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Part Number: [0444741441](#)
Status: **Active**
Description: 4.20mm (.165") Pitch Mini-Fit HCS™ Header, Dual Row, Vertical, Blind Mating, with Snap-in Plastic Peg PCB Lock, 14 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 \(PDF\)](#)

Agency Certification

CSA LR19980
UL E29179

General

Product Family PCB Headers
Series [44474](#)
Application Board-to-Board, Wire-to-Board
Comments Square Pin|Solder Type
Product Name Mini-Fit HCS™

Physical

Breakaway No
Circuits (Loaded) 14
Circuits (maximum) 14
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
PC Tail Length (in) 0.138 In
PC Tail Length (mm) 3.50 mm
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 Fully
Stackable No
Surface Mount Compatible (SMC) No
Temperature Range - Operating -40°C to +105°C
Termination Interface: Style Through Hole

Electrical

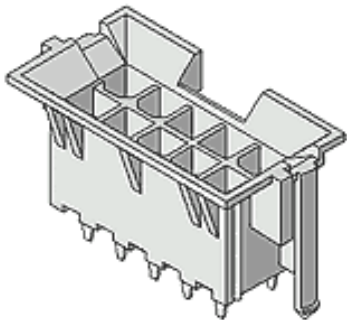


image - Reference only

Series

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
[44474Series](#)

Mates With
[42474](#) , [44475](#) , [44516](#) , [5557d](#)

Current - Maximum per Contact	11A
Voltage - Maximum	600V

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	260

Material Info

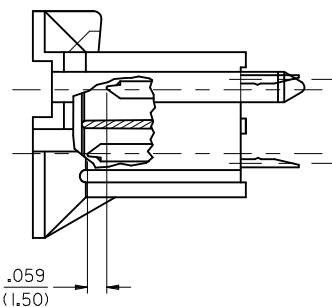
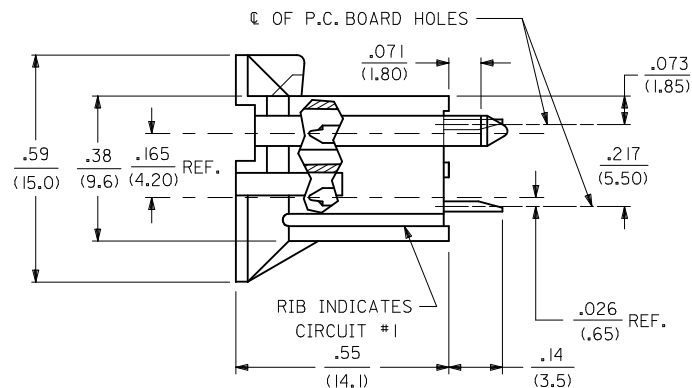
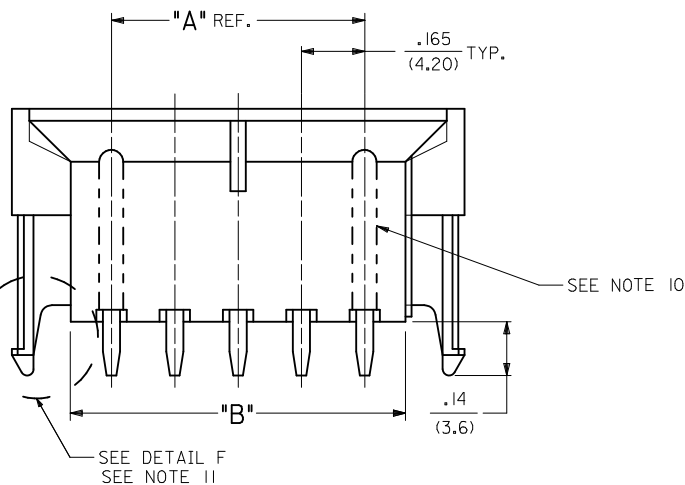
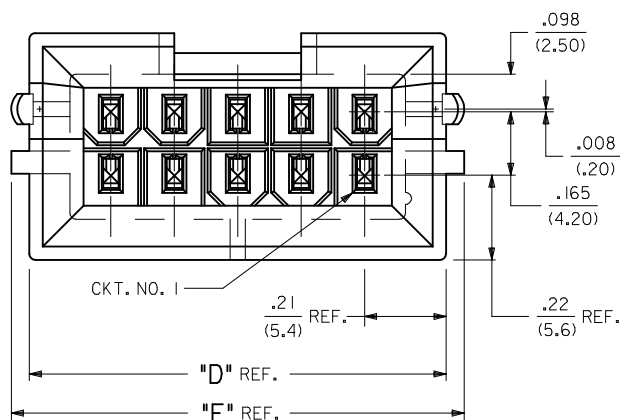
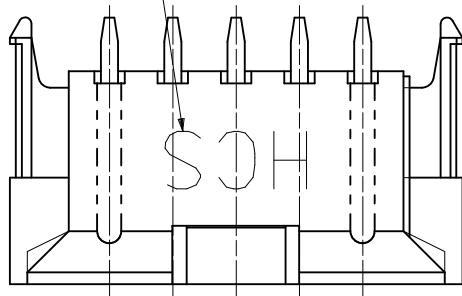
Reference - Drawing Numbers

