

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

**Part Number:** [0462070008](#)  
**Status:** **Active**  
**Description:** 4.20mm (.165") Pitch Mini-Fit RTC™ Reflow High Temperature Compatible Header, Dual Row, Vertical, 8 Circuits, 1.57mm (.062") PCB Thickness, with PCB Pegs, LCP Housing, with Tin (Sn) Over Nickel (Ni) Plating

**Documents:**

[3D Model](#) [Product Specification PS-46207-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

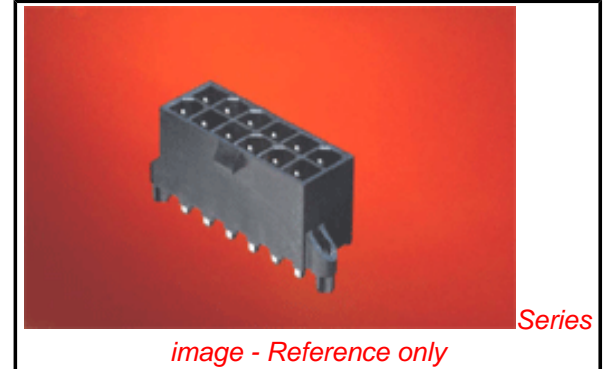
CSA LR19980  
 UL E29179

**General**

Product Family PCB Headers  
 Series [46207](#)  
 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.  
 MolexKits Yes  
 Product Name Mini-Fit RTC™

**Physical**

Breakaway No  
 Circuits (Loaded) 8  
 Circuits (maximum) 8  
 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 Vertical  
 PC Tail Length (in) 0.144 In  
 PC Tail Length (mm) 3.66 mm  
 PCB Locator Yes  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.062 In  
 PCB Thickness Recommended (mm) 1.57 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



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**Halogen-Free Status**  
**Halogen-Free**

**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**

[46207Series](#)

**Mates With**

[45750](#) , [5557](#) Mini Fit Jr.™ Receptacle

|                                |                 |
|--------------------------------|-----------------|
| Polarized to PCB               | Yes             |
| Shrouded                       | Fully           |
| Stackable                      | No              |
| Surface Mount Compatible (SMC) | Yes             |
| 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        | 3                            |
| Process Temperature max. C                     | 260                          |

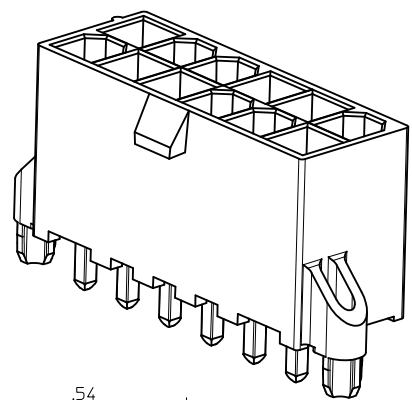
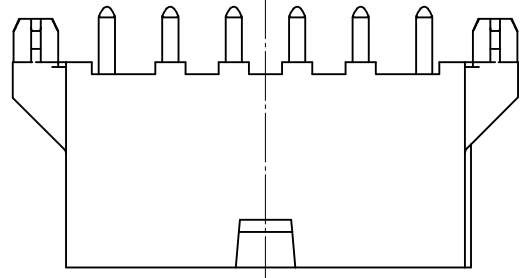
### **Material Info**

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

|                         |              |
|-------------------------|--------------|
| Packaging Specification | PK-46207-001 |
| Product Specification   | PS-46207-001 |
| Sales Drawing           | SD-46207-001 |

