

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0444721650](#)
Status: **Active**
Description: 4.20mm (.165") Pitch Mini-Fit HCS™ Header, Dual Row, Vertical, with Snap-in Plastic Peg PCB Lock, 16 Circuits, PA Polyamide Nylon 6/6 94V-2, without Drain Holes

Documents:

| | |
|---|--|
| 3D Model | Product Specification PS-44476-001 (PDF) |
| Drawing (PDF) | RoHS Certificate of Compliance (PDF) |
| Packaging Specification (PDF) | |

Agency Certification

| | |
|-----|---------|
| CSA | LR19980 |
| UL | E29179 |

General

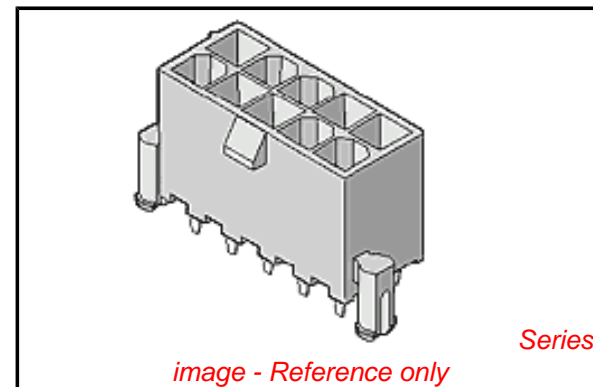
| | |
|----------------|------------------------|
| Product Family | PCB Headers |
| Series | 44472 |
| Application | Wire-to-Board |
| Comments | Square Pin Solder Type |
| Product Name | Mini-Fit HCS™ |

Physical

| | |
|--------------------------------|------------------------------|
| Breakaway | No |
| Circuits (Loaded) | 16 |
| Circuits (maximum) | 16 |
| Color - Resin | Natural |
| Durability (mating cycles max) | 30 |
| Flammability | 94V-2 |
| Glow-Wire Compliant | No |
| Material - Metal | High Performance Alloy (HPA) |
| Material - Plating Mating | Tin |
| Material - Plating Termination | Tin |
| Material - Resin | Nylon |
| Number of Rows | 2 |
| Orientation | Vertical |
| PCB Locator | Yes |
| PCB Retention | Yes |
| PCB Thickness Recommended (in) | 0.070 In |
| PCB Thickness Recommended (mm) | 1.80 mm |
| Packaging Type | Tray |
| Pitch - Mating Interface (in) | 0.165 In |
| Pitch - Mating Interface (mm) | 4.20 mm |
| Plating min: Mating (µin) | 100 |
| Plating min: Mating (µm) | 2.50 |
| Plating min: Termination (µin) | 100 |
| Plating min: Termination (µm) | 2.50 |
| Polarized to PCB | Yes |
| Shrouded | Partial |
| 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 | 11A |
| Voltage - Maximum | 600V |



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

[44472Series](#)

Mates With

[5557d](#)

Solder Process Data

| | |
|--|------------------------|
| Duration at Max. Process Temperature (seconds) | 5 |
| Lead-free Process Capability | Wave Capable (TH only) |
| Max. Cycles at Max. Process Temperature | 1 |
| Process Temperature max. C | 240 |

Material Info

| | |
|-----------------|--------------|
| Old Part Number | A-44472-1650 |
|-----------------|--------------|

Reference - Drawing Numbers

| | |
|-----------------------|-----------------------------|
| Product Specification | PS-44476-001, RPS-44476-001 |
| Sales Drawing | SDA-44472-**** |

This document was generated on 04/21/2010

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| CKT SIZE | DIM A | DIM B |
|----------|------------------|------------------|
| 4 | .709 (18.00) | .496 (12.60) |
| 5 | .874 (22.20) | .661 (16.80) |
| 6 | 1.039 (26.40) | .827 (21.00) |
| 7 | 1.205 (30.60) | .992 (25.20) |
| 8 | 1.370 (34.80) | 1.157 (29.40) |
| 9 | 1.535 (39.00) | 1.323 (33.60) |
| 10 | 1.701 (43.20) | 1.488 (37.80) |
| 11 | 1.866 (47.40) | 1.654 (42.00) |
| 12 | 2.031 (51.60) | 1.819 (46.20) |