Product Specification	PS-44476-001, RPS-44476-001
Sales Drawing	SDA-44474-****

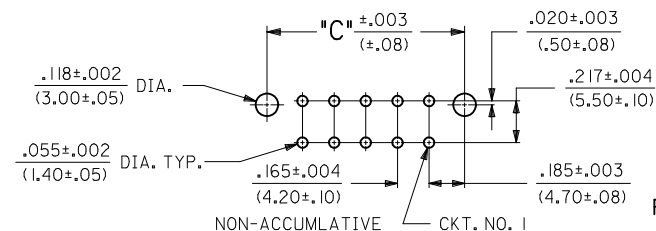
This document was generated on 03/25/2010

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SEE NOTE 14

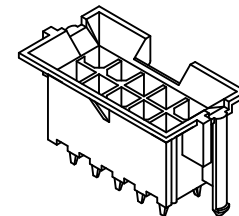


MATE-FIRST/BREAK-LAST DETAIL
(SEE NOTE 12)



RECOMMENDED HOLE LAYOUT FOR .070/(1.78) MAX. THICK P.C. BOARD

(SEE NOTE 5)
(SCALE: 2X)



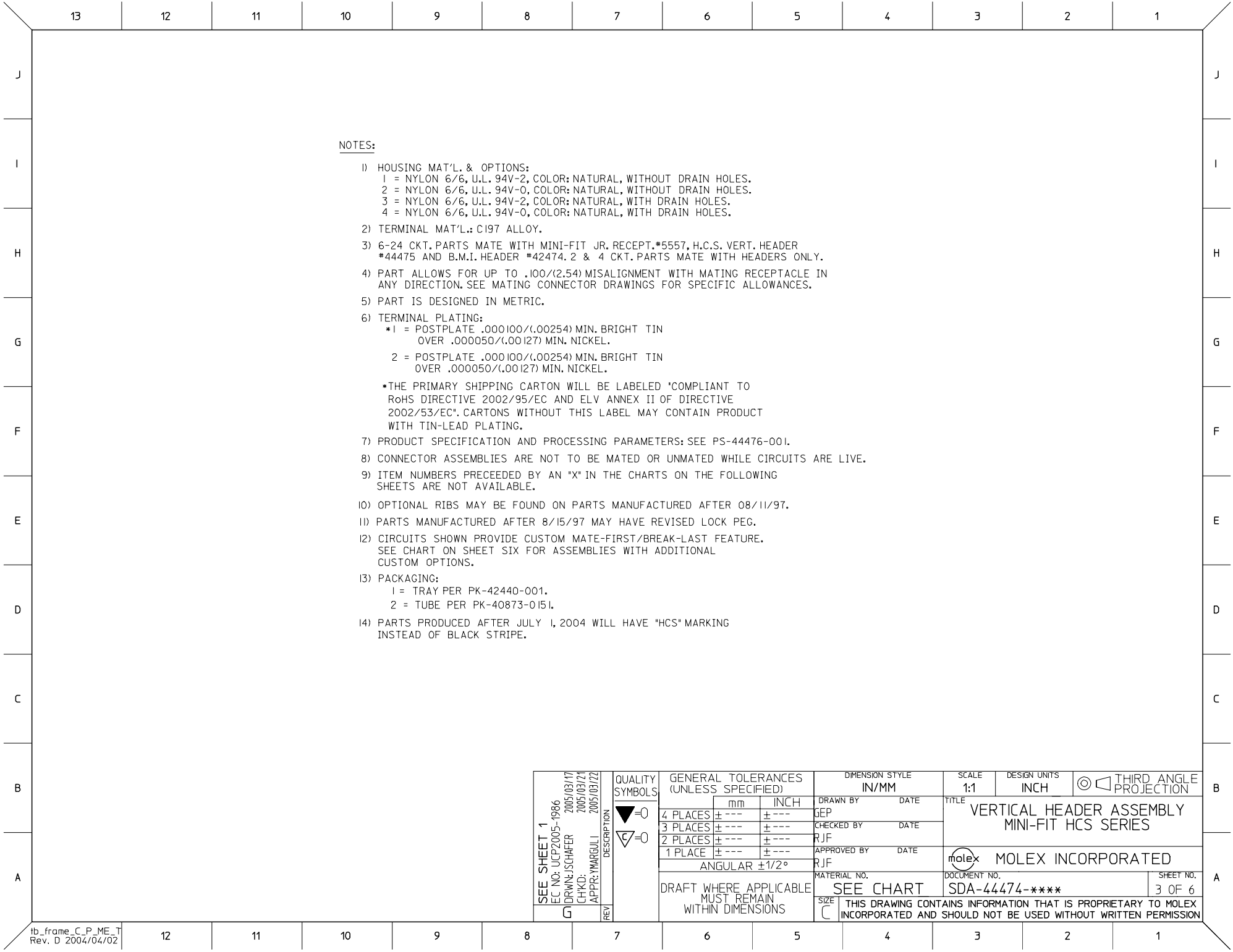
(SCALE: 2X)