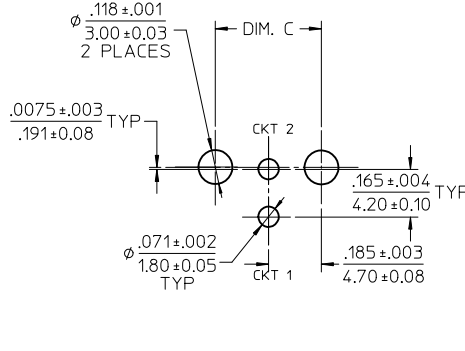
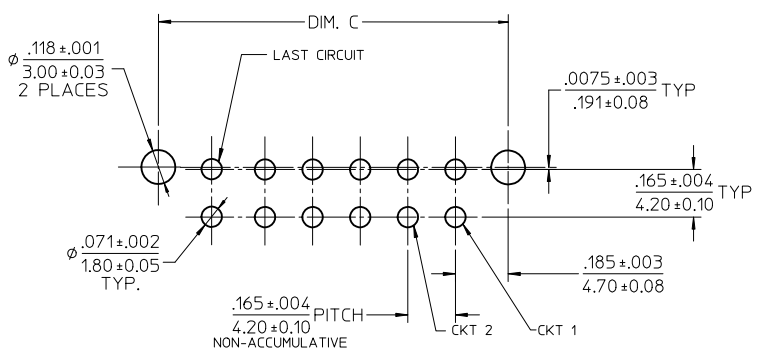
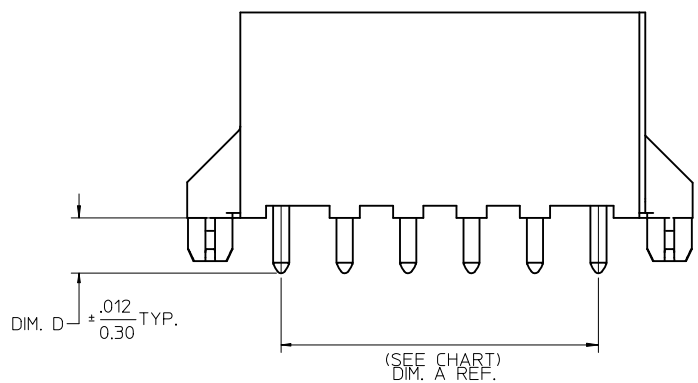
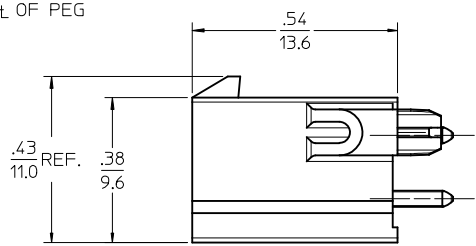
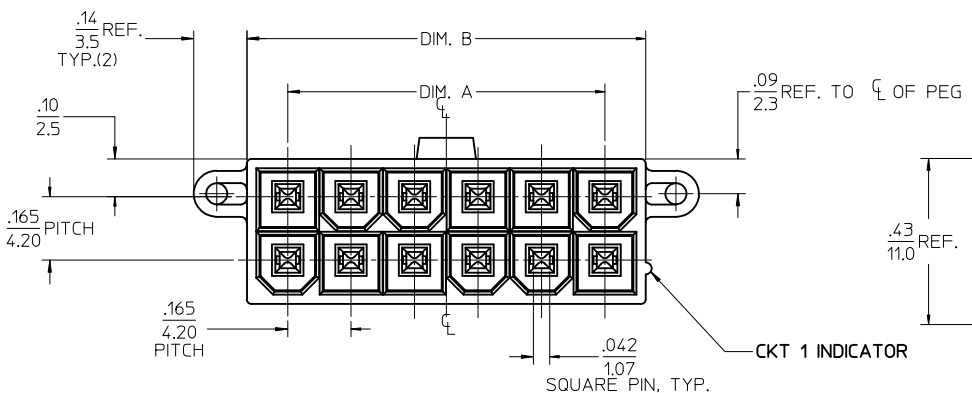
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| CIRCUIT SIZE | DIM. A      | DIM. B    | DIM. C      |
|--------------|-------------|-----------|-------------|
| 02           | NA          | 0.21/5.4  | 0.37/9.4    |
| 04           | 0.165/4.20  | 0.38/9.6  | 0.535/13.60 |
| 06           | 0.331/8.40  | 0.54/13.8 | 0.701/17.80 |
| 08           | 0.496/12.60 | 0.71/18.0 | 0.866/22.00 |
| 10           | 0.661/16.80 | 0.87/22.2 | 1.031/26.20 |
| 12           | 0.827/21.00 | 1.04/26.4 | 1.197/30.40 |
| 14           | 0.992/25.20 | 1.21/30.6 | 1.362/34.60 |
| 16           | 1.160/29.40 | 1.37/34.8 | 1.528/38.80 |
| 18           | 1.323/33.60 | 1.54/39.0 | 1.693/43.00 |
| 20           | 1.488/37.80 | 1.70/43.2 | 1.858/47.20 |
| 22           | 1.654/42.00 | 1.87/47.4 | 2.024/51.40 |
| 24           | 1.819/46.20 | 2.03/51.6 | 2.189/55.60 |

ISOMETRIC VIEW  
(12 CKT - SHOWN)



LAYOUT FOR  
4-24 CIRCUIT

LAYOUT FOR  
2 CIRCUIT

RECOMMENDED PCB HOLE LAYOUT COMPONENT SIDE  
(SCALE 3:1)

