

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

**Part Number:** [0444722056](#)  
**Status:** **Active**  
**Description:** 4.20mm (.165") Pitch Mini-Fit HCS™ Header, Dual Row, Vertical, without Snap-in Plastic Peg PCB Lock, 20 Circuits, PA Polyamide Nylon 6/6 94V-2, with Drain Holes

**Documents:**

<a href="#">3D Model</a>	<a href="#">Product Specification PS-44476-001 (PDF)</a>
<a href="#">Drawing (PDF)</a>	<a href="#">RoHS Certificate of Compliance (PDF)</a>
<a href="#">Packaging Specification (PDF)</a>	

**Agency Certification**

CSA	LR19980
UL	E29179

**General**

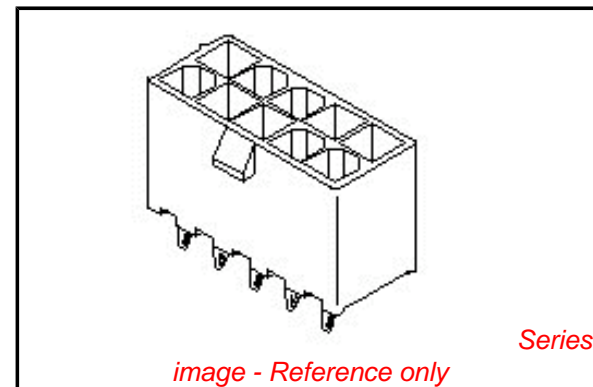
Product Family	PCB Headers
Series	<a href="#">44472</a>
Application	Wire-to-Board
Comments	Square Pin Solder Type
Product Name	Mini-Fit HCS™

**Physical**

Breakaway	No
Circuits (Loaded)	20
Circuits (maximum)	20
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	None
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**  
 Not Reviewed  
**Halogen-Free Status**  
 Not Reviewed

**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**

[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	260

### **Material Info**

### **Reference - Drawing Numbers**

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

This document was generated on 03/24/2010

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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)

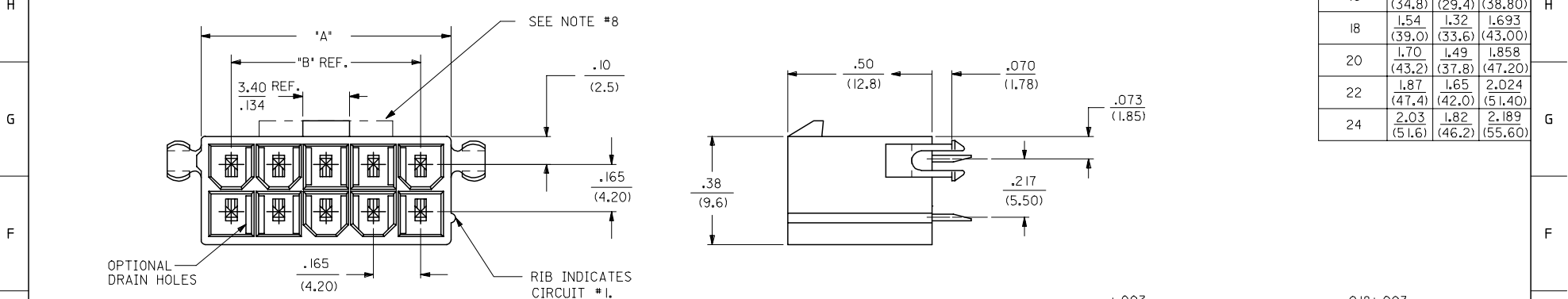
SEE SHT. 2 FOR DUAL ROW  
 \* THE CHART FOR SINGLE ROW PRODUCT IS ON PAGE 7

STANDARDIZE NOTES EC NO: UCP2008-0153 DRWNL: SCHMIDT 2007/09/26 CHKD: ADERR 2007/09/26 APPR: FSM TH 2007/09/26	QUALITY SYMBOLS =0 =0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		mm	INCH	IN/MM	DATE	4:1	METRIC		
		4 PLACES ± --- ± ---		DRAWN BY	DATE	molex		MINI-FIT VERT HDR ASSY W & W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW	
		3 PLACES ± --- ± .015		GEP	1994/07/25				
		2 PLACES ± 0.38 ± .020		CHECKED BY	DATE				
		1 PLACE ± 0.50 ± ---		RJF	1994/07/25				
		ANGULAR ±1/2°		APPROVED BY	DATE				
				RJF	1994/07/25			MOLEX INCORPORATED	
				MATERIAL NO.				DOCUMENT NO.	SHEET NO.
								SDA-44472-****	1 OF 10
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHARTS		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

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

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

J	PLATING:	1 (SEE NOTE 2)			PLATING:	1 (SEE NOTE 2)			PLATING:	1 (SEE NOTE 2)			PIN NO.:		
	DRAINS:	WITH DRAIN HOLES			DRAINS:	WITH DRAIN HOLES			DRAINS:	WITH DRAIN HOLES			DRAINS:		
	PEGS:	WITHOUT PEGS			PEGS:	WITHOUT PEGS			PEGS:	WITH PEGS			PEGS:		
	MAT'L:	94V-2 [NATURAL]			MAT'L:	94V-0 [NATURAL]			MAT'L:	94V-2 [BLACK]			MAT'L:		
	PACKAGING:	PK-44472-001			PACKAGING:	PK-44472-001			PACKAGING:	PK-44472-001			PACKAGING:		
I	ITEM NO.		CKTS	ITEM NO.		CKTS	ITEM NO.		CKTS	ITEM NO.		CKTS	ITEM NO.		CKTS
	44472-0256		2	44472-0257		2	44472-0258		2	-		-	-		-
	44472-0456		4	44472-0457		4	44472-0458		4	-		-	-		-
	44472-0656		6	44472-0657		6	44472-0658		6	-		-	-		-
	44472-0856		8	44472-0857		8	44472-0858		8	-		-	-		-
	44472-1056		10	44472-1057		10	44472-1058		10	-		-	-		-
	44472-1256		12	44472-1257		12	44472-1258		12	-		-	-		-
	44472-1456		14	44472-1457		14	44472-1458		14	-		-	-		-
	44472-1656		16	44472-1657		16	44472-1658		16	-		-	-		-
	44472-1856		18	44472-1857		18	44472-1858		18	-		-	-		-
44472-2056		20	44472-2057		20	44472-2058		20	-		-	-		-	
44472-2256		22	44472-2257		22	44472-2258		22	-		-	-		-	
44472-2456		24	44472-2457		24	44472-2458		24	-		-	-		-	

G	PIN NO.:		PIN NO.:			
	PLATING:		PLATING:			
	DRAINS:		DRAINS:			
	PEGS:		PEGS:			
	MAT'L:		MAT'L:			
PACKAGING:		PACKAGING:				
F	ITEM NO.		CKTS	ITEM NO.		CKTS
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-

A	B	C	D	E	F	G	H	I	J	<p>PLATING REFERENCE          EC NO: UCP2008-0153          DRAWN:LSCHMI DT 2007/09/26          CHKD:ADERR 2007/09/26          APPR:FSM TH 2007/09/26</p>	<p>QUALITY SYMBOLS   = 0   = 0</p>	<p>GENERAL TOLERANCES (UNLESS SPECIFIED)</p> <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± .005</td> <td>± .0008</td> </tr> <tr> <td>3 PLACES</td> <td>± .003</td> <td>± .0005</td> </tr> <tr> <td>2 PLACES</td> <td>± .002</td> <td>± .0003</td> </tr> <tr> <td>1 PLACE</td> <td>± .001</td> <td>± .0001</td> </tr> <tr> <td colspan="3">ANGULAR ± .005°</td> </tr> </table>		mm	INCH	4 PLACES	± .005	± .0008	3 PLACES	± .003	± .0005	2 PLACES	± .002	± .0003	1 PLACE	± .001	± .0001	ANGULAR ± .005°			<p>DIMENSION STYLE IN/MM</p> <p>DRAWN BY LEM</p> <p>DATE 1999/02/22</p> <p>CHECKED BY MAB</p> <p>DATE 1999/02/22</p> <p>APPROVED BY RRE</p> <p>DATE 1999/02/22</p>	<p>SCALE ---</p> <p>DESIGN UNITS METRIC</p> <p>THIRD ANGLE PROJECTION</p>	<p>TITLE MINI-FIT VERT HDR ASSY W &amp; W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW</p>	<p>MATERIAL NO. SEE CHART</p>	<p>DOCUMENT NO. SDA-44472-****</p>	<p>SHEET NO. 4 OF 10</p>
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