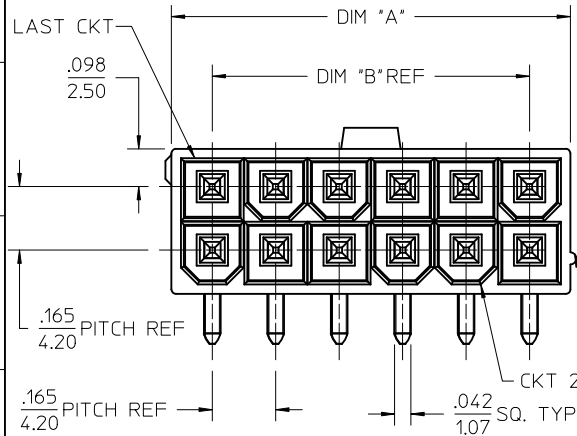
X DESIGNATES NOT TOOLED



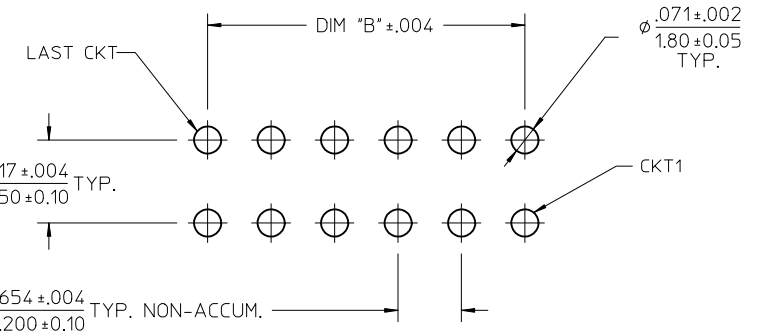
SEE NOTE 10

NOTES:

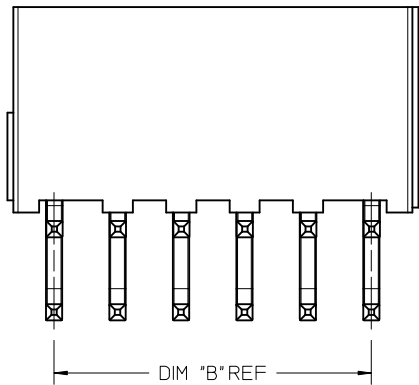
- MATERIAL:
HOUSING - LIQUID CRYSTAL POLYMER (LCP), COLOR: BLACK.
TERMINAL - BRASS
- TERMINAL PLATING: .000100/0.00254 MATTE TIN OVER
.000050/0.00127 NICKEL OVERALL
- PRODUCT SPECIFICATION: PS-46207-001.
- PACKAGING SPECIFICATION: TRAY PACKED PER PK-5569-003 OR
TAPE AND REEL PACKAGED PER PK-46991-001.
- 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 ▽=0 ▽=0 | 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 | MINIFIT JR RIGHT ANGLE HEADER ASSEMBLY W/O MOUNTING PEGS | | | |
| | | ANGULAR ± 1/2° | CHECKED BY JBELL 2008/12/10 | DATE 2008/12/10 | MOLEX INCORPORATED | | | |
| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | APPROVED BY FSMITH 2008/12/15 | DATE 2008/12/15 | MATERIAL NO. SEE CHART | DOCUMENT NO. SD-46991-001 | SHEET NO. 1 OF 1 | |