DETAIL "F"
PEG DESIGN
PRIOR TO 8/11/97

CIRCUIT SIZE	DIM. "A"	DIM. "B"	DIM. "C"	DIM. "D"	DIM. "E"
2	—	.21 (5.4)	.370 (9.40)	.425 (10.80)	.520 (13.20)
4	.17 (4.2)	.38 (9.6)	.535 (13.60)	.590 (15.00)	.685 (17.40)
6	.33 (8.4)	.54 (13.8)	.701 (17.80)	.756 (19.20)	.850 (21.60)
8	.50 (12.6)	.71 (18.0)	.866 (22.00)	.921 (23.40)	1.016 (25.80)
10	.66 (16.8)	.87 (22.2)	1.031 (26.20)	1.087 (27.60)	1.181 (30.00)
12	.83 (21.0)	1.04 (26.4)	1.197 (30.40)	1.252 (31.80)	1.346 (34.20)
14	.99 (25.2)	1.20 (30.6)	1.362 (34.60)	1.417 (36.00)	1.512 (38.40)
16	1.16 (29.4)	1.37 (34.8)	1.528 (38.80)	1.583 (40.20)	1.677 (42.60)
18	1.32 (33.6)	1.54 (39.0)	1.693 (43.00)	1.748 (44.40)	1.843 (46.80)
20	1.49 (37.8)	1.70 (43.2)	1.858 (47.20)	1.913 (48.60)	2.008 (51.00)
22	1.65 (42.0)	1.87 (47.4)	2.024 (51.40)	2.079 (52.80)	2.173 (55.20)
24	1.82 (46.2)	2.03 (51.6)	2.189 (55.60)	2.244 (57.00)	2.339 (59.40)

MODIFIED SHT 4 EC NO: UCP2010-0472 DRAWN: JAGUILAR CHKD: JEBEL APPR: FSMITH G1	REV	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 1:1	DESIGN UNITS INCH	 THIRD ANGLE PROJECTION	TITLE VERTICAL HEADER ASSEMBLY MINI-FIT HCS SERIES		
				4 PLACES	± ---	± ---	DRAWN BY GEP	DATE					
				3 PLACES	± ---	± .010	CHECKED BY	DATE					
				2 PLACES	± 0.25	± .015	RJF						
				1 PLACE	± 0.38	± ---	APPROVED BY	DATE					
				ANGULAR ±1/2°		RJF		molex MOLEX INCORPORATED					
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHARTS		DOCUMENT NO. SDA-44474-****		SHEET NO. 1 OF 6			
						SIZE C		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

6	G
5	G
4	G1
3	G
2	D1
1	G1



NOTES:

