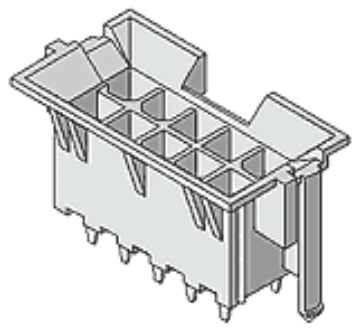
This document was generated on 04/09/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: 0444741021

Status: Active

Description: 4.20mm (.165") Pitch Mini-Fit HCS™ Header, Dual Row, Vertical, Blind Mating, with Snap-in Plastic Peg PCB Lock, 10 Circuits, PA Polyamide Nylon 6/6 94V-0, without Drain Holes



Series image - Reference only

Documents:

3D Model
Drawing (PDF)
Product Specification PS-44476-001 (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)	10
Circuits (maximum)	10
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

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

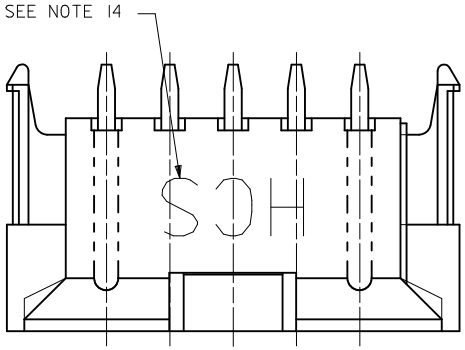
Duration at Max. Process Temperature (seconds)	5
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

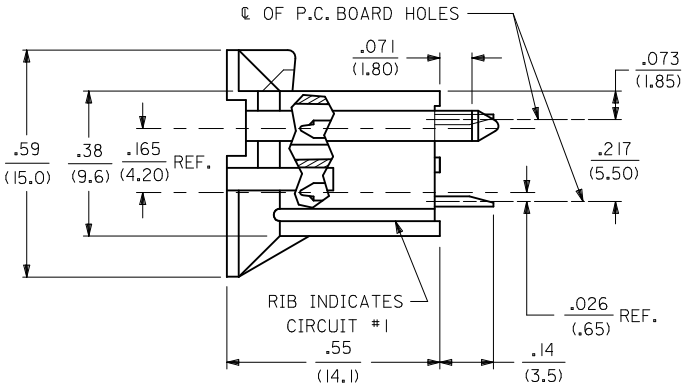
Material Info

Reference - Drawing Numbers

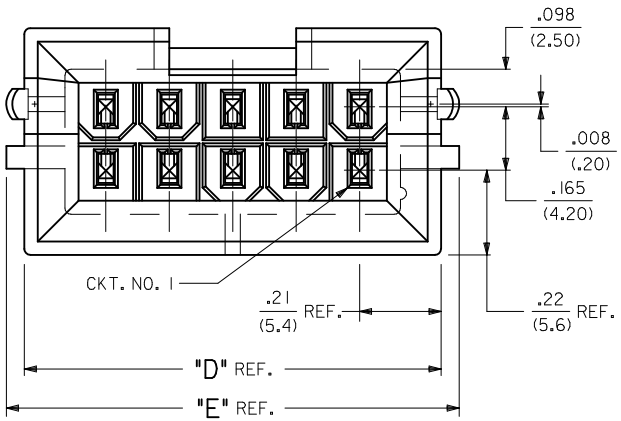
Product Specification	PS-44476-001, RPS-44476-001
Sales Drawing	SDA-44474-****

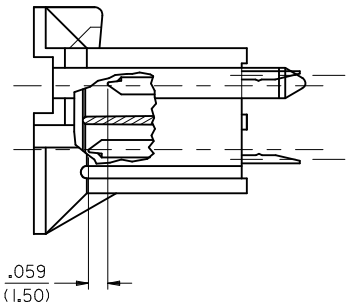
This document was generated on 04/09/2010
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION



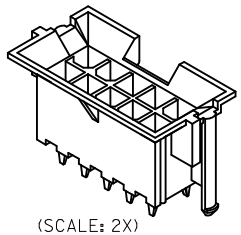


CIRCUIT SIZE	DIM. "A"	DIM. "B"	DIM. "C"	DIM. "D"	DIM. "E"
2	——	.21 (5.4)	.370 (9.40)	.425 (10.80)	.520 (13.20)
4	.17 (4.2)	.38 (9.6)	.535 (13.60)	.590 (15.00)	.685 (17.40)
6	.33 (8.4)	.54 (13.8)	.701 (17.80)	.756 (19.20)	.850 (21.60)
8	.50 (12.6)	.71 (18.0)	.866 (22.00)	.921 (23.40)	1.016 (25.80)
10	.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)

