

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

**Part Number:** **0444722454**  
**Status:** **Active**  
**Description:** 4.20mm (.165") Pitch Mini-Fit HCS™ Header, Dual Row, Vertical, without Snap-in Plastic Peg PCB Lock, 24 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**

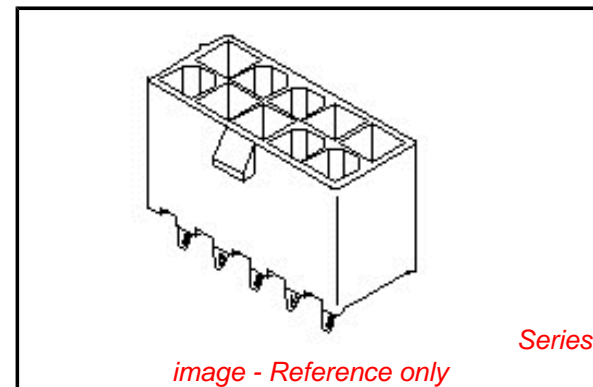
Breakaway No  
 Circuits (Loaded) 24  
 Circuits (maximum) 24  
 Durability (mating cycles max) 30  
 Flammability 94V-2  
 Glow-Wire Compliant No  
 Material - Metal High Performance Alloy (HPA)  
 Material - Plating Mating Tin  
 Material - Plating Termination Tin  
 Number of Rows 2  
 Orientation 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**

**Reference - Drawing Numbers**

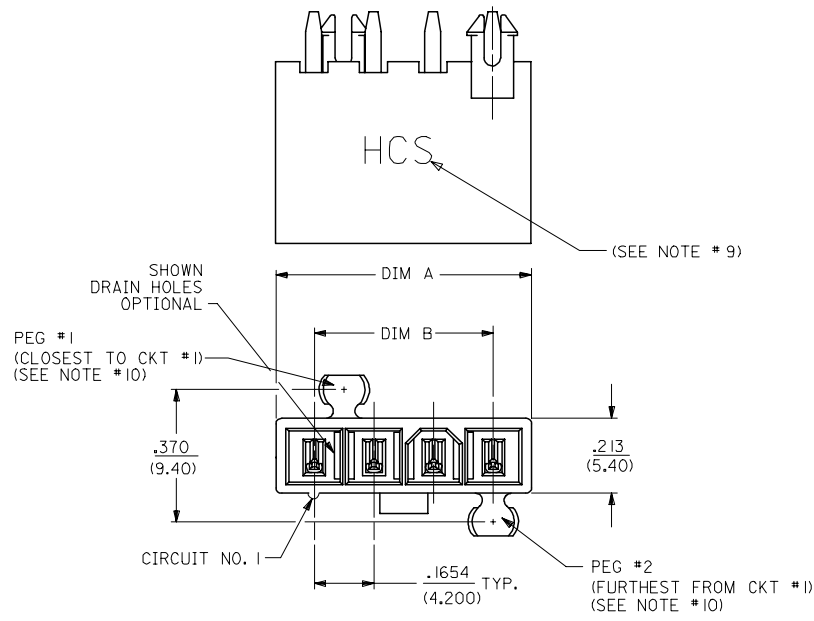
Product Specification  
Sales Drawing

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

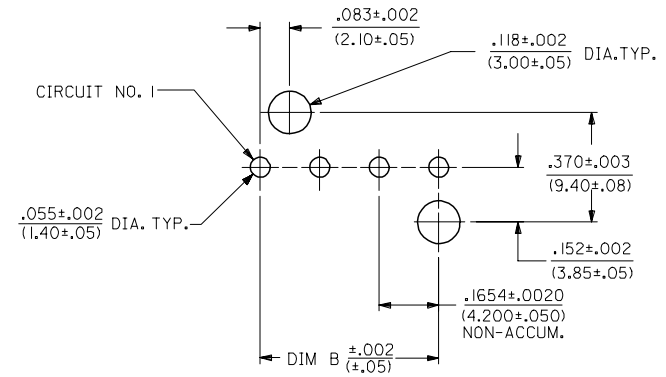
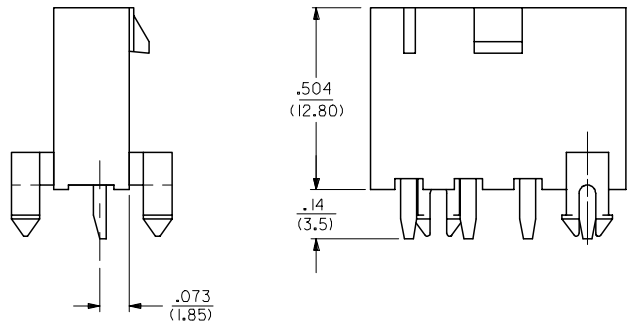
This document was generated on 03/24/2010

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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.



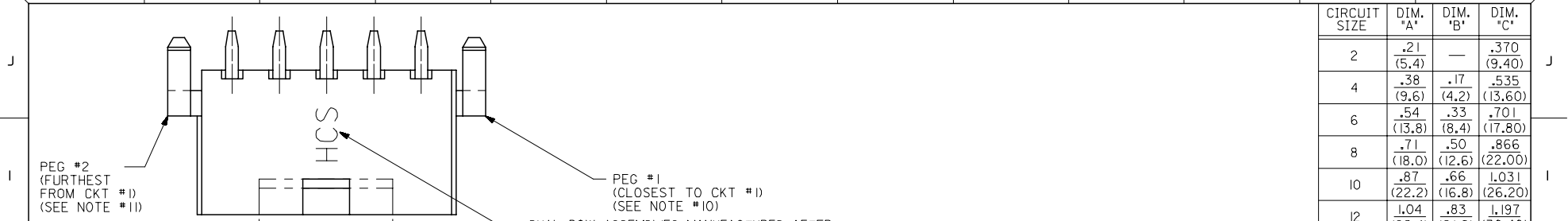
10	L
9	L
8	L
7	L
6	L
5	L
4	L
3	L
2	L
1	L
SHT	REV

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)

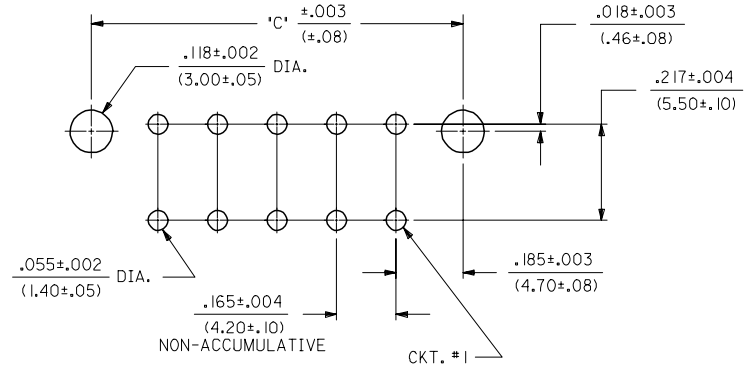
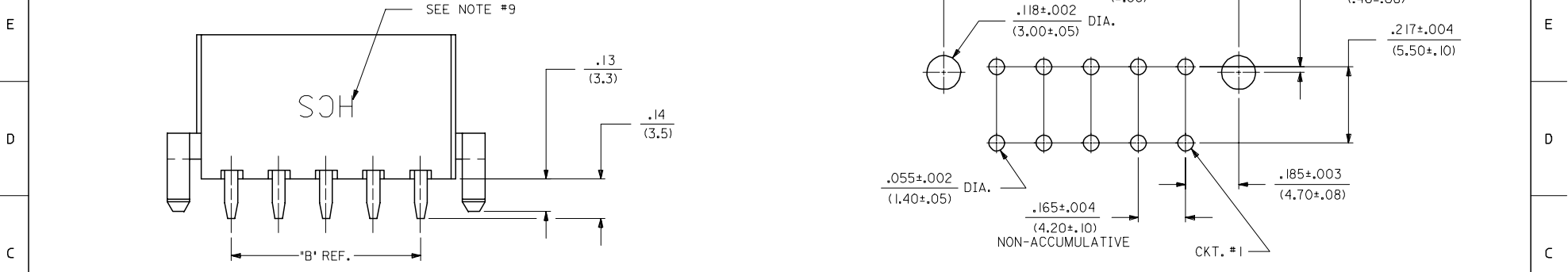
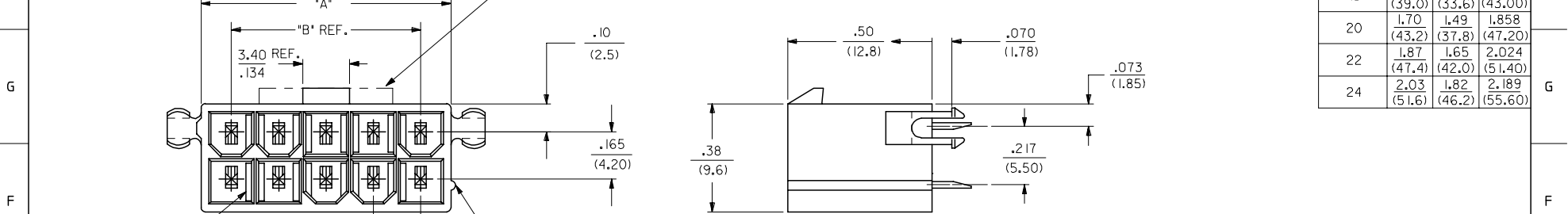
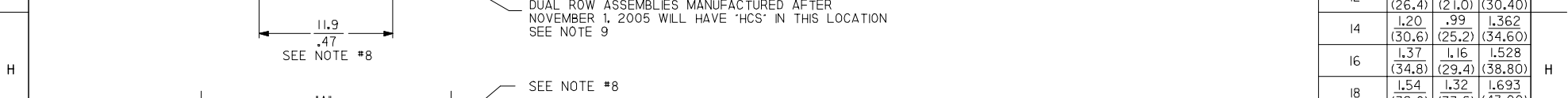
SEE SHT. 2 FOR DUAL ROW  
 \* THE CHART FOR SINGLE ROW PRODUCT IS ON PAGE 7

STANDARDIZE NOTES EC NO: UCP2008-0153 2007/09/26 DRW:LSCHMIDT 2007/09/26 CHKD:ADERR 2007/09/26 APPR:FSM TH 2007/09/26 REV	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	DATE 1994/07/25	TITLE MINI-FIT VERT HDR ASSY W & W/O PEGS/DRAIN HOLES SINGLE AND DUAL ROW	MATERIAL NO.	DOCUMENT NO. SDA-44472-****
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHARTS		MOLEX INCORPORATED			
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 DRAFTING 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				
	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	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 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	± .005	± .0004																	
	3 PLACES	± .008	± .0005																	
2 PLACES	± .015	± .0008																		
1 PLACE	± .030	± .0015																		
MATERIAL NO.		DOCUMENT NO.		SHEET NO.																
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