

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

**Part Number:** [0444720857](#)  
**Status:** **Active**  
**Description:** 4.20mm (.165") Pitch Mini-Fit HCS™ Header, Dual Row, Vertical, without Snap-in Plastic Peg PCB Lock, 8 Circuits, PA Polyamide Nylon 6/6 94V-0, with 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**

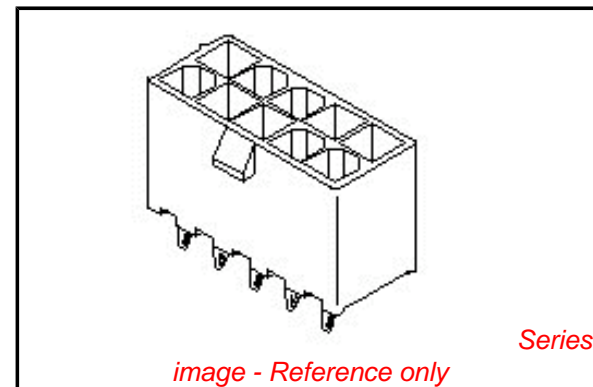
Product Family PCB Headers  
 Series [44472](#)  
 Application Wire-to-Board  
 Comments Square Pin|Solder Type  
 Product Name Mini-Fit HCS™

**Physical**

Breakaway No  
 Circuits (Loaded) 8  
 Circuits (maximum) 8  
 Color - Resin Natural (White)  
 Durability (mating cycles max) 30  
 Flammability 94V-0  
 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**

Old Part Number	A-44472-0857
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**Reference - Drawing Numbers**

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

This document was generated on 04/09/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**

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.



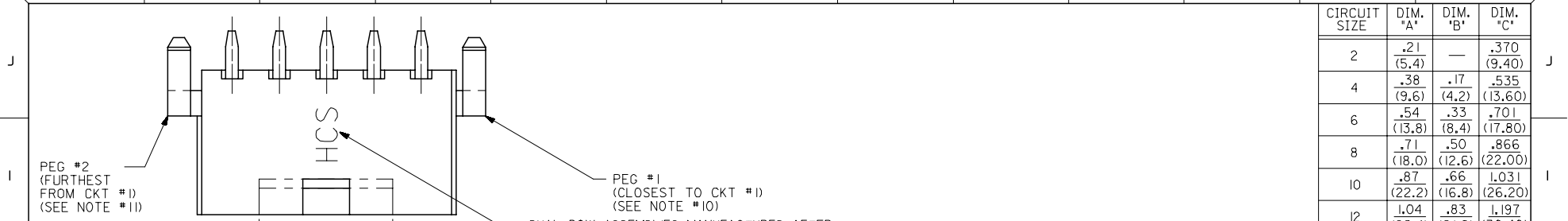
10	L
9	L
8	L
7	L
6	L
5	L
4	L
3	L
2	L
1	L
SHT	REV

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)