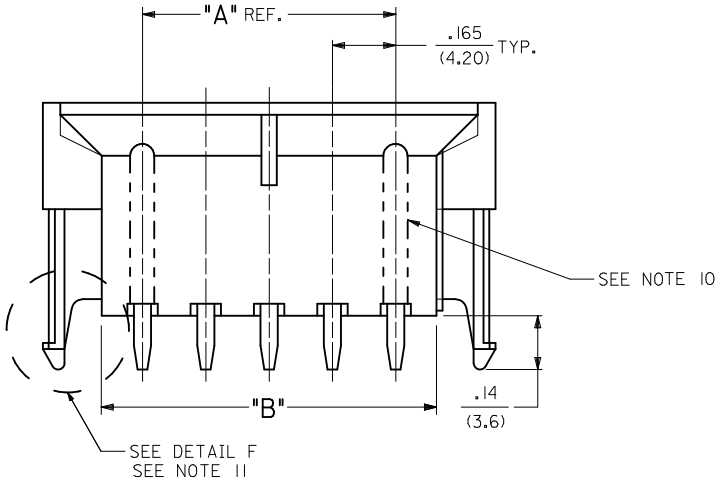


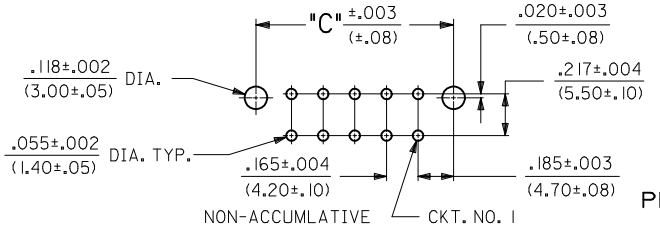


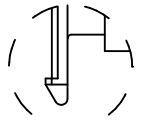
MATE-FIRST/BREAK-LAST DETAIL
(SEE NOTE 12)



(SCALE: 2X)







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

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

(SEE NOTE 5)
(SCALE: 2X)

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

MODIFIED SHT 4
EC NO: UCP2010-0472 2009/11/11
DRWN: JJAGUILAR 2009/12/01
CH'KD: JBELL 2009/12/01
APPR: FSMITH 2009/12/01
DESCRIPTION
G1
REV

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± .015
1 PLACE	± 0.38	± ---
ANGULAR ±1/2°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: 1:1
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: GEP DATE:
CHECKED BY: RJF DATE:
APPROVED BY: RJF DATE:
MATERIAL NO.: SEE CHARTS

TITLE: VERTICAL HEADER ASSEMBLY MINI-FIT HCS SERIES

molex MOLEX INCORPORATED

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

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 PRECEEDED 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 2005/03/17
DRWN: JSCHAFER 2005/03/21
CHKD:
APPR: YMARGULI 2005/03/22
DESCRIPTION
G
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
SCALE: 1:1
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: GEP DATE:
CHECKED BY: RJF DATE:
APPROVED BY: RJF DATE:

TITLE: VERTICAL HEADER ASSEMBLY MINI-FIT HCS SERIES

molex MOLEX INCORPORATED

MATERIAL NO.: 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

PLATING:	I (SEE NOTE 6)		PLATING:	I (SEE NOTE 6)		PLATING:	I (SEE NOTE 6)		PLATING:	I (SEE NOTE 6)		PLATING:	I (SEE NOTE 6)		PLATING:	I (SEE NOTE 6)	
DRAINS:	WITHOUT DRAIN HOLES		DRAINS:	WITHOUT DRAIN HOLES		DRAINS:	WITH DRAIN HOLES		DRAINS:	WITH DRAIN HOLES		DRAINS:	WITHOUT DRAIN HOLES		DRAINS:	WITHOUT DRAIN HOLES	
PEGS:	WITH PEGS		PEGS:	WITH PEGS		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]		MAT'L:	94V-2 [NATURAL]		MAT'L:	94V-0 [NATURAL]	
PACKAGING:	TRAY (SEE NOTE 13)		PACKAGING:	TRAY (SEE NOTE 13)		PACKAGING:	TRAY (SEE NOTE 13)		PACKAGING:	TRAY (SEE NOTE 13)		PACKAGING:	TUBE (SEE NOTE 13)		PACKAGING:	TUBE (SEE NOTE 13)	
	ITEM NO.	CKTS		ITEM NO.	CKTS		ITEM NO.	CKTS		ITEM NO.	CKTS		ITEM NO.	CKTS		ITEM NO.	CKTS
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
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
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

PLATING:	I (SEE NOTE 6)		PLATING:	I (SEE NOTE 6)		PLATING:			PLATING:			PLATING:			PLATING:		
DRAINS:	WITH DRAIN HOLES		DRAINS:	WITH DRAIN HOLES		DRAINS:			DRAINS:			DRAINS:			DRAINS:		
PEGS:	WITH PEGS		PEGS:	WITH PEGS		PEGS:			PEGS:			PEGS:			PEGS:		
MAT'L:	94V-2 [NATURAL]		MAT'L:	94V-0 [NATURAL]		MAT'L:			MAT'L:			MAT'L:			MAT'L:		
PACKAGING:	TUBE (SEE NOTE 13)		PACKAGING:	TUBE (SEE NOTE 13)		PACKAGING:			PACKAGING:			PACKAGING:			PACKAGING:		
	ITEM NO.	CKTS		ITEM NO.	CKTS		ITEM NO.	CKTS		ITEM NO.	CKTS		ITEM NO.	CKTS		ITEM NO.	CKTS
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
	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

* 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

MODIFIED CHART
EC NO: UCP2010-0472 2009/11/11
DRWN: JJAGUILAR 2009/12/01
CH'KD: JBELL
APPR: FSMITH 2009/12/01
DESCRIPTION
G1
REV

QUALITY SYMBOLS
▼=0
▽C=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
SCALE: 1:1
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: ERH DATE:
CHECKED BY: MB DATE:
APPROVED BY: RE DATE:

TITLE: VERTICAL HEADER ASSEMBLY MINI-FIT HCE SERIES

molex MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SDA-44474-****
SHEET NO.: 4 OF 6

SIZE: C

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION