

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

**Part Number:** [0444720252](#)  
**Status:** **Active**  
**Description:** 4.20mm (.165") Pitch Mini-Fit HCS™ Header, Dual Row, Vertical, with Snap-in Plastic Peg PCB Lock, 2 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**

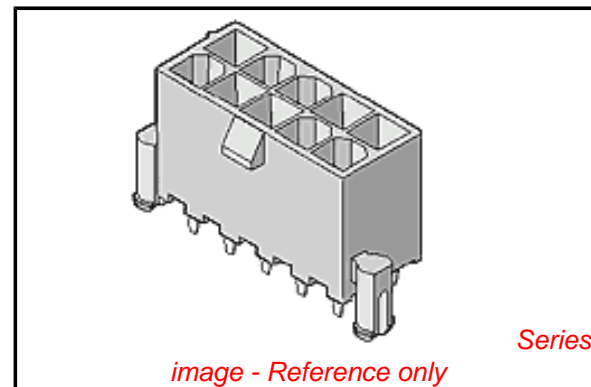
Product Family PCB Headers  
 Series [44472](#)  
 Application Wire-to-Board  
 Comments Square Pin|Solder Type  
 Product Name Mini-Fit HCS™

**Physical**

Breakaway No  
 Circuits (Loaded) 2  
 Circuits (maximum) 2  
 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) 101.6  
 Plating min: Mating (µm) 2.54  
 Plating min: Termination (µin) 101.6  
 Plating min: Termination (µm) 2.54  
 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 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.



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

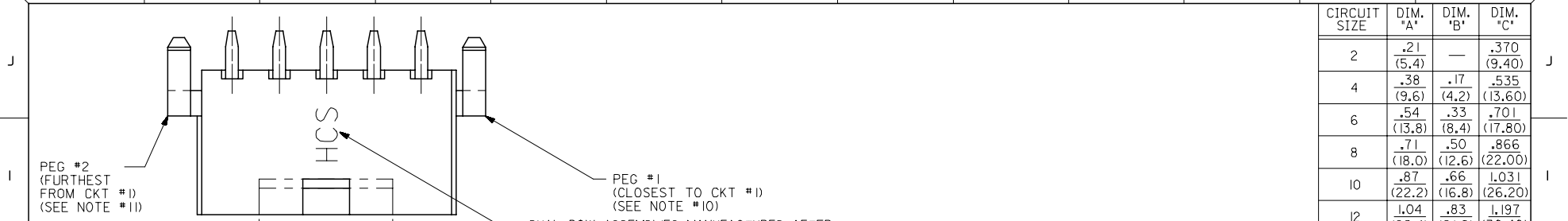
10	L
9	L
8	L
7	L
6	L
5	L
4	L
3	L
2	L
1	L
SHT	REV

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)

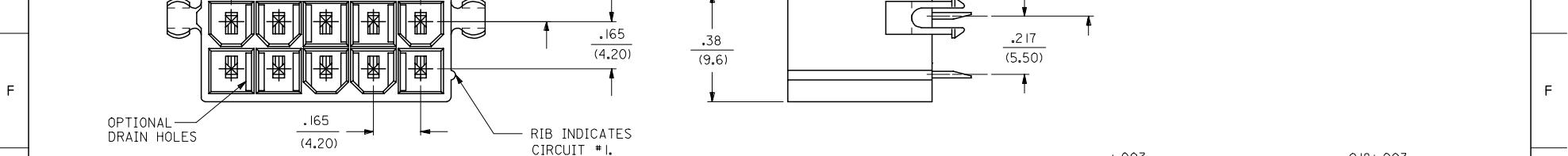
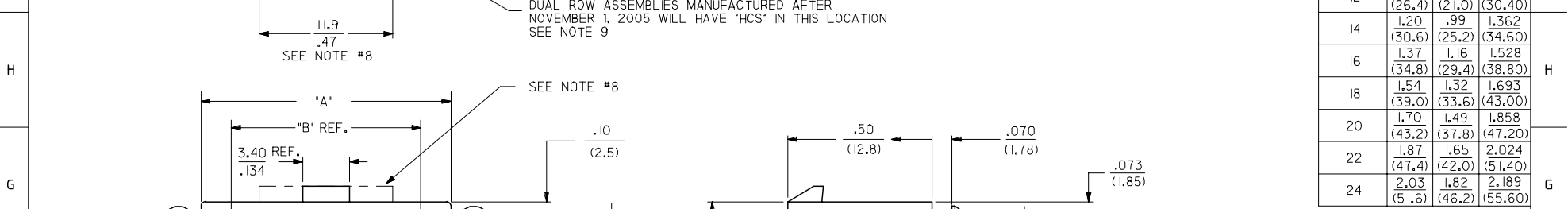
SEE SHT. 2 FOR DUAL ROW  
\* THE CHART FOR SINGLE ROW PRODUCT IS ON PAGE 7

STANDARDIZE NOTES EC NO: UCP2008-0153 2007/09/26 DRW:LLSCHMIDT 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	4:1	METRIC		
		4 PLACES	± .015	DRAWN BY	GEP	DATE	1994/07/25	<b>MINI-FIT VERT HDR ASSY W &amp; W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW</b> <b>MOLEX INCORPORATED</b> MATERIAL NO. SDA-44472-**** DOCUMENT NO. SHEET NO. 1 OF 10	
		3 PLACES	± .020	CHECKED BY	RJF	DATE	1994/07/25		
		2 PLACES	± 0.38	APPROVED BY	RJF	DATE	1994/07/25		
		1 PLACE	± 0.50	MATERIAL NO.		DOCUMENT NO.			
		ANGULAR ±1/2°		DRAWN BY		DATE			
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 CHKD: ADERR APPR: FSM TH	<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	THIS DRAFTING 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: 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					
	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.			ITEM NO.			ITEM NO.			ITEM NO.			ITEM NO.		
	44472-0250			44472-0251			44472-0252			44472-0253			44472-0254		
	44472-0450			44472-0451			44472-0452			44472-0453			44472-0454		
	44472-0650			44472-0651			44472-0652			44472-0653			44472-0654		
	44472-0850			44472-0851			44472-0852			44472-0853			44472-0854		
	44472-1050			44472-1051			44472-1052			44472-1053			44472-1054		
	44472-1250			44472-1251			44472-1252			44472-1253			44472-1254		
	44472-1450			44472-1451			44472-1452			44472-1453			44472-1454		
	44472-1650			44472-1651			44472-1652			44472-1653			44472-1654		
H	44472-1850			44472-1851			44472-1852			44472-1853			44472-1854		
	44472-2050			44472-2051			44472-2052			44472-2053			44472-2054		
	44472-2250			44472-2251			44472-2252			44472-2253			44472-2254		
	44472-2450			44472-2451			44472-2452			44472-2453			44472-2454		

G	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: WITHOUT DRAIN HOLES			DRAINS: WITHOUT DRAIN HOLES					
	PEGS: WITHOUT PEGS			PEGS: WITHOUT PEGS			PEGS: WITHOUT PEGS			PEGS: WITHOUT 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					
F	ITEM NO.			ITEM NO.			ITEM NO.			ITEM NO.			ITEM NO.		
	44472-0254			44472-0255			44472-0256			44472-0257			44472-0258		
	44472-0454			44472-0455			44472-0456			44472-0457			44472-0458		
	44472-0654			44472-0655			44472-0656			44472-0657			44472-0658		
	44472-0854			44472-0855			44472-0856			44472-0857			44472-0858		
	44472-1054			44472-1055			44472-1056			44472-1057			44472-1058		
	44472-1254			44472-1255			44472-1256			44472-1257			44472-1258		
E	44472-1454			44472-1455			44472-1456			44472-1457			44472-1458		
	44472-1654			44472-1655			44472-1656			44472-1657			44472-1658		
	44472-1854			44472-1855			44472-1856			44472-1857			44472-1858		
	44472-2054			44472-2055			44472-2056			44472-2057			44472-2058		
	44472-2254			44472-2255			44472-2256			44472-2257			44472-2258		
	44472-2454			44472-2455			44472-2456			44472-2457			44472-2458		

\* 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>± .005</td> <td>± .0004</td> </tr> <tr> <td>3 PLACES</td> <td>± .008</td> <td>± .0005</td> </tr> <tr> <td>2 PLACES</td> <td>± .012</td> <td>± .0007</td> </tr> <tr> <td>1 PLACE</td> <td>± .015</td> <td>± .0009</td> </tr> </table>		mm	INCH	4 PLACES	± .005	± .0004	3 PLACES	± .008	± .0005	2 PLACES	± .012	± .0007	1 PLACE	± .015	± .0009	<b>DIMENSION STYLE</b> IN/MM DRAWN BY: LEM DATE: 1999/02/22 CHECKED BY: MAB DATE: 1999/02/22 APPROVED BY: RRE DATE: 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	± .005	± .0004																	
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1 PLACE	± .015	± .0009																		
<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																