

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

**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**

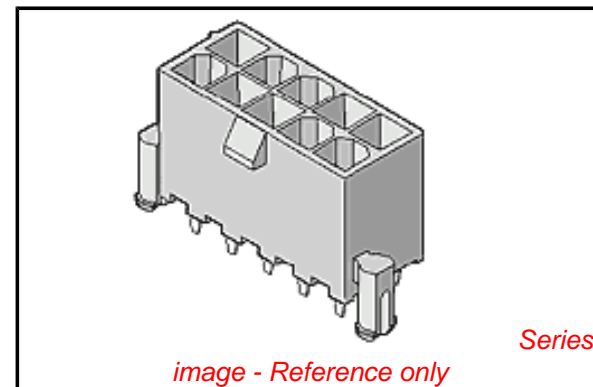
Product Family PCB Headers  
 Series [44472](#)  
 Application Wire-to-Board  
 Comments Square Pin|Solder Type  
 Product Name Mini-Fit HCS™

**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](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

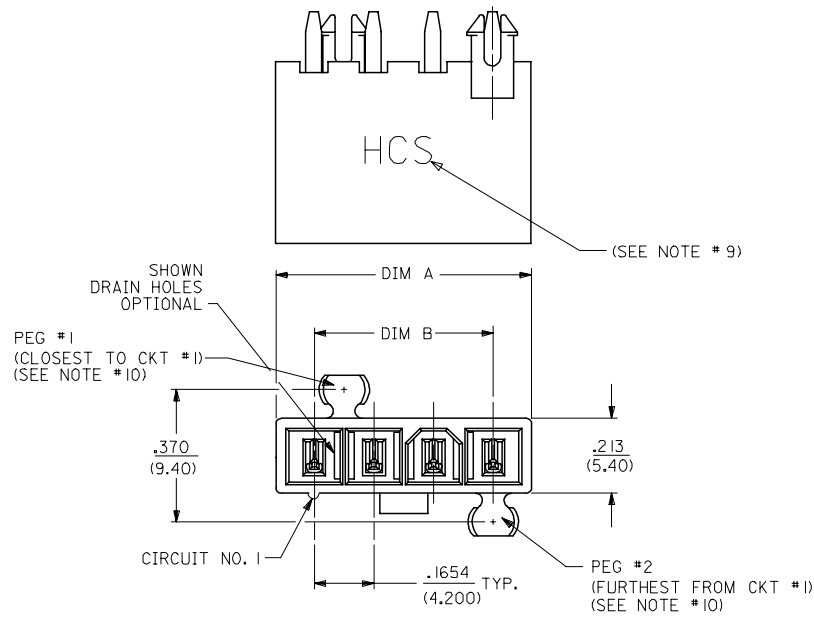
**Material Info****Reference - Drawing Numbers**

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

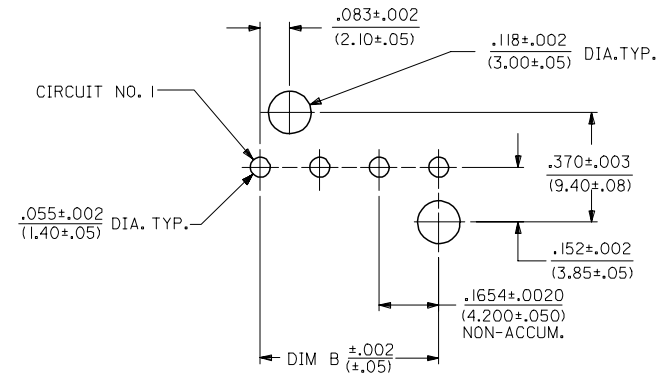
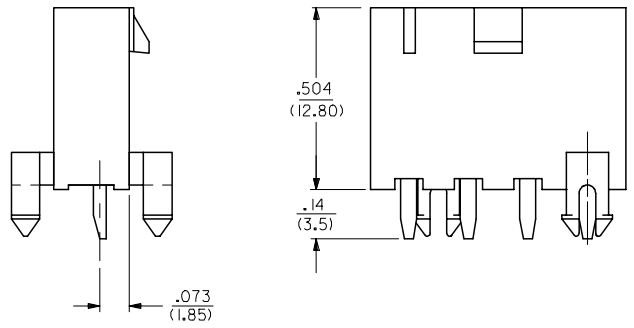
This document was generated on 04/21/2010

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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 - \*\* \*\*

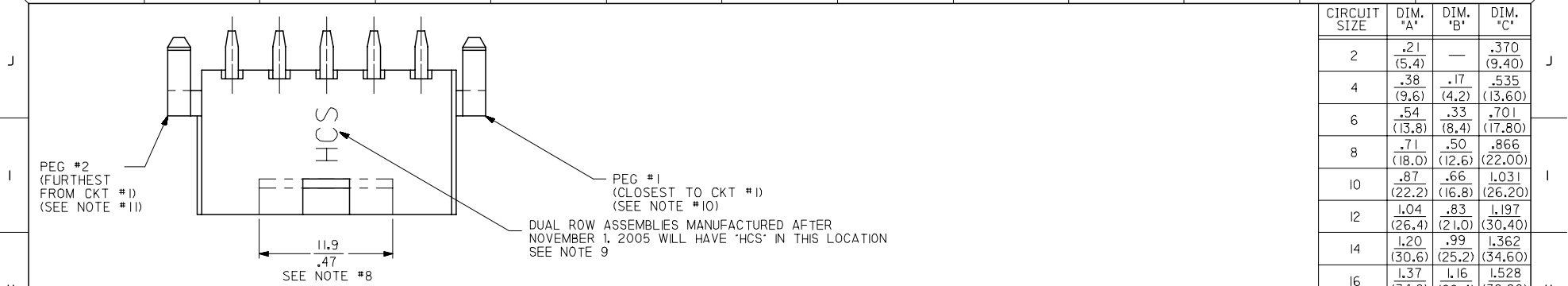
CIRCUIT SIZE  
(04-12 FOR SINGLE ROW)  
(02-24 FOR DUAL ROW)

ASSEMBLY VERSION  
(01 THRU 49 FOR SINGLE ROW)  
(50 THRU 99 FOR DUAL ROW)

