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Part Number: [0015286042](#)
Status: **Active**
Description: 4.20mm (.165") Pitch Mini-Fit BMI™ Header, Dual Row, Vertical, with Snap-in Plastic Peg PCB Lock, 4 Circuits, PA Polyamide Nylon 6/6, UL 94V-0, Select Gold (Au) Plating, without Drain Holes

Documents:

[3D Model](#) [Product Specification PS-5556-002 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

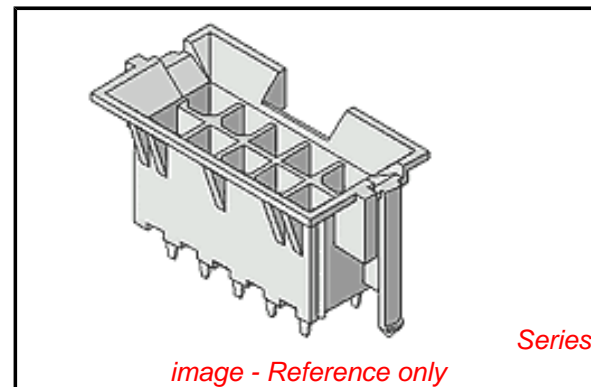
CSA	LR19980
TUV	R72082037
UL	E29179

General

Product Family	PCB Headers
Series	42440
Application	Board-to-Board, Wire-to-Board
Comments	Current = 13A max. per circuit when header is mated to a receptacle loaded with 45750 Mini-Fit Plus HCS™ Crimp Terminal Crimped to to 16 AWG wire. . See Molex product specification PS-45750-001 for additional current de-rating information.. High Temperature, Square Pin, Solder Type
Product Name	Mini-Fit BMI™

Physical

Breakaway	No
Circuits (Loaded)	4
Circuits (maximum)	4
Color - Resin	Natural (White)
Durability (mating cycles max)	30
Flammability	94V-0
Glow-Wire Compliant	No
Lock to Mating Part	Yes
Material - Metal	Brass
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	Nylon
Number of Rows	2
Orientation	Vertical
PC Tail Length (in)	0.140 In
PC Tail Length (mm)	3.56 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)	30
Plating min: Mating (µm)	0.76
Plating min: Termination (µin)	100
Plating min: Termination (µm)	2.50
Polarized to Mating Part	Yes



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

[42440Series](#)

Mates With

[15-06-0041](#) Mini-Fit BMI™ Panel Mount Receptacle, [39-01-3048](#) Mini-Fit Jr.™ Receptacle, [15-24-7043](#) Mini-Fit BMI™ Vertical Receptacle Header

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	13A
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	240

Material Info

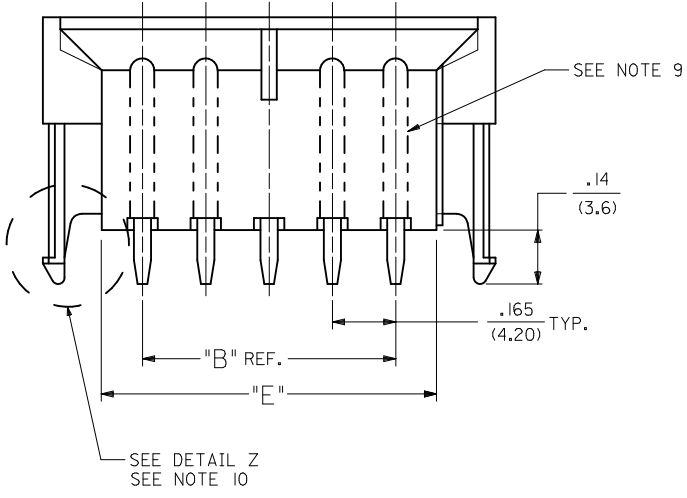
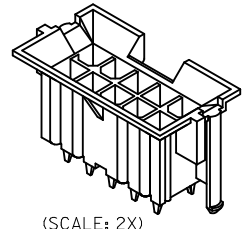
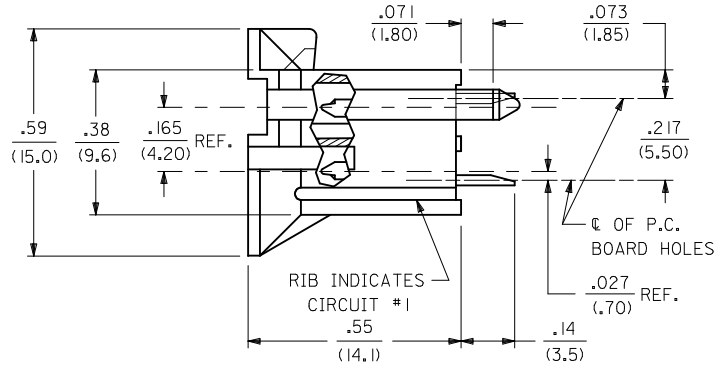
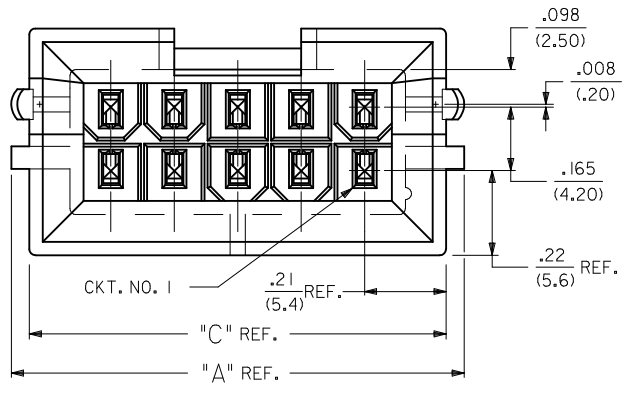
Old Part Number	A-42440-0422
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Reference - Drawing Numbers

