

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

**Part Number:** [0444720852](#)  
**Status:** **Active**  
**Description:** 4.20mm (.165") Pitch Mini-Fit HCS™ Header, Dual Row, Vertical, with Snap-in Plastic Peg PCB Lock, 8 Circuits, PA Polyamide Nylon 6/6 94V-2, 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**

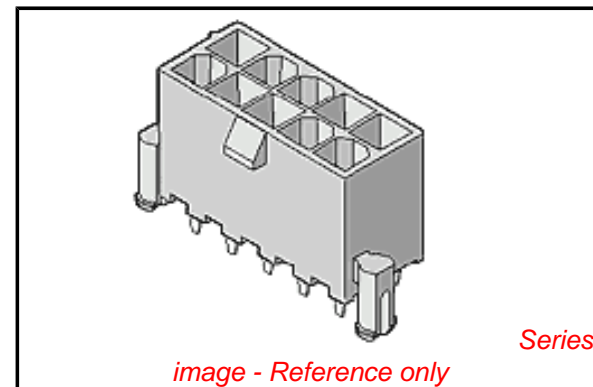
Product Family PCB Headers  
 Series [44472](#)  
 Application Wire-to-Board  
 Comments Square Pin|Solder Type  
 Product Name Mini-Fit HCS™

**Physical**

Breakaway No  
 Circuits (Loaded) 8  
 Circuits (maximum) 8  
 Color - Resin Natural  
 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](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	240

**Material Info****Reference - Drawing Numbers**

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

This document was generated on 03/19/2010

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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
  - 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.



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

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

LEGEND:

44472 - \*\* \*\*

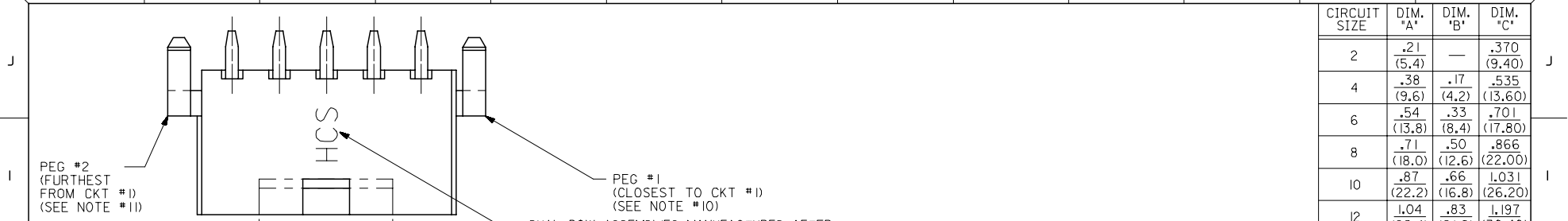
CIRCUIT SIZE  
 (04-12 FOR SINGLE ROW)  
 (02-24 FOR DUAL ROW)

ASSEMBLY VERSION  
 (01 THRU 49 FOR SINGLE ROW)  
 (50 THRU 99 FOR DUAL ROW)

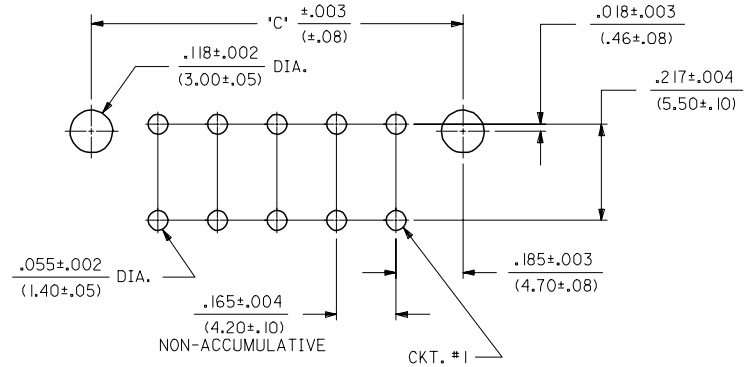
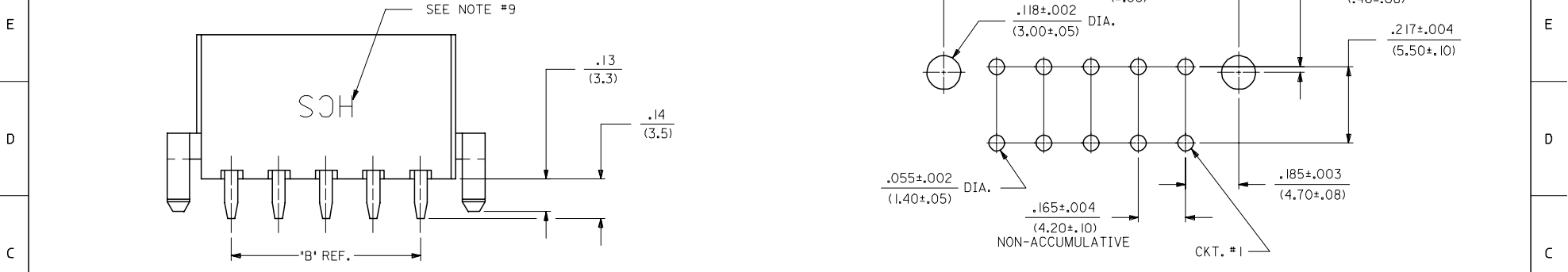
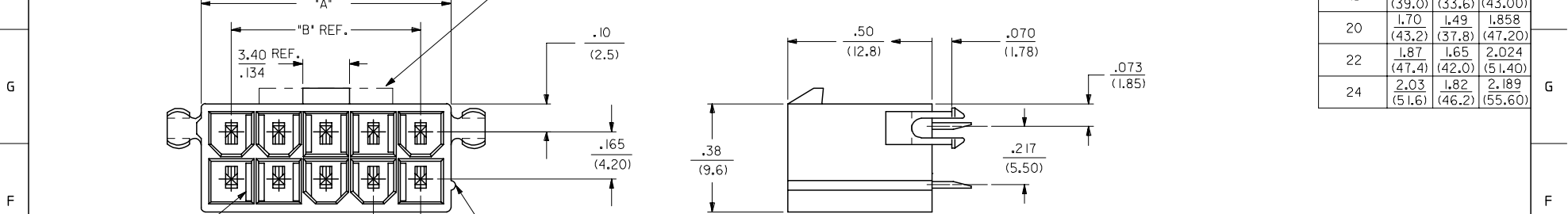
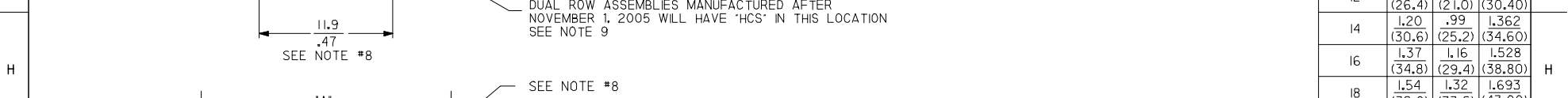
SEE SHT. 2 FOR DUAL ROW  
 \* THE CHART FOR SINGLE ROW PRODUCT IS ON PAGE 7

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

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		<b>SCALE</b> 4:1	<b>DESIGN UNITS</b> METRIC	<b>THIRD ANGLE PROJECTION</b>	
		mm	INCH	DRAWN BY	DATE	<b>TITLE</b> MINI-FIT VERT HDR ASSY W & W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW			
		4 PLACES ± --- ± ---	± .015	GEP	1994/07/26	<b>MOLEX INCORPORATED</b>			
		3 PLACES ± --- ± .020	± .020	RJF	1994/07/26	<b>SDA-44472-****</b>			
2 PLACES ± 0.38 ± .020	± ---	APPROVED BY	DATE	<b>SEE CHARTS</b>		<b>DOCUMENT NO.</b> SDA-44472-****	<b>SHEET NO.</b> 2 OF 10		
1 PLACE ± 0.50 ± ---	ANGULAR ±1/2°	RJF	1994/07/26	<b>DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</b>		<b>THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</b>			

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: 1 (SEE NOTE 2)				PLATING: 1 (SEE NOTE 2)				PLATING: 1 (SEE NOTE 2)				PLATING: 1 (SEE NOTE 2)			
	DRAINS: WITHOUT DRAIN HOLES				DRAINS: WITHOUT DRAIN HOLES				DRAINS: WITH DRAIN HOLES				DRAINS: WITH DRAIN HOLES			
	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
	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: 1 (SEE NOTE 2)				PLATING: 1 (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.

<b>PLATING NOTE</b> EC NO: UCP2008-0153 DRW:NLSCHMI DT 2007/09/26 CHKD:ADERR 2007/09/26 APPR:FSM TH 2007/09/26 REVISION DESCRIPTION	<b>QUALITY SYMBOLS</b> = 0 = 0	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b> <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± ---	± ---	1 PLACE	± ---	± ---	<b>DIMENSION STYLE</b> IN/MM DRAWN BY DATE LEM 1999/02/22 CHECKED BY DATE MAB 1999/02/22 APPROVED BY DATE RRE 1999/02/22	<b>SCALE</b> --- <b>DESIGN UNITS</b> METRIC <b>THIRD ANGLE PROJECTION</b>	<b>TITLE</b> MINI-FIT VERT HDR ASSY W & W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW
		mm	INCH																	
	4 PLACES	± ---	± ---																	
	3 PLACES	± ---	± ---																	
2 PLACES	± ---	± ---																		
1 PLACE	± ---	± ---																		
<b>MATERIAL NO.</b> SEE CHART		<b>DOCUMENT NO.</b> SDA-44472-****		<b>SHEET NO.</b> 3 OF 10																
<b>DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</b>		<b>SIZE</b> THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		<b>MOLEX</b> MOLEX INCORPORATED																