

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0444722451](#)
Status: **Active**
Description: 4.20mm (.165") Pitch Mini-Fit HCS™ Header, Dual Row, Vertical, with Snap-in Plastic Peg PCB Lock, 24 Circuits, PA Polyamide Nylon 6/6 94V-0, without Drain Holes

Documents:

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

Agency Certification

CSA	LR19980
UL	E29179

General

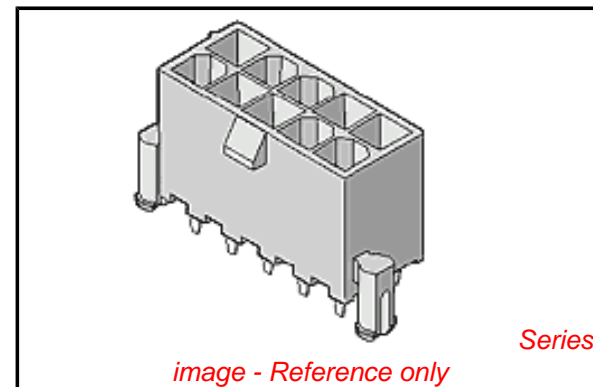
Product Family	PCB Headers
Series	44472
Application	Wire-to-Board
Comments	Square Pin Solder Type
Product Name	Mini-Fit HCS™

Physical

Breakaway	No
Circuits (Loaded)	24
Circuits (maximum)	24
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
 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

Old Part Number	A-44472-2451
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Reference - Drawing Numbers

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

This document was generated on 03/24/2010

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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

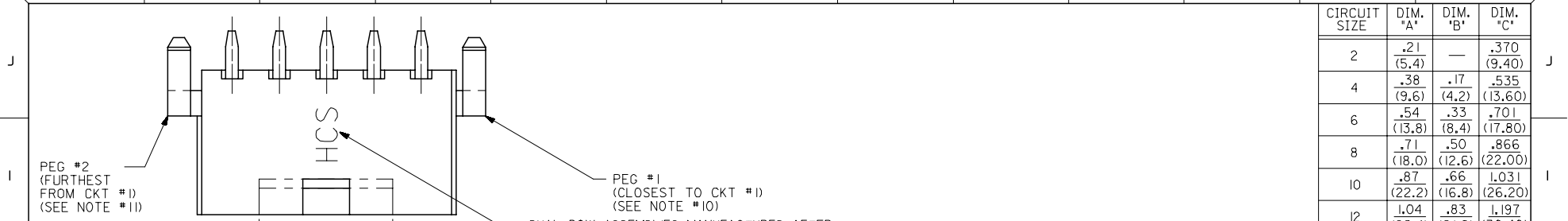
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9	L
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4	L
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LEGEND:
44472 - ** **
CIRCUIT SIZE
(04-12 FOR SINGLE ROW)
(02-24 FOR DUAL ROW)
ASSEMBLY VERSION
(01 THRU 49 FOR SINGLE ROW)
(50 THRU 99 FOR DUAL ROW)