- NOTES:
- MATERIALS:
HOUSING:
1=NYLON 6/6, UL94 V-2, COLOR: NATURAL
2=NYLON 6/6, UL94 V-0, COLOR: NATURAL
3=NYLON 6/6, UL94 V-2, COLOR: BLACK
TERMINALS:
COPPER ALLOY
 - TERMINAL PLATING:
1=.000100/(0.00254) MIN. BRIGHT TIN OVER
.000050/(0.00127) MIN. NICKEL
2=.000030/(0.00076) MIN. SELECT GOLD AND
.000100/(0.00254) MIN. SELECT MATTE TIN
OVER .000050/(0.00127) MIN. NICKEL OVERALL
3=.000100/(0.00254) MIN. MATTE TIN OVER
.000050/(0.00127) MIN. NICKEL
*THE PRIMARY SHIPPING CARTON WILL BE LABELED
"ELV AND RoHS COMPLIANT"; CARTONS WITHOUT THIS
LABEL MAY CONTAIN PRODUCT WITH TIN-LEAD PLATING.
 - PRODUCT SPECIFICATION: PS-44476-001
 - PACKAGING: SEE CHARTS
 - PART MATES WITH MINI-FIT JR. RECEPTACLE NO. 5557.
 - PART IS NOT DESIGNED FOR CURRENT SHARING.
 - PARTS ARE NOT TO BE MATED OR UN-MATED WHILE
CIRCUITS ARE LIVE.
 - 44472-2470 ONLY FOR WIDER LOCKING RAMP.
 - PARTS PRODUCED AFTER JULY 1, 2004 WILL HAVE "HCS"
MARKING INSTEAD OF BLACK STRIPE.
 - SEE CHART FOR PARTS WITH PEGS REMOVED.
 - PART CONFORMS TO CLASS 'B' REQUIREMENTS OF
COSMETIC SPECIFICATION PS-45499-002.



| | |
|-----|-----|
| 10 | L |
| 9 | L |
| 8 | L |
| 7 | L |
| 6 | L |
| 5 | L |
| 4 | L |
| 3 | L |
| 2 | L |
| 1 | L |
| SHT | REV |

LEGEND:
 44472 - ** **
 CIRCUIT SIZE
 (04-12 FOR SINGLE ROW)
 (02-24 FOR DUAL ROW)
 ASSEMBLY VERSION
 (01 THRU 49 FOR SINGLE ROW)
 (50 THRU 99 FOR DUAL ROW)

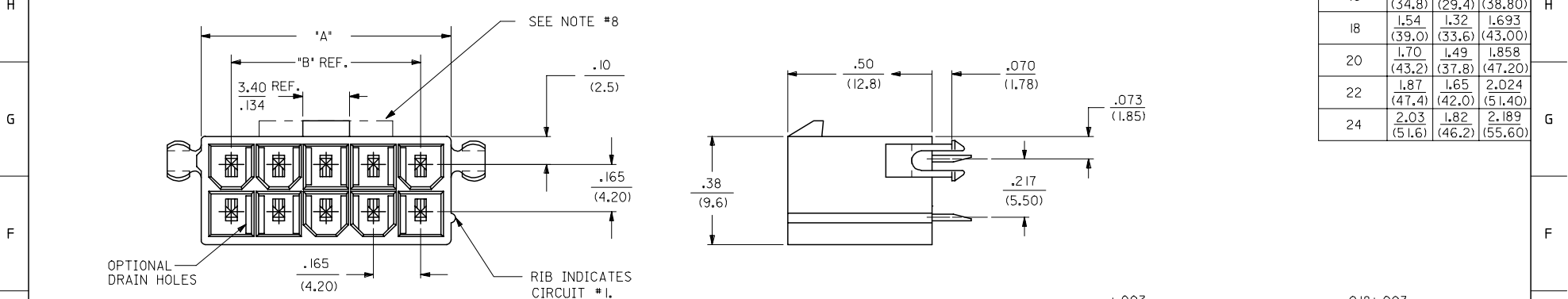
SEE SHT. 2 FOR DUAL ROW
 * THE CHART FOR SINGLE ROW PRODUCT IS ON PAGE 7

| | | | | | | | |
|--|-----------------------------|--|--------------------------|--------------------------------|--|--------------------------------|------------------------|
| STANDARDIZE NOTES EC NO: UCP2008-0153 2007/09/26 DRW:LLSCHMIDT 2007/09/26 CHKD:ADERR 2007/09/26 APPR:FSM TH 2007/09/26 | 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 ± --- ± .015 2 PLACES ± 0.38 ± .020 1 PLACE ± 0.50 ± --- ANGULAR ±1/2° | DRAWN BY GEP | DATE 1994/07/25 | TITLE MINI-FIT VERT HDR ASSY W & W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW | MATERIAL NO. SDA-44472-**** | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | SEE CHARTS | | MATERIAL NO. SDA-44472-**** | | SHEET NO. 1 OF 10 | |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | |

13 12 11 10 9 8 7 6 5 4 3 2 1



| CIRCUIT SIZE | DIM. 'A' | DIM. 'B' | DIM. 'C' |
|--------------|----------------|----------------|------------------|
| 2 | .21 (5.4) | — | .370 (9.40) |
| 4 | .38 (9.6) | .17 (4.2) | .535 (13.60) |
| 6 | .54 (13.8) | .33 (8.4) | .701 (17.80) |
| 8 | .71 (18.0) | .50 (12.6) | .866 (22.00) |
| 10 | .87 (22.2) | .66 (16.8) | 1.031 (26.20) |
| 12 | 1.04 (26.4) | .83 (21.0) | 1.197 (30.40) |
| 14 | 1.20 (30.6) | .99 (25.2) | 1.362 (34.60) |
| 16 | 1.37 (34.8) | 1.16 (29.4) | 1.528 (38.80) |
| 18 | 1.54 (39.0) | 1.32 (33.6) | 1.693 (43.00) |
| 20 | 1.70 (43.2) | 1.49 (37.8) | 1.858 (47.20) |
| 22 | 1.87 (47.4) | 1.65 (42.0) | 2.024 (51.40) |
| 24 | 2.03 (51.6) | 1.82 (46.2) | 2.189 (55.60) |



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

SEE SHT. I FOR SINGLE ROW

| | | | | | | | | | |
|---|----------------------------|---|------------|---------------------------------|------------|---|------------------------|------------------------|--|
| STANDARDIZE NOTES EC NO: UCP2008-0153 DRAWN: SCHMIDT 2007/09/26 CHKD: ADERR 2007/09/26 APPR: FSM TH 2007/09/26 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE IN/MM | | SCALE 4:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | |
| | | mm | INCH | DRAWN BY | DATE | TITLE | | | |
| | | 4 PLACES ± --- ± --- | ± .015 | GEP | 1994/07/26 | MINI-FIT VERT HDR ASSY W & W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW | | | |
| | | 3 PLACES ± --- ± .020 | ± .020 | RJF | 1994/07/26 | MOLEX INCORPORATED | | | |
| 2 PLACES ± 0.38 ± .020 | ± --- | APPROVED BY | DATE | MATERIAL NO. | | DOCUMENT NO. | SHEET NO. | | |
| 1 PLACE ± 0.50 ± --- | ANGULAR ±1/2° | RJF | 1994/07/26 | SEE CHARTS | | SDA-44472-**** | 2 OF 10 | | |
| 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 | | | | | | | |

12 11 10 9 8 7 6 5 4 3 2 1

| | | | | | | | | | | | | | | |
|---|-----------------------------|----|------|-----------------------------|---|------|--------------------------|---|------|--------------------------|---|------|---|--|
| | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | |
| J | PLATING: I (SEE NOTE 2) | | | PLATING: I (SEE NOTE 2) | | | PLATING: I (SEE NOTE 2) | | | PLATING: I (SEE NOTE 2) | | | | |
| | DRAINS: WITHOUT DRAIN HOLES | | | DRAINS: WITHOUT DRAIN HOLES | | | DRAINS: WITH DRAIN HOLES | | | DRAINS: WITH DRAIN HOLES | | | J | |
| | PEGS: WITH PEGS | | | PEGS: WITH PEGS | | | PEGS: WITH PEGS | | | PEGS: WITH PEGS | | | | |
| | MAT'L: 94V-2 [NATURAL] | | | MAT'L: 94V-0 [NATURAL] | | | MAT'L: 94V-2 [NATURAL] | | | MAT'L: 94V-0 [NATURAL] | | | | |
| | PACKAGING: PK-44472-001 | | | PACKAGING: PK-44472-001 | | | PACKAGING: PK-44472-001 | | | PACKAGING: PK-44472-001 | | | | |
| I | ITEM NO. | | CKTS | ITEM NO. | | CKTS | ITEM NO. | | CKTS | ITEM NO. | | CKTS | | |
| | 44472-0250 | | 2 | 44472-0251 | | 2 | 44472-0252 | | 2 | 44472-0253 | | 2 | | |
| | 44472-0450 | | 4 | 44472-0451 | | 4 | 44472-0452 | | 4 | 44472-0453 | | 4 | | |
| | 44472-0650 | | 6 | 44472-0651 | | 6 | 44472-0652 | | 6 | 44472-0653 | | 6 | | |
| | 44472-0850 | | 8 | 44472-0851 | | 8 | 44472-0852 | | 8 | 44472-0853 | | 8 | | |
| | 44472-1050 | | 10 | 44472-1051 | | 10 | 44472-1052 | | 10 | 44472-1053 | | 10 | | |
| | 44472-1250 | | 12 | 44472-1251 | | 12 | 44472-1252 | | 12 | 44472-1253 | | 12 | | |
| | 44472-1450 | | 14 | 44472-1451 | | 14 | 44472-1452 | | 14 | 44472-1453 | | 14 | | |
| | 44472-1650 | | 16 | 44472-1651 | | 16 | 44472-1652 | | 16 | 44472-1653 | | 16 | | |
| H | 44472-1850 | | 18 | 44472-1851 | | 18 | 44472-1852 | | 18 | 44472-1853 | | 18 | H | |
| | 44472-2050 | | 20 | 44472-2051 | | 20 | 44472-2052 | | 20 | 44472-2053 | | 20 | | |
| | 44472-2250 | | 22 | 44472-2251 | | 22 | 44472-2252 | | 22 | 44472-2253 | | 22 | | |
| | 44472-2450 | | 24 | 44472-2451 | | 24 | 44472-2452 | | 24 | 44472-2453 | | 24 | | |

| | | | | | | | | | | | | | |
|---|-----------------------------|-------------|------|-----------------------------|--|------|--|--|--|--|--|--|--|
| G | PLATING: I (SEE NOTE 2) | | | PLATING: I (SEE NOTE 2) | | | | | | | | | |
| | DRAINS: WITHOUT DRAIN HOLES | | | DRAINS: WITHOUT DRAIN HOLES | | | | | | | | | |
| | PEGS: WITHOUT PEGS | | | PEGS: WITHOUT PEGS | | | | | | | | | |
| | MAT'L: 94V-2 [NATURAL] | | | MAT'L: 94V-0 [NATURAL] | | | | | | | | | |
| | PACKAGING: PK-44472-001 | | | PACKAGING: PK-44472-001 | | | | | | | | | |
| F | ITEM NO. | HOUSING NO. | CKTS | ITEM NO. | | CKTS | | | | | | | |
| | 44472-0254 | | 2 | 44472-0255 | | 2 | | | | | | | |
| | 44472-0454 | | 4 | 44472-0455 | | 4 | | | | | | | |
| | 44472-0654 | | 6 | 44472-0655 | | 6 | | | | | | | |
| | 44472-0854 | | 8 | 44472-0855 | | 8 | | | | | | | |
| | 44472-1054 | | 10 | 44472-1055 | | 10 | | | | | | | |
| | 44472-1254 | | 12 | 44472-1255 | | 12 | | | | | | | |
| E | 44472-1454 | | 14 | 44472-1455 | | 14 | | | | | | | |
| | 44472-1654 | | 16 | 44472-1655 | | 16 | | | | | | | |
| | 44472-1854 | | 18 | 44472-1855 | | 18 | | | | | | | |
| | 44472-2054 | | 20 | 44472-2055 | | 20 | | | | | | | |
| | 44472-2254 | | 22 | 44472-2255 | | 22 | | | | | | | |
| | 44472-2454 | | 24 | 44472-2455 | | 24 | | | | | | | |

* ITEMS PRECEDED BY AN "X" ARE NOT AVAILABLE.

| PLATING NOTE EC NO: UCP2008-0153 DRW: NLSCHMI DT 2007/09/26 CHKD: ADERR 2007/09/26 APPR: FSM TH 2007/09/26 REVISION DESCRIPTION | QUALITY SYMBOLS = 0 = 0 | GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± .005</td> <td>± .0002</td> </tr> <tr> <td>3 PLACES</td> <td>± .008</td> <td>± .0003</td> </tr> <tr> <td>2 PLACES</td> <td>± .012</td> <td>± .0004</td> </tr> <tr> <td>1 PLACE</td> <td>± .015</td> <td>± .0005</td> </tr> </table> | | mm | INCH | 4 PLACES | ± .005 | ± .0002 | 3 PLACES | ± .008 | ± .0003 | 2 PLACES | ± .012 | ± .0004 | 1 PLACE | ± .015 | ± .0005 | DIMENSION STYLE IN/MM DRAWN BY DATE LEM 1999/02/22 CHECKED BY DATE MAB 1999/02/22 APPROVED BY DATE RRE 1999/02/22 | SCALE --- DESIGN UNITS METRIC THIRD ANGLE PROJECTION | TITLE MINI-FIT VERT HDR ASSY W & W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW |
|---|--------------------------------|--|---|----|------|----------|--------|---------|----------|--------|---------|----------|--------|---------|---------|--------|---------|--|--|--|
| | | mm | INCH | | | | | | | | | | | | | | | | | |
| | 4 PLACES | ± .005 | ± .0002 | | | | | | | | | | | | | | | | | |
| | 3 PLACES | ± .008 | ± .0003 | | | | | | | | | | | | | | | | | |
| 2 PLACES | ± .012 | ± .0004 | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ± .015 | ± .0005 | | | | | | | | | | | | | | | | | | |
| MATERIAL NO. SEE CHART | DOCUMENT NO. SDA-44472-**** | SHEET NO. 3 OF 10 | | | | | | | | | | | | | | | | | | |
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| MOLEX MOLEX INCORPORATED | | | | | | | | | | | | | | | | | | | | |