- 1) HOUSING MAT'L. & OPTIONS:
 - 1 = NYLON 6/6, U.L. 94V-2, COLOR: NATURAL, WITHOUT DRAIN HOLES.
 - 2 = NYLON 6/6, U.L. 94V-0, COLOR: NATURAL, WITHOUT DRAIN HOLES.
 - 3 = NYLON 6/6, U.L. 94V-2, COLOR: NATURAL, WITH DRAIN HOLES.
 - 4 = NYLON 6/6, U.L. 94V-0, COLOR: NATURAL, WITH DRAIN HOLES.
- 2) TERMINAL MAT'L.: C197 ALLOY.
- 3) 6-24 CKT. PARTS MATE WITH MINI-FIT JR. RECEPT.*5557, H.C.S. VERT. HEADER *44475 AND B.M.I. HEADER *42474. 2 & 4 CKT. PARTS MATE WITH HEADERS ONLY.
- 4) PART ALLOWS FOR UP TO .100/(2.54) MISALIGNMENT WITH MATING RECEPTACLE IN ANY DIRECTION. SEE MATING CONNECTOR DRAWINGS FOR SPECIFIC ALLOWANCES.
- 5) PART IS DESIGNED IN METRIC.
- 6) TERMINAL PLATING:
 - *1 = POSTPLATE .000100/(.00254) MIN. BRIGHT TIN OVER .000050/(.00127) MIN. NICKEL.
 - 2 = POSTPLATE .000100/(.00254) MIN. BRIGHT TIN OVER .000050/(.00127) MIN. NICKEL.

*THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2002/53/EC". CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH TIN-LEAD PLATING.
- 7) PRODUCT SPECIFICATION AND PROCESSING PARAMETERS: SEE PS-44476-001.
- 8) CONNECTOR ASSEMBLIES ARE NOT TO BE MATED OR UNMATED WHILE CIRCUITS ARE LIVE.
- 9) ITEM NUMBERS PRECEDED BY AN "X" IN THE CHARTS ON THE FOLLOWING SHEETS ARE NOT AVAILABLE.
- 10) OPTIONAL RIBS MAY BE FOUND ON PARTS MANUFACTURED AFTER 08/11/97.
- 11) PARTS MANUFACTURED AFTER 8/15/97 MAY HAVE REVISED LOCK PEG.
- 12) CIRCUITS SHOWN PROVIDE CUSTOM MATE-FIRST/BREAK-LAST FEATURE. SEE CHART ON SHEET SIX FOR ASSEMBLIES WITH ADDITIONAL CUSTOM OPTIONS.
- 13) PACKAGING:
 - 1 = TRAY PER PK-42440-001.
 - 2 = TUBE PER PK-40873-0151.
- 14) PARTS PRODUCED AFTER JULY 1, 2004 WILL HAVE "HCS" MARKING INSTEAD OF BLACK STRIPE.

