

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

**Part Number:** [0444721251](#)  
**Status:** **Active**  
**Description:** 4.20mm (.165") Pitch Mini-Fit HCS™ Header, Dual Row, Vertical, with Snap-in Plastic Peg PCB Lock, 12 Circuits, PA Polyamide Nylon 6/6 94V-0, without 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**

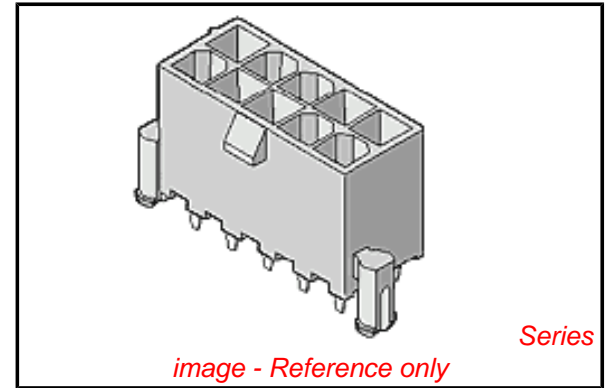
Product Family	PCB Headers
Series	<a href="#">44472</a>
Application	Wire-to-Board
Comments	Square Pin Solder Type
Product Name	Mini-Fit HCS™

**Physical**

Breakaway	No
Circuits (Loaded)	12
Circuits (maximum)	12
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	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**  
 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	240

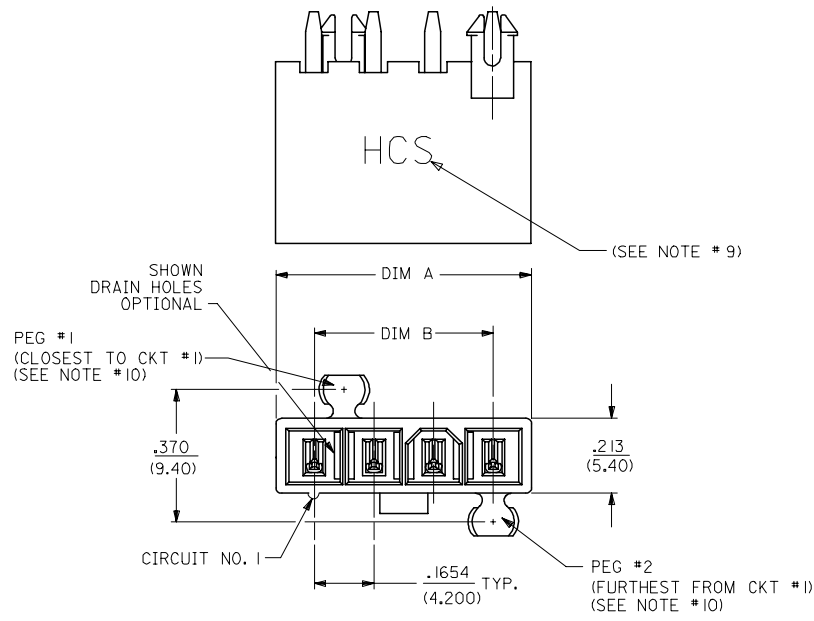
**Material Info****Reference - Drawing Numbers**

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

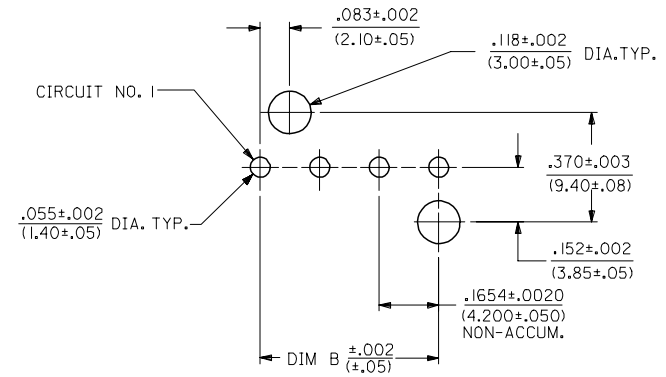
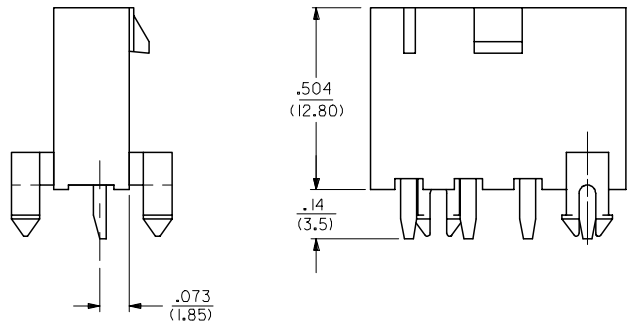
This document was generated on 04/09/2010

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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.



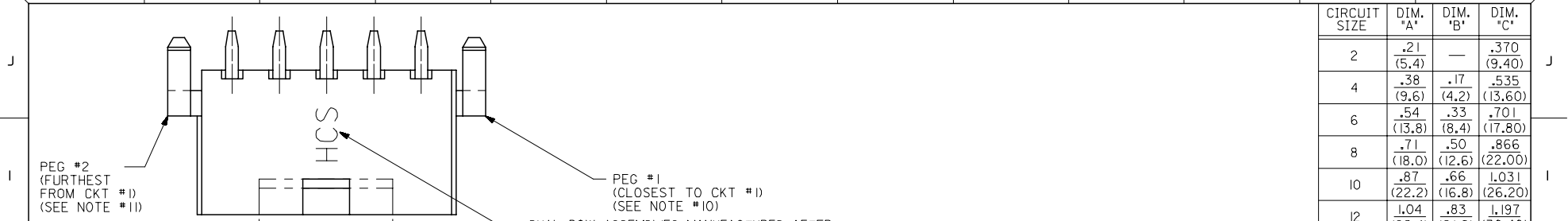
10	L
9	L
8	L
7	L
6	L
5	L
4	L
3	L
2	L
1	L
SHT	REV

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)

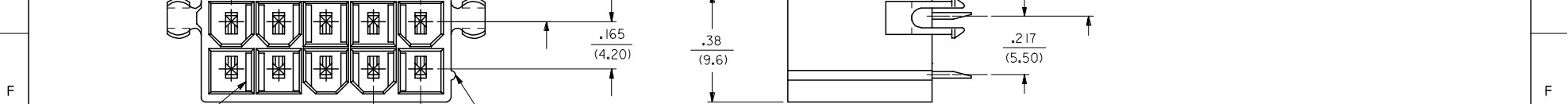
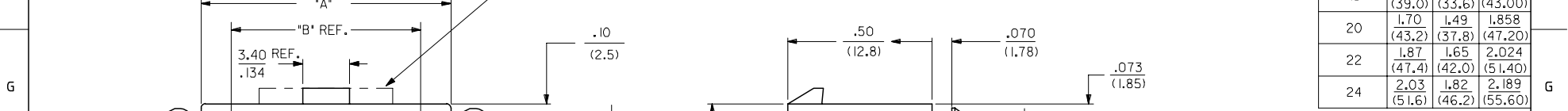
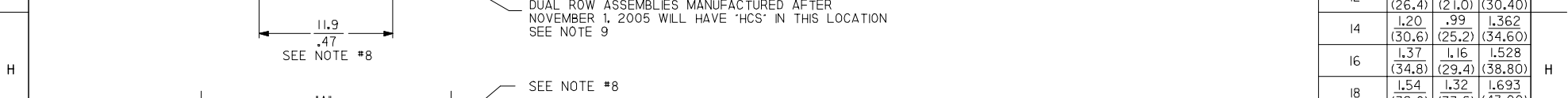
SEE SHT. 2 FOR DUAL ROW  
\* THE CHART FOR SINGLE ROW PRODUCT IS ON PAGE 7

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	SDA-44472-****	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	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHARTS		DOCUMENT NO.		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 2007/09/26 DRW:NLSCHMI DT 2007/09/26 CHKD:ADERR 2007/09/26 APPR:FSM TH 2007/09/26 REVISIONS DESCRIPTION	<b>QUALITY SYMBOLS</b> 	<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>± .15</td> <td>± .005</td> </tr> <tr> <td>3 PLACES</td> <td>± .10</td> <td>± .004</td> </tr> <tr> <td>2 PLACES</td> <td>± .08</td> <td>± .003</td> </tr> <tr> <td>1 PLACE</td> <td>± .05</td> <td>± .002</td> </tr> </table>		mm	INCH	4 PLACES	± .15	± .005	3 PLACES	± .10	± .004	2 PLACES	± .08	± .003	1 PLACE	± .05	± .002	<b>DIMENSION STYLE</b> IN/MM	<b>SCALE</b> 4:1	<b>DESIGN UNITS</b> METRIC	THIRD ANGLE PROJECTION
		mm	INCH																		
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<b>DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</b>	<b>SEE CHARTS</b>	<b>MATERIAL NO.</b> SDA-44472-****	<b>DOCUMENT NO.</b> SDA-44472-****	<b>SHEET NO.</b> 2 OF 10	<b>MINI-FIT VERT HDR ASSY W &amp; W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW</b> <b>MOLEX INCORPORATED</b>																
<b>THIS DRAFTING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</b>																					

	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		
	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.

<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
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		<b>ANGULAR</b> ±1/2°	<b>MATERIAL NO.</b> SEE CHART	<b>DOCUMENT NO.</b> SDA-44472-****	<b>SHEET NO.</b> 3 OF 10															
		<b>DRAFT WHERE APPLICABLE</b> MUST REMAIN WITHIN DIMENSIONS	<b>SIZE</b> C	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																