- NOTES:
- MATERIALS:  
HOUSING - LIQUID CRYSTAL POLYMER (LCP), COLOR: BLACK  
TERMINAL - BRASS ALLOY C26000
  - TERMINAL PLATING:  
TIN= .000100/0.00254 MIN MATTE TIN OVER  
.000050/0.00127 MIN NICKEL OVERALL  
GOLD= .000030/0.00076 MIN. SELECT GOLD OVER  
.000100/0.00254 MIN. SELECT MATTE TIN OVER  
.000050/0.00127 MIN NICKEL OVERALL
  - PRODUCT SPECIFICATION: PS-46207-001
  - PACKAGING SPECIFICATION: TRAY PACK PER PK-46207-001  
TAPE AND REEL PACK PER PK-46207-002
  - PART CONFORMS TO CLASS "B" REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

|  |                                      |   |  |                          |                    |  |                        |                                    |  |                              |
|--|--------------------------------------|---|--|--------------------------|--------------------|--|------------------------|------------------------------------|--|------------------------------|
| ADDED GOLD PN<br>EC NO: UCP2010-1779<br>DRWN: JAGUILAR 2010/01/26<br>CHKD: BELL 2010/02/22<br>APPR: FSMTH 2010/02/22<br>D4 | QUALITY SYMBOLS<br>∇=0<br>∇=0<br>∇=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)   |  | DIMENSION STYLE<br>IN/MM |                    | SCALE<br>4:1   | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION             |  |                              |
|  |                                      | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± .005<br>2 PLACES ± 0.13 ± .010<br>1 PLACE ± 0.25 ± ---<br>ANGULAR ±1/2°              |  | DRAWN BY<br>DROSCA       | DATE<br>08/07/2006 | TITLE<br>MINI-FIT RTC HI-TEMP VERTICAL HEADER IN LCP, W/PCB PEGS |                        | MOLEX INCORPORATED<br>SD-46207-001 |  |                              |
|  |                                      | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |  | CHECKED BY<br>BWIRKUS    | DATE<br>08/07/2006 | MATERIAL NO.<br>SEE TABLE  |                        |                                    |  |                              |
|  |                                      | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  | APPROVED BY<br>BWIRKUS   |                    |  |                        | DATE<br>08/07/2006                 |  | DOCUMENT NO.<br>SD-46207-001 |

| GOLD PLATING |                             |                             |            |               |  |
|--------------|-----------------------------|-----------------------------|------------|---------------|--|
| CIRCUIT SIZE | TAPE & REEL MATERIAL NUMBER | TRAY PACKED MATERIAL NUMBER | DIM. D     | PCB THICKNESS |  |
| 02           | 462077002                   | * 462075002*                | 0.144/3.66 | 0.062         |  |
| 04           | 462077004                   | * 462075004                 | 0.144/3.66 | 0.062         |  |
| 06           | 462077006                   | * 462075006                 | 0.144/3.66 | 0.062         |  |
| 08           | 462077008                   | * 462075008                 | 0.144/3.66 | 0.062         |  |
| 10           | 462077010                   | * 462075010                 | 0.144/3.66 | 0.062         |  |
| 12           | 462077012                   | * 462075012                 | 0.144/3.66 | 0.062         |  |
| 14           | 462077014                   | * 462075014*                | 0.144/3.66 | 0.062         |  |
| 16           | 462077016                   | * 462075016*                | 0.144/3.66 | 0.062         |  |
| 18           | 462077018                   | * 462075018*                | 0.144/3.66 | 0.062         |  |
| 20           | 462077020                   | * 462075020*                | 0.144/3.66 | 0.062         |  |
| 22           | 462077022                   | * 462075022*                | 0.144/3.66 | 0.062         |  |
| 24           | 462077024                   | * 462075024                 | 0.144/3.66 | 0.062         |  |
| 02           |                             |                             |            |               |  |
| 04           |                             |                             |            |               |  |
| 06           |                             |                             |            |               |  |
| 08           |                             |                             |            |               |  |
| 10           |                             |                             |            |               |  |
| 12           |                             |                             |            |               |  |
| 14           |                             |                             |            |               |  |
| 16           |                             |                             |            |               |  |
| 18           |                             |                             |            |               |  |
| 20           |                             |                             |            |               |  |
| 22           |                             |                             |            |               |  |
| 24           |                             |                             |            |               |  |

| TIN PLATING  |                             |                             |            |               |  |
|--------------|-----------------------------|-----------------------------|------------|---------------|--|
| CIRCUIT SIZE | TAPE & REEL MATERIAL NUMBER | TRAY PACKED MATERIAL NUMBER | DIM. D     | PCB THICKNESS |  |
| 02           | 462073002                   | * 462070002*                | 0.144/3.66 | 0.062         |  |
| 04           | 462073004                   | * 462070004                 | 0.144/3.66 | 0.062         |  |
| 06           | 462073006                   | * 462070006                 | 0.144/3.66 | 0.062         |  |
| 08           | 462073008                   | * 462070008                 | 0.144/3.66 | 0.062         |  |
| 10           | 462073010                   | * 462070010                 | 0.144/3.66 | 0.062         |  |
| 12           | 462073012                   | * 462070012                 | 0.144/3.66 | 0.062         |  |
| 14           | 462073014                   | * 462070014*                | 0.144/3.66 | 0.062         |  |
| 16           | 462073016                   | * 462070016*                | 0.144/3.66 | 0.062         |  |
| 18           | 462073018                   | * 462070018*                | 0.144/3.66 | 0.062         |  |
| 20           | 462073020                   | * 462070020*                | 0.144/3.66 | 0.062         |  |
| 22           | 462073022                   | * 462070022*                | 0.144/3.66 | 0.062         |  |
| 24           | 462073024                   | * 462070024                 | 0.144/3.66 | 0.062         |  |
| 02           |                             | 462070102*                  | 0.176/4.46 | 0.093         |  |
| 04           |                             | 462070104                   | 0.176/4.46 | 0.093         |  |
| 06           |                             | 462070106                   | 0.176/4.46 | 0.093         |  |
| 08           |                             | 462070108                   | 0.176/4.46 | 0.093         |  |
| 10           |                             | 462070110                   | 0.176/4.46 | 0.093         |  |
| 12           |                             | 462070112                   | 0.176/4.46 | 0.093         |  |
| 14           |                             | 462070114*                  | 0.176/4.46 | 0.093         |  |
| 16           |                             | 462070116*                  | 0.176/4.46 | 0.093         |  |
| 18           |                             | 462070118*                  | 0.176/4.46 | 0.093         |  |
| 20           |                             | 462070120*                  | 0.176/4.46 | 0.093         |  |
| 22           |                             | 462070122*                  | 0.176/4.46 | 0.093         |  |
| 24           |                             | 462070124                   | 0.176/4.46 | 0.093         |  |
| 02           |                             | 462070202*                  | 0.207/5.26 | 0.125         |  |
| 04           |                             | 462070204                   | 0.207/5.26 | 0.125         |  |
| 06           |                             | 462070206                   | 0.207/5.26 | 0.125         |  |
| 08           |                             | 462070208                   | 0.207/5.26 | 0.125         |  |
| 10           |                             | 462070210                   | 0.207/5.26 | 0.125         |  |
| 12           |                             | 462070212                   | 0.207/5.26 | 0.125         |  |
| 14           |                             | 462070214*                  | 0.207/5.26 | 0.125         |  |
| 16           |                             | 462070216*                  | 0.207/5.26 | 0.125         |  |
| 18           |                             | 462070218*                  | 0.207/5.26 | 0.125         |  |
| 20           |                             | 462070220*                  | 0.207/5.26 | 0.125         |  |
| 22           |                             | 462070222*                  | 0.207/5.26 | 0.125         |  |
| 24           |                             | 462070224                   | 0.207/5.26 | 0.125         |  |

\* DESIGNATES PART NOT RELEASED  
CONTACT FACTORY FOR AVAILABILITY.

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CONTACT FACTORY FOR AVAILABILITY.

|   |                 |  |   |   |                               |                        |
|---|-----------------|--|---|---|-------------------------------|------------------------|
| <b>SEE SHEET 1</b><br>EC NO: UCP2010-1779<br>DRWN: JAGUILAR 2010/01/26<br>CHKD: JBELL 2010/02/22<br>APPR: FSMITH 2010/02/22 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED)                | DIMENSION STYLE<br><b>IN/MM</b>   | SCALE<br><b>1:1</b>   | DESIGN UNITS<br><b>METRIC</b> | THIRD ANGLE PROJECTION |
|   | ▽=0             | 4 PLACES ± --- ± ---                                 | DRAWN BY DATE<br>DROSCA 08/07/2006  | <b>MINI-FIT RTC HI-TEMP VERTICAL HEADER IN LCP, W/PCB PEGS</b><br><b>MOLEX INCORPORATED</b> |                               |                        |
|   | ▽=0             | 3 PLACES ± --- ± .005                                | CHECKED BY DATE<br>BWIRKUS 08/07/2006   |   |                               |                        |
|   | ▽=0             | 2 PLACES ± 0.13 ± .010                               | APPROVED BY DATE<br>BWIRKUS 08/07/2006  | MATERIAL NO. <b>SEE CHART</b> DOCUMENT NO. <b>SD-46207-001</b> SHEET NO. <b>2 OF 2</b>      |                               |                        |
| REV: D4   | ANGULAR ± 1/2°  | 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 |   |                               |                        |