

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0444721853](#)
Status: **Active**
Description: 4.20mm (.165") Pitch Mini-Fit HCS™ Header, Dual Row, Vertical, with Snap-in Plastic Peg PCB Lock, 18 Circuits, PA Polyamide Nylon 6/6 94V-0, 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

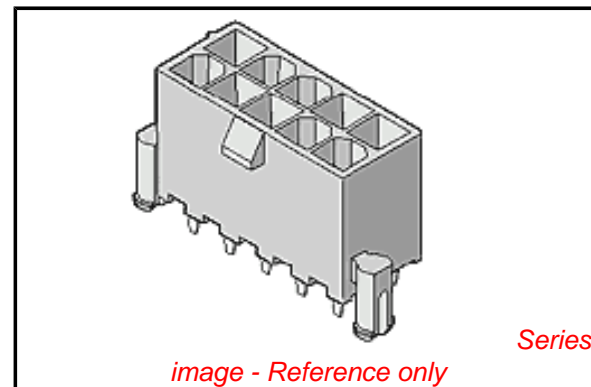
Product Family PCB Headers
 Series [44472](#)
 Application Wire-to-Board
 Comments Square Pin|Solder Type
 Product Name Mini-Fit HCS™

Physical

Breakaway No
 Circuits (Loaded) 18
 Circuits (maximum) 18
 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 Contains SVHC: No
Halogen-Free Status

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

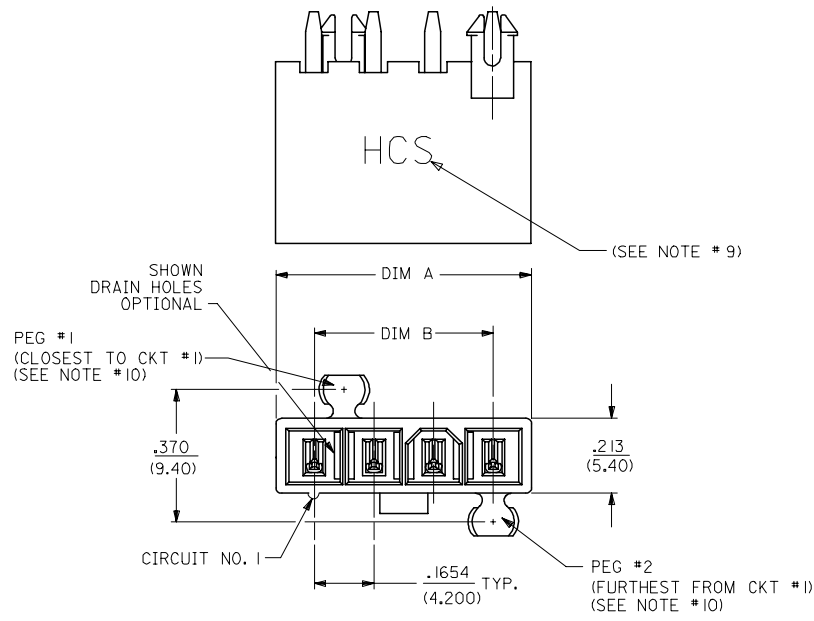
Material Info**Reference - Drawing Numbers**

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

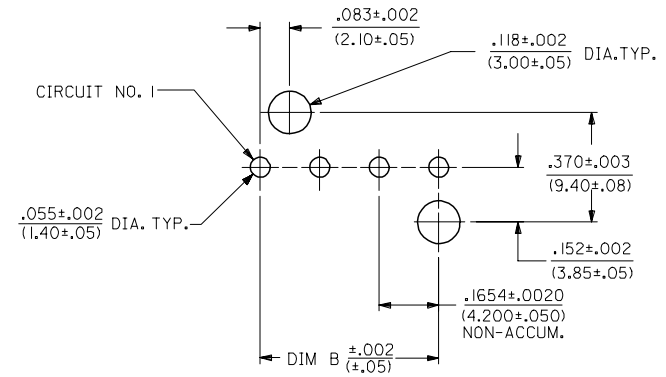
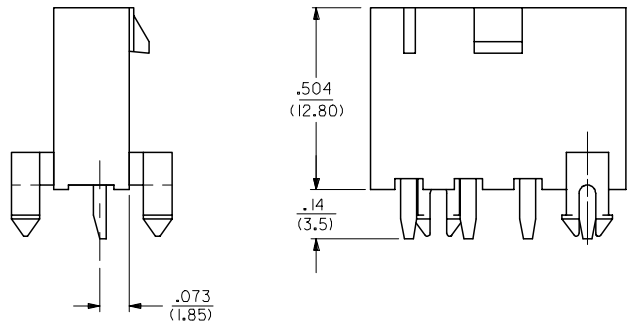
This document was generated on 04/21/2010

