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Part Number: [0444722050](#)
Status: **Active**
Description: 4.20mm (.165") Pitch Mini-Fit HCS™ Header, Dual Row, Vertical, with Snap-in Plastic Peg PCB Lock, 20 Circuits, PA Polyamide Nylon 6/6 94V-2, without 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

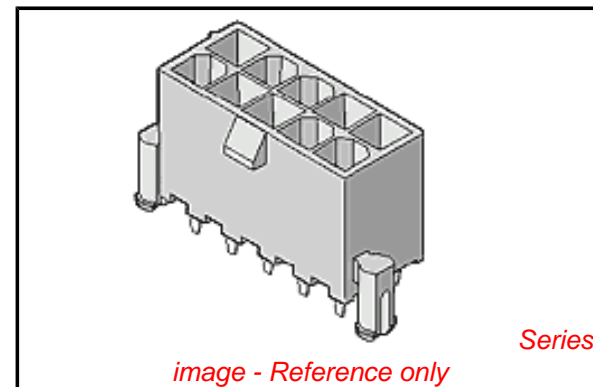
Product Family	PCB Headers
Series	44472
Application	Wire-to-Board
Comments	Square Pin Solder Type
Product Name	Mini-Fit HCS™

Physical

Breakaway	No
Circuits (Loaded)	20
Circuits (maximum)	20
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
 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**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)

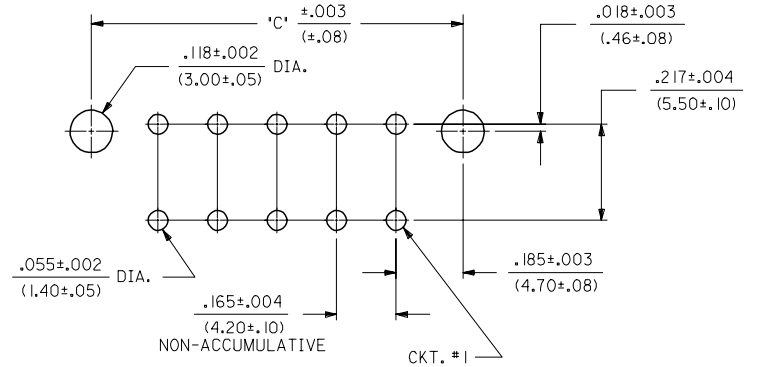
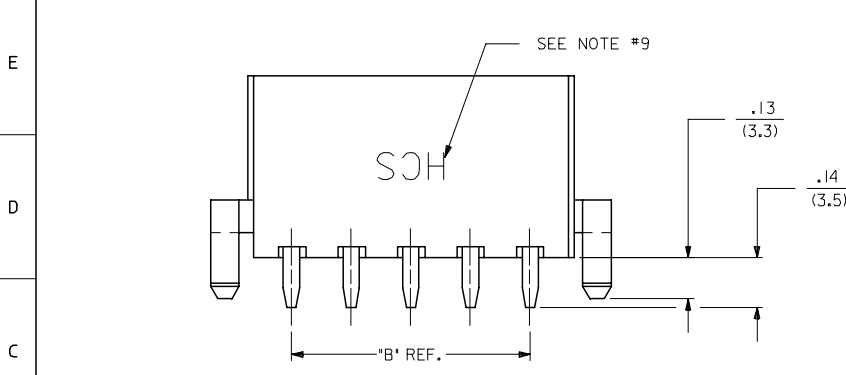
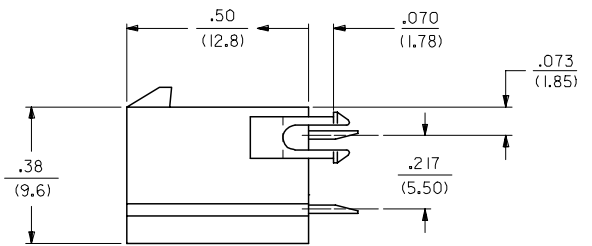
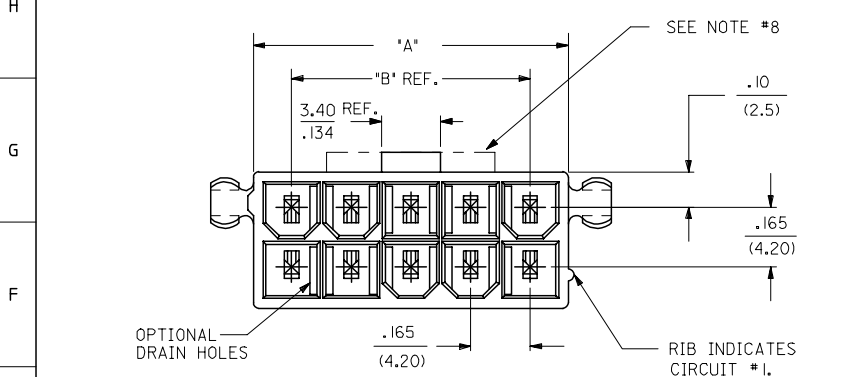
SEE SHT. 2 FOR DUAL ROW
 * THE CHART FOR SINGLE ROW PRODUCT IS ON PAGE 7

