

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

**Part Number:** **0444721854**  
**Status:** **Active**  
**Description:** 4.20mm (.165") Pitch Mini-Fit HCS™ Header, Dual Row, Vertical, without Snap-in Plastic Peg PCB Lock, 18 Circuits, PA Polyamide Nylon 6/6 94V-2, without Drain Holes

**Documents:**

[3D Model](#)  
[Drawing \(PDF\)](#)  
[Packaging Specification \(PDF\)](#)  
[Product Specification PS-44476-001 \(PDF\)](#)  
[RoHS Certificate of Compliance \(PDF\)](#)

**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**

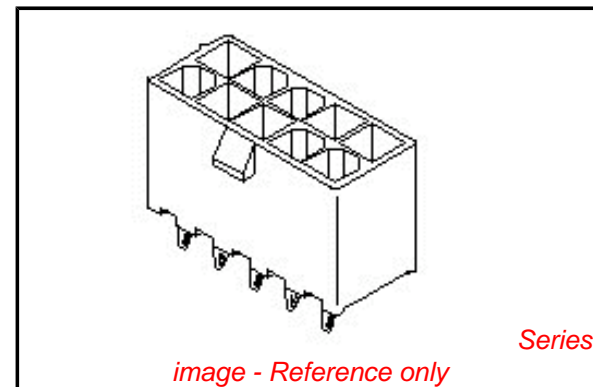
Breakaway No  
 Circuits (Loaded) 18  
 Circuits (maximum) 18  
 Durability (mating cycles max) 30  
 Flammability 94V-2  
 Glow-Wire Compliant No  
 Material - Metal High Performance Alloy (HPA)  
 Material - Plating Mating Tin  
 Material - Plating Termination Tin  
 Number of Rows 2  
 Orientation 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) 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

**Solder Process Data**

Duration at Max. Process Temperature (seconds) 5



**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](#)

Lead-free Process Capability  
Max. Cycles at Max. Process Temperature  
Process Temperature max. C

Wave Capable (TH only)  
1  
260

**Material Info**

Old Part Number

A-44472-1854

**Reference - Drawing Numbers**

Product Specification  
Sales Drawing

PS-44476-001, RPS-44476-001  
SDA-44472-\*\*\*\*

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**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.



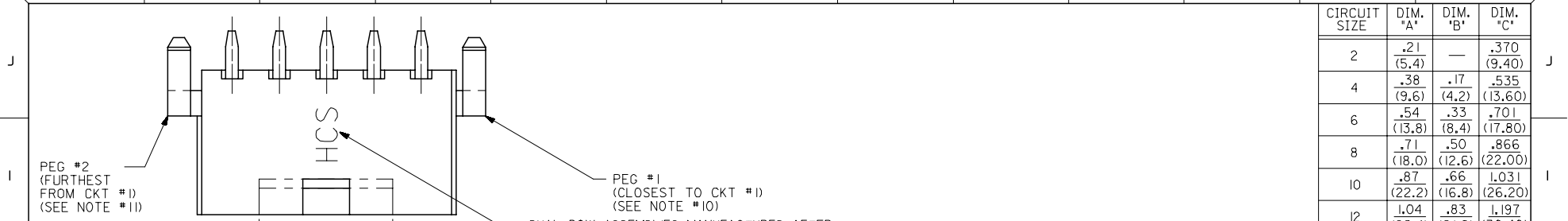
10	L
9	L
8	L
7	L
6	L
5	L
4	L
3	L
2	L
1	L
	SHT REV

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)