SEE SHEET 1 EC NO: UCP2005-1986 DRAWN: JSCHAFER 2005/03/17 CHKD: 2005/03/21 APPR: YMARGULI 2005/03/22 REV	QUALITY SYMBOLS ▽=0 ▽=0	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 1:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	TITLE VERTICAL HEADER ASSEMBLY MINI-FIT HCS SERIES		
				mm	INCH	DRAWN BY	DATE					
			4 PLACES	± ---	± ---	GEP	CHECKED BY	DATE				
			3 PLACES	± ---	± ---	RJF	APPROVED BY	DATE				
			2 PLACES	± ---	± ---							MOLEX INCORPORATED
			1 PLACE	± ---	± ---							
			ANGULAR ±1/2°									
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		DOCUMENT NO. SDA-44474-****		SHEET NO. 3 OF 6			
					SIZE C		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 6) DRAINS: WITHOUT DRAIN HOLES PEGS: WITH PEGS MAT'L: 94V-2 [NATURAL] PACKAGING: TRAY (SEE NOTE I3)		PLATING: I (SEE NOTE 6) DRAINS: WITHOUT DRAIN HOLES PEGS: WITH PEGS MAT'L: 94V-0 [NATURAL] PACKAGING: TRAY (SEE NOTE I3)		PLATING: I (SEE NOTE 6) DRAINS: WITH DRAIN HOLES PEGS: WITH PEGS MAT'L: 94V-2 [NATURAL] PACKAGING: TRAY (SEE NOTE I3)		PLATING: I (SEE NOTE 6) DRAINS: WITH DRAIN HOLES PEGS: WITH PEGS MAT'L: 94V-0 [NATURAL] PACKAGING: TRAY (SEE NOTE I3)		PLATING: I (SEE NOTE 6) DRAINS: WITHOUT DRAIN HOLES PEGS: WITH PEGS MAT'L: 94V-2 [NATURAL] PACKAGING: TUBE (SEE NOTE I3)		PLATING: I (SEE NOTE 6) DRAINS: WITHOUT DRAIN HOLES PEGS: WITH PEGS MAT'L: 94V-0 [NATURAL] PACKAGING: TUBE (SEE NOTE I3)		J	
I	ITEM NO.	CKTS	ITEM NO.	CKTS	ITEM NO.	CKTS	ITEM NO.	CKTS	ITEM NO.	CKTS	ITEM NO.	CKTS	I	
	X 44474-0211	2	X 44474-0221	2	X 44474-0231	2	X 44474-0241	2	X -	2	X -	2		
	44474-0411	4	44474-0421	4	44474-0431	4	44474-0441	4	44474-3001	4	44474-3013	4		
	44474-0611	6	X 44474-0621	6	O 44474-0631	6	X 44474-0641	6	X -	6	X -	6		
	X 44474-0811	8	X 44474-0821	8	X 44474-0831	8	X 44474-0841	8	X -	8	X -	8		
	44474-1011	10	44474-1021	10	44474-1031	10	44474-1041	10	44474-3004	10	44474-3016	10		
	X 44474-1211	12	X 44474-1221	12	X 44474-1231	12	X 44474-1241	12	X -	12	X -	12		
	44474-1411	14	44474-1421	14	44474-1431	14	44474-1441	14	44474-3006	14	44474-3018	14		
H	X 44474-1611	16	X 44474-1621	16	X 44474-1631	16	X 44474-1641	16	X -	16	X -	16		
	44474-1811	18	44474-1821	18	44474-1831	18	44474-1841	18	44474-3008	18	44474-3020	18	H	
	X 44474-2011	20	X 44474-2021	20	X 44474-2031	20	X 44474-2041	20	X -	20	X -	20		
	X 44474-2211	22	X 44474-2221	22	X 44474-2231	22	X 44474-2241	22	X -	22	X -	22		
	44474-2411	24	44474-2421	24	44474-2431	24	44474-2441	24	44474-3011	24	44474-3023	24		
G	PLATING: I (SEE NOTE 6) DRAINS: WITH DRAIN HOLES PEGS: WITH PEGS MAT'L: 94V-2 [NATURAL] PACKAGING: TUBE (SEE NOTE I3)		PLATING: I (SEE NOTE 6) DRAINS: WITH DRAIN HOLES PEGS: WITH PEGS MAT'L: 94V-0 [NATURAL] PACKAGING: TUBE (SEE NOTE I3)		PLATING: DRAINS: PEGS: MAT'L: PACKAGING:		PLATING: DRAINS: PEGS: MAT'L: PACKAGING:		PLATING: DRAINS: PEGS: MAT'L: PACKAGING:		PLATING: DRAINS: PEGS: MAT'L: PACKAGING:		G	
F	ITEM NO.	CKTS	ITEM NO.	CKTS	ITEM NO.	CKTS	ITEM NO.	CKTS	ITEM NO.	CKTS	ITEM NO.	CKTS	F	
	X -	2	X -	2		2		2		2		2		
	44474-3025	4	44474-3037	4		4		4		4		4		
	X -	6	X -	6		6		6		6		6		
	X -	8	X -	8		8		8		8		8		
	44474-3028	10	44474-3040	10		10		10		10		10		
	X -	12	X -	12		12		12		12		12		
	44474-3030	14	44474-3042	14		14		14		14		14		
	X -	16	X -	16		16		16		16		16		
E	44474-3032	18	44474-3044	18		18		18		18		18		
	X -	20	X -	20		20		20		20		20		
	X -	22	X -	22		22		22		22		22		
	44474-3035	24	44474-3047	24		24		24		24		24		
D	* ITEMS PRECEDED BY "X" ARE NOT AVAILABLE ITEMS ON THIS PAGE ARE STANDARD PRODUCT. REFER TO SHEET SIX FOR PRODUCT WITH CUSTOM OPTIONS. "O" = OBSOLETE												D	
C													C	
B													B	
A													A	
ib_frame_C_P_ME_T Rev. D 2004/04/02 121110987654321 MODIFIED CHART EC NO: UCP2010-0472 DRWN: JAGUILAR CHKD: J.BELL APPR: F.SMITH 2009/11/11 2009/12/01 2009/12/01 DESCRIPTION REV QUALITY SYMBOLS =0 =0 GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- ANGULAR ±1/2° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS DIMENSION STYLE IN/MM DRAWN BY DATE CHECKED BY DATE APPROVED BY DATE RE MATERIAL NO. SIZE ERH MB RE SEE CHART THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION THIRD ANGLE PROJECTION VERTICAL HEADER ASSEMBLY MINI-FIT HCE SERIES MOLEX MOLEX INCORPORATED SDA-44474-**** 4 OF 6														