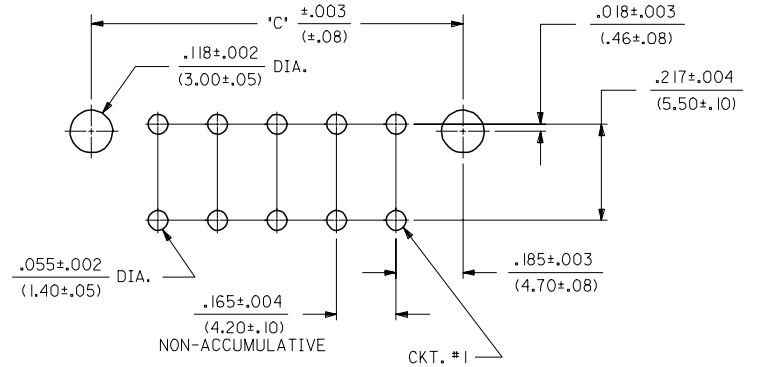
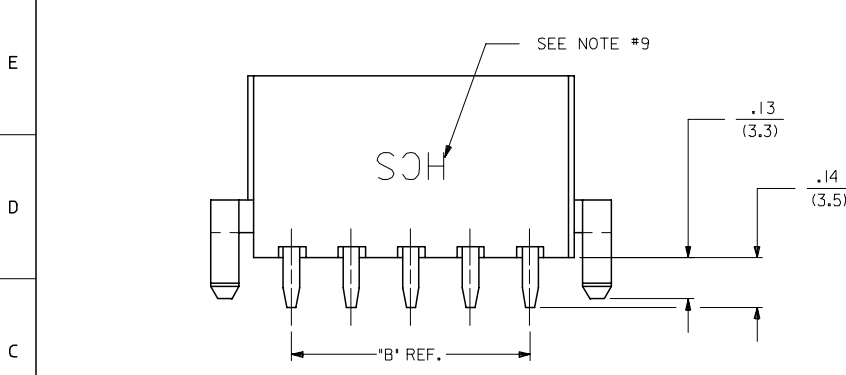
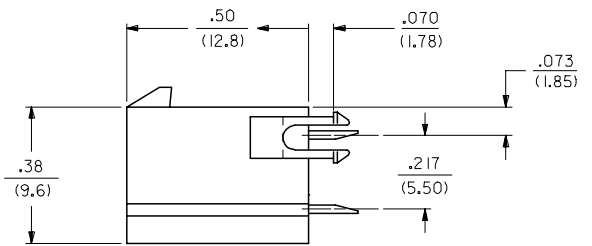
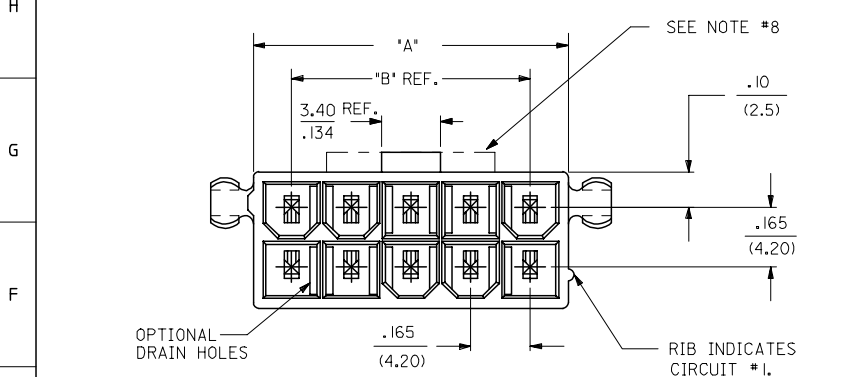
SEE SHT. 2 FOR DUAL ROW  
\* THE CHART FOR SINGLE ROW PRODUCT IS ON PAGE 7

STANDARDIZE NOTES EC NO: UCP2008-0153 2007/09/26 DRW:NLSCHM/DT 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	± .015	± .001	DRAWN BY	DATE	MOLEX	MINI-FIT VERT HDR ASSY W & W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW	
		3 PLACES	± .020	± .002	GEP	1994/07/25			
		2 PLACES	± .038	± .020	CHECKED BY	DATE			
		1 PLACE	± 0.50	± .001	RJF	1994/07/25			
		ANGULAR ±1/2°		APPROVED BY	DATE				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHARTS		MATERIAL NO.		DOCUMENT NO.	SHEET NO.		
				SDA-44472-****		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 DRAWN: LSCHMI DT 2007/09/26 CHKD: ADERR 2007/09/26 APPR: FSM TH 2007/09/26 REV 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	<b>THIRD ANGLE PROJECTION</b> 
		mm	INCH																		
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	3 PLACES	± .10	± .004																		
2 PLACES	± .08	± .003																			
1 PLACE	± .05	± .002																			
<b>DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</b>	<b>SEE CHARTS</b>	<b>MATERIAL NO.</b> SDA-44472-****	<b>DATE</b> 1994/07/26	<b>DATE</b> 1994/07/26	<b>DATE</b> 1994/07/26	<b>DATE</b> 1994/07/26															
<b>DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</b>	<b>THIS DRAFTING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</b>	<b>MOLEX INCORPORATED</b>	<b>DOCUMENT NO.</b> SDA-44472-****	<b>SHEET NO.</b> 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)					
	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			
	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
		mm	INCH																	
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<b>DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</b>		<b>SEE CHART</b>	<b>MOLEX</b> MOLEX INCORPORATED MATERIAL NO. SDA-44472-**** DOCUMENT NO.		SHEET NO. 3 OF 10															
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