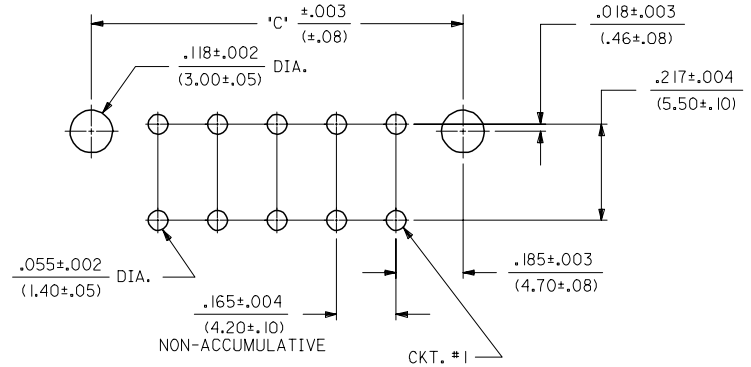
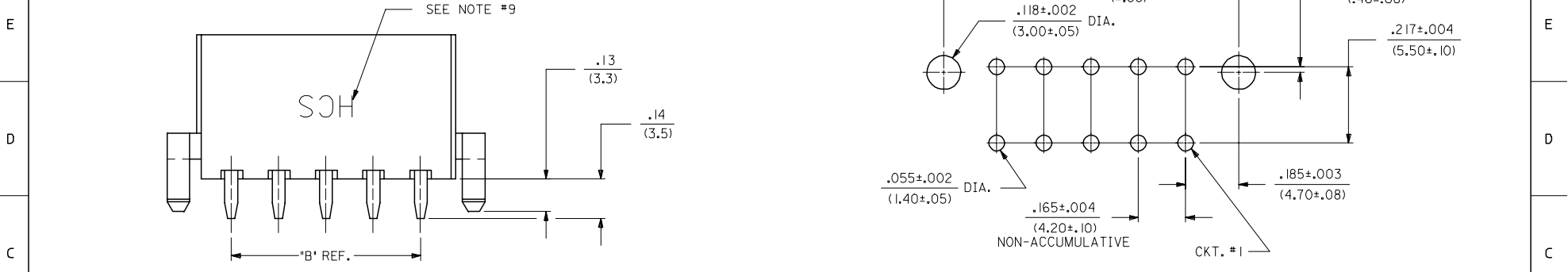
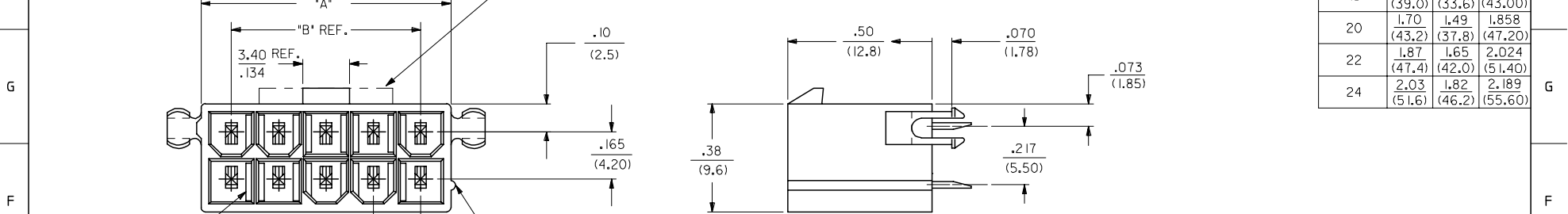
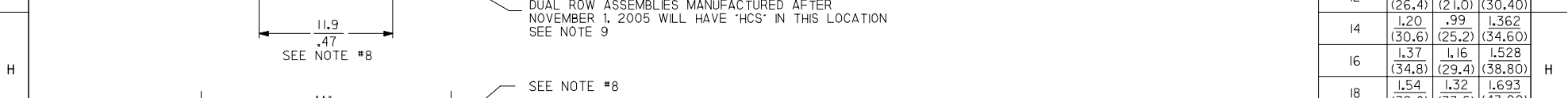
SEE SHT. 2 FOR DUAL ROW
* THE CHART FOR SINGLE ROW PRODUCT IS ON PAGE 7

STANDARDIZE NOTES EC NO: UCP2008-0153 2007/09/26 DRW:NLSCHMIDT 2007/09/26 CHKD:ADERR 2007/09/26 APPR:FSM TH 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	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHARTS		MATERIAL NO. DOCUMENT 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

STANDARDIZE NOTES EC NO: UCP2008-0153 DRAWN: SCHMIDT 2007/09/26 CHKD: ADERR 2007/09/26 APPR: FSM TH 2007/09/26	QUALITY SYMBOLS 	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE 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			

	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.			CKTS			CKTS			CKTS			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		
	44472-1850			18	44472-1851		18	44472-1852		18	44472-1853		18		
H	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			
	44472-1454		14	44472-1455	14			
	44472-1654		16	44472-1655	16			
	44472-1854		18	44472-1855	18			
E	44472-2054		20	44472-2055	20			
	44472-2254		22	44472-2255	22			
	44472-2454		24	44472-2455	24			
D								

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

PLATING NOTE EC NO: UCP2008-0153 DRW: NLSCHMI DT 2007/09/26 CHKD: ADERR 2007/09/26 APPR: FSM TH 2007/09/26 REVISION DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION															
	$\nabla=0$ $\nabla=0$	<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	± ---	± ---	IN/MM	---	METRIC	
		mm	INCH																		
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		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE CHART	MOLEX INCORPORATED	MATERIAL NO. SDA-44472-****	SHEET NO. 3 OF 10															