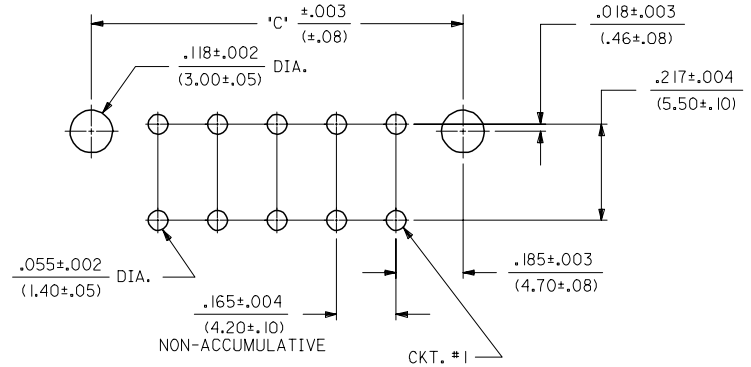
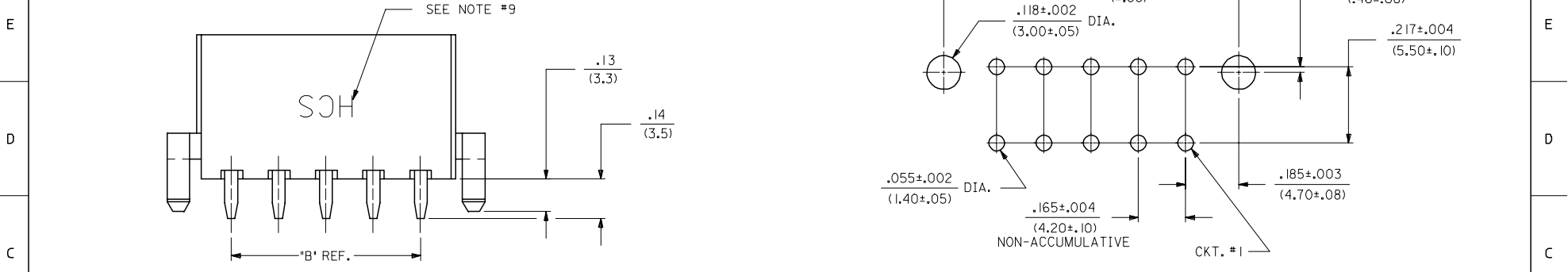
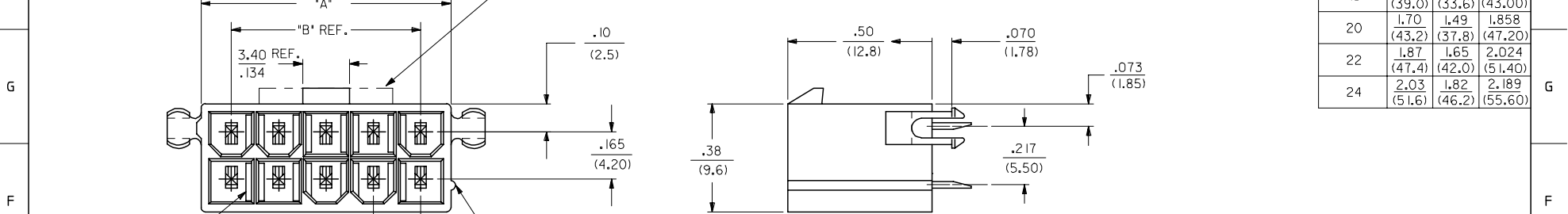
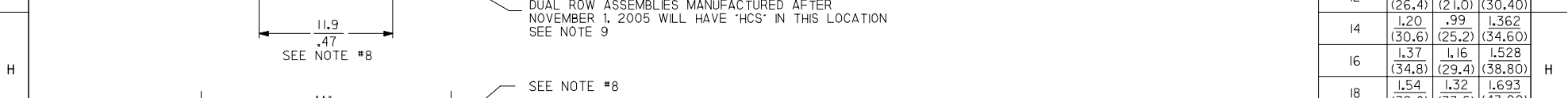
SEE SHT. 2 FOR DUAL ROW  
 \* THE CHART FOR SINGLE ROW PRODUCT IS ON PAGE 7

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

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: 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.			ITEM NO.			ITEM NO.			ITEM NO.				
	44472-0250			44472-0251			44472-0252			44472-0253				
	44472-0450			44472-0451			44472-0452			44472-0453				
	44472-0650			44472-0651			44472-0652			44472-0653				
	44472-0850			44472-0851			44472-0852			44472-0853				
	44472-1050			44472-1051			44472-1052			44472-1053				
	44472-1250			44472-1251			44472-1252			44472-1253				
	44472-1450			44472-1451			44472-1452			44472-1453				
	44472-1650			44472-1651			44472-1652			44472-1653				
H	44472-1850			44472-1851			44472-1852			44472-1853				
	44472-2050			44472-2051			44472-2052			44472-2053				
	44472-2250			44472-2251			44472-2252			44472-2253				
	44472-2450			44472-2451			44472-2452			44472-2453				

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.			ITEM NO.			
	44472-0254			44472-0255			
	44472-0454			44472-0455			
	44472-0654			44472-0655			
	44472-0854			44472-0855			
	44472-1054			44472-1055			
	44472-1254			44472-1255			
E	44472-1454			44472-1455			
	44472-1654			44472-1655			
	44472-1854			44472-1855			
	44472-2054			44472-2055			
	44472-2254			44472-2255			
	44472-2454			44472-2455			

\* ITEMS PRECEDED BY AN "X" ARE NOT AVAILABLE.

<b>PLATING NOTE</b> EC NO: UCP2008-0153 DRAWN:LSCHMI DT 2007/09/26 CHKD:ADERR 2007/09/26 APPR:FSM TH 2007/09/26 REVISION DESCRIPTION	QUALITY SYMBOLS = 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	SCALE --- DESIGN UNITS METRIC THIRD ANGLE PROJECTION
		mm	INCH																
	4 PLACES	± ---	± ---																
	3 PLACES	± ---	± ---																
2 PLACES	± ---	± ---																	
1 PLACE	± ---	± ---																	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE CHART SIZE C THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	TITLE MINI-FIT VERT HDR ASSY W & W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW MOLEX MOLEX INCORPORATED DOCUMENT NO. SDA-44472-**** SHEET NO. 3 OF 10																