PLEASE CHECK 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.



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

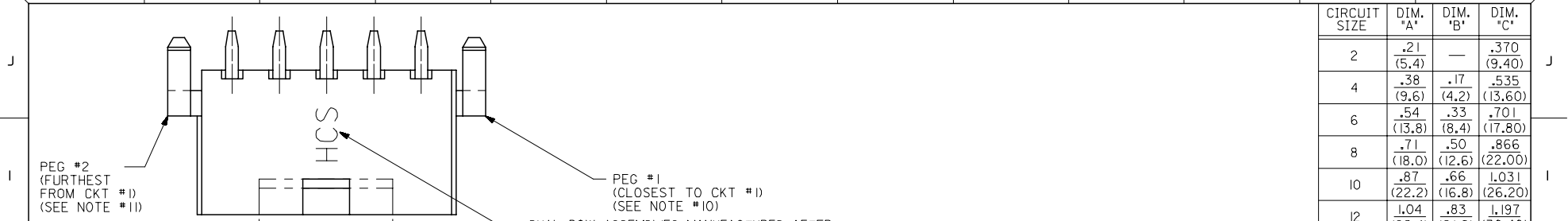
10	L
9	L
8	L
7	L
6	L
5	L
4	L
3	L
2	L
1	L
SHT	REV

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)

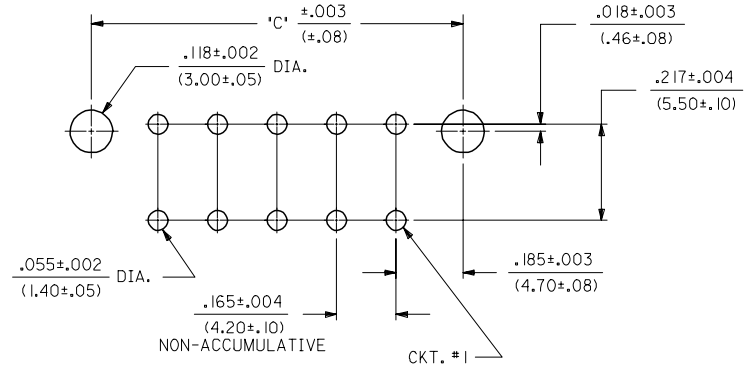
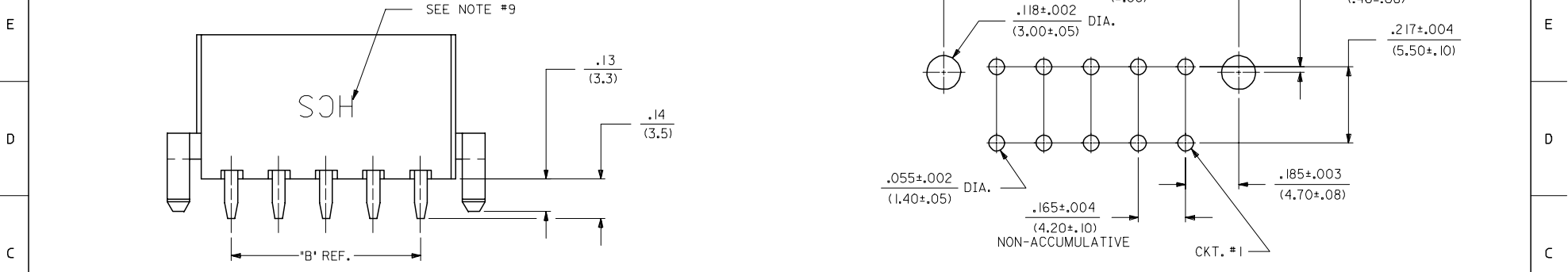
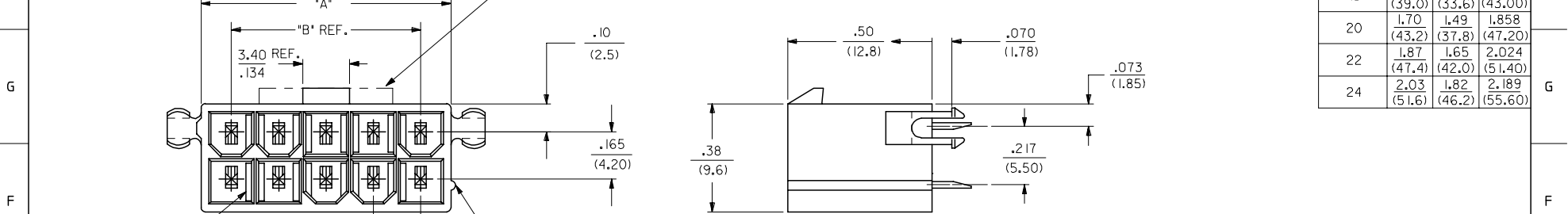
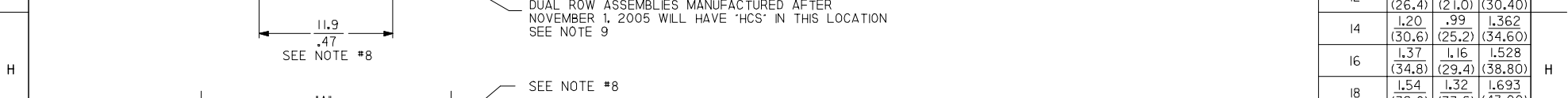
SEE SHT. 2 FOR DUAL ROW
* THE CHART FOR SINGLE ROW PRODUCT IS ON PAGE 7