STANDARDIZE NOTES EC NO: UCP2008-0153 2007/09/26 DRW:LLSCHMIDT 2007/09/26 CHKD:ADERR 2007/09/26 APPR:FSM TH 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		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		MOLEX INCORPORATED		
1 PLACE ± 0.50 ± ---		RJF		1994/07/25				
ANGULAR ±1/2°		APPROVED BY		DATE		SDA-44472-****		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		RJF		1994/07/25				
SIZE C		MATERIAL NO.		DOCUMENT NO.		SHEET NO.		
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		SEE CHARTS		SDA-44472-****		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

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
		4 PLACES ± --- ± --- 3 PLACES ± --- ± .015 2 PLACES ± 0.38 ± .020 1 PLACE ± 0.50 ± ---	mm INCH DRAWN BY DATE GEP 1994/07/26	CHECKED BY DATE RJF 1994/07/26	TITLE MINI-FIT VERT HDR ASSY W & W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW			
		ANGULAR ±1/2°	APPROVED BY DATE RJF 1994/07/26	MOLEX INCORPORATED				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE CHARTS	MATERIAL NO. DOCUMENT NO. SDA-44472-****	SHEET NO. 2 OF 10			

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)				J
	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	I
	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	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)				PLATING: I (SEE NOTE 2)				PLATING: I (SEE NOTE 2)				G	
	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-0 [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.			HOUSING NO.	CKTS	ITEM NO.			CKTS	ITEM NO.			CKTS	ITEM NO.			CKTS	F
	44472-0254				2	44472-0255			2	44472-0256			2	44472-0257			2	
	44472-0454				4	44472-0455			4	44472-0456			4	44472-0457			4	
	44472-0654				6	44472-0655			6	44472-0656			6	44472-0657			6	
	44472-0854				8	44472-0855			8	44472-0856			8	44472-0857			8	
	44472-1054				10	44472-1055			10	44472-1056			10	44472-1057			10	
	44472-1254				12	44472-1255			12	44472-1256			12	44472-1257			12	
E	44472-1454				14	44472-1455			14	44472-1456			14	44472-1457			14	E
	44472-1654				16	44472-1655			16	44472-1656			16	44472-1657			16	
	44472-1854				18	44472-1855			18	44472-1856			18	44472-1857			18	
	44472-2054				20	44472-2055			20	44472-2056			20	44472-2057			20	
	44472-2254				22	44472-2255			22	44472-2256			22	44472-2257			22	
	44472-2454				24	44472-2455			24	44472-2456			24	44472-2457			24	

* 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 = 0 = 0	GENERAL TOLERANCES (UNLESS SPECIFIED) <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>± .015</td> <td>± .0008</td> </tr> <tr> <td>1 PLACE</td> <td>± .030</td> <td>± .0015</td> </tr> </table>		mm	INCH	4 PLACES	± .005	± .0004	3 PLACES	± .008	± .0005	2 PLACES	± .015	± .0008	1 PLACE	± .030	± .0015	DIMENSION STYLE IN/MM DRAWN BY: LEM DATE: 1999/02/22 CHECKED BY: MAB DATE: 1999/02/22 APPROVED BY: RRE DATE: 1999/02/22	SCALE: --- DESIGN UNITS: METRIC THIRD ANGLE PROJECTION	TITLE 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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MATERIAL NO. SDA-44472-****		DOCUMENT NO. SDA-44472-****		SHEET NO. 3 OF 10																
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																