Packaging Specification	PK-42440-001
Product Specification	PS-5556-002
Sales Drawing	SDA-42440-****
Test Summary	TS-5556-002

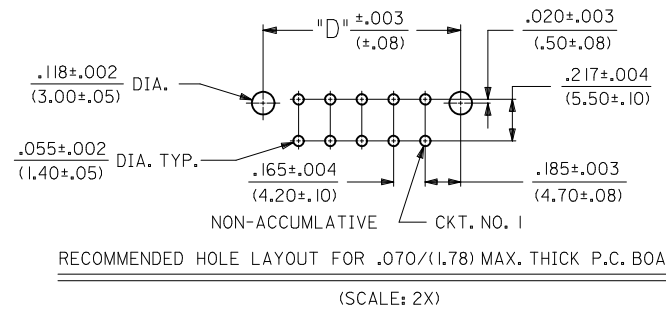
This document was generated on 05/11/2010

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

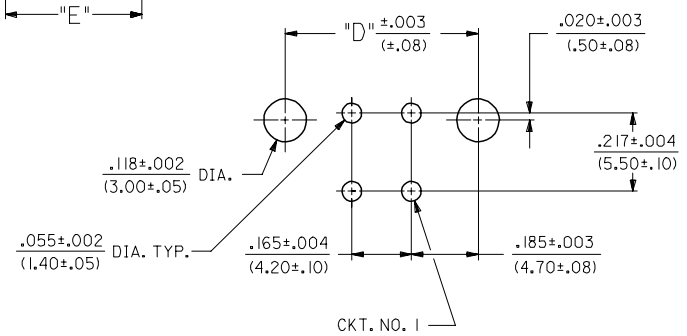
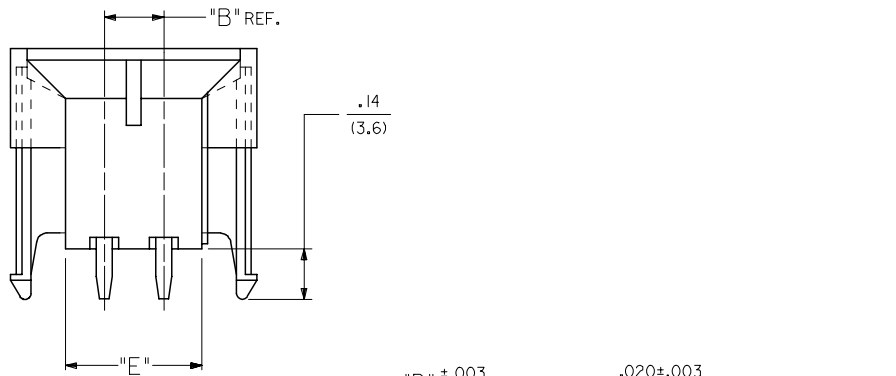
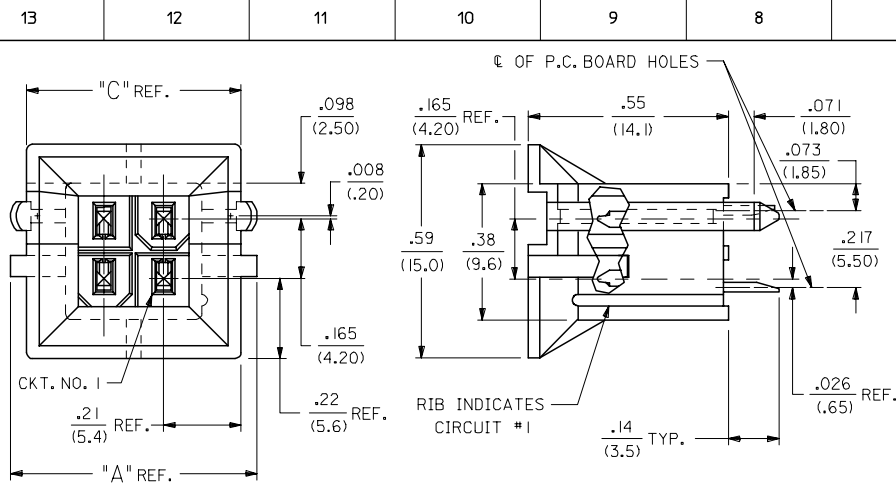
LEGEND:
 A - 42440 - * * * *
 BASE NUMBER — PLATING (SEE NOTE 2.)
 CIRCUIT SIZE (02-24) — HOUSING MAT'L. & OPTIONS (SEE NOTE 1.)