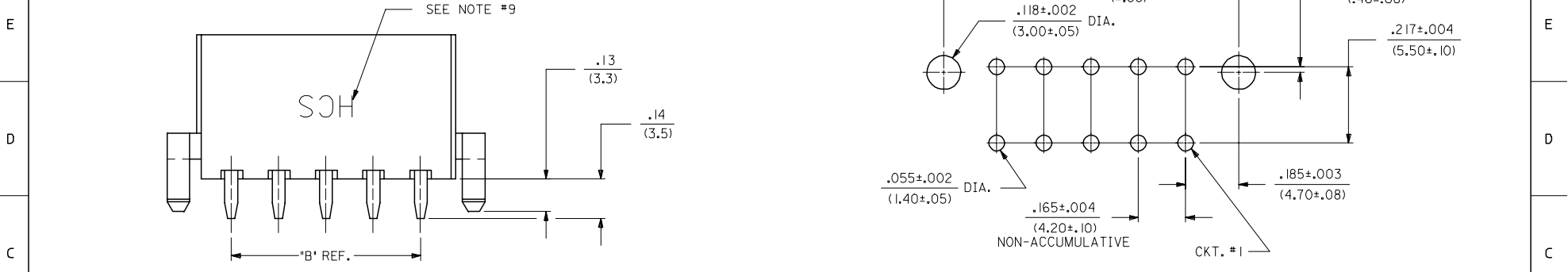
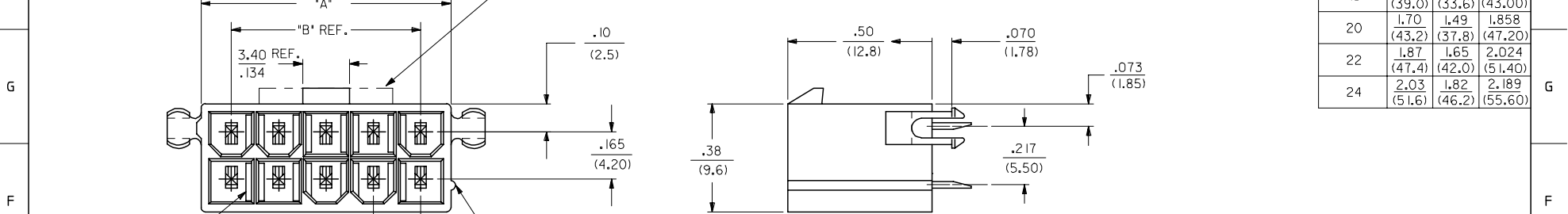
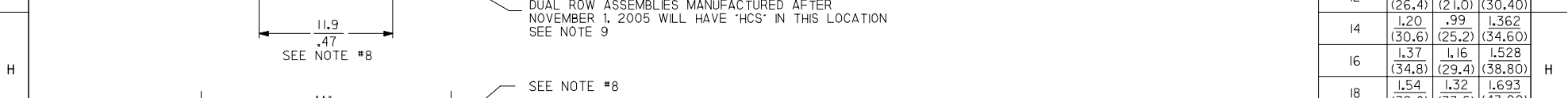
SEE SHT. 2 FOR DUAL ROW  
 \* THE CHART FOR SINGLE ROW PRODUCT IS ON PAGE 7

STANDARDIZE NOTES EC NO: UCP2008-0153 2007/09/26 DRWNL:LSCHH1DT 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

<b>STANDARDIZE NOTES</b> EC NO: UCP2008-0153 DRAWN: SCHMIDT 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	<b>MINI-FIT VERT HDR ASSY W &amp; W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW</b>			
		4 PLACES ± ---	± ---	GEP	1994/07/26				
		3 PLACES ± ---	± .015	CHECKED BY	DATE	<b>MOLEX INCORPORATED</b>			
2 PLACES ± 0.38	± .020	RJF	1994/07/26						
1 PLACE ± 0.50	± ---	APPROVED BY	DATE	MATERIAL NO.		DOCUMENT NO.		SHEET NO.	
ANGULAR ±1/2°		RJF	1994/07/26	<b>SEE CHARTS</b>		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					

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
	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	-	-		
H	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
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A	B	C	D	E	F	G	H	I	J	<p>PLATING REFERENCE          EC NO: UCP2008-0153          DRAWNLSCHMIDT 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 ± .000°</td> </tr> </table>		mm	INCH	4 PLACES	± .005	± .0008	3 PLACES	± .003	± .0005	2 PLACES	± .002	± .0003	1 PLACE	± .001	± .0001	ANGULAR ± .000°			<p>DIMENSION STYLE IN/MM</p> <p>DRAWN BY LEM DATE 1999/02/22</p> <p>CHECKED BY MAB DATE 1999/02/22</p> <p>APPROVED BY RRE DATE 1999/02/22</p> <p>MATERIAL NO.</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>DOCUMENT NO.          SDA-44472-****</p>	<p>SHEET NO.          4 OF 10</p>
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