STANDARDIZE NOTES EC NO: UCP2008-0153 DRW:LSCHMIDT 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	METRIC	DATE	TITLE	SHEET NO.
		4 PLACES ±---	±---	DRAWN BY	1994/07/25	4:1	METRIC	MINI-FIT VERT HDR ASSY W & W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW	1 OF 10
		3 PLACES ±---	±.015	CHECKED BY	1994/07/25				
		2 PLACES ±0.38	±.020	APPROVED BY	1994/07/25			MOLEX INCORPORATED	SDA-44472-****
		1 PLACE ±0.50	±---	MATERIAL NO.					
		ANGULAR ±1/2°		DRAWN BY					
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					
				APPROVED BY					
				DATE					
				MATERIAL NO.					
				DATE					
				CHECKED BY					

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 CHECKED: ADERR 2007/09/26 APPROVED: FSN 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 MINI-FIT VERT HDR ASSY W & W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW			
		4 PLACES ± --- ± ---	± --- ± ---	GEP	1994/07/26	MOLEX INCORPORATED			
		3 PLACES ± --- ± .015	± .015 ± .020	CHECKED BY	DATE	DOCUMENT NO. SDA-44472-****			
2 PLACES ± 0.38 ± .020	± .020 ± ---	RJF	1994/07/26	MATERIAL NO. SEE CHARTS		SHEET NO. 2 OF 10			
1 PLACE ± 0.50 ± ---	± --- ± ---	APPROVED BY	DATE	THIS DRAFTING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
ANGULAR ±1/2°		RJF	1994/07/26						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS									

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.		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.

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>± ---</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	± ---	± ---	DIMENSION STYLE 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	TITLE MINI-FIT VERT HDR ASSY W & W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW
		mm	INCH																	
	4 PLACES	± ---	± ---																	
	3 PLACES	± ---	± ---																	
2 PLACES	± ---	± ---																		
1 PLACE	± ---	± ---																		
MATERIAL NO. SEE CHART	DOCUMENT NO. SDA-44472-****	SHEET NO. 3 OF 10																		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SIZE C	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																
MOLEX MOLEX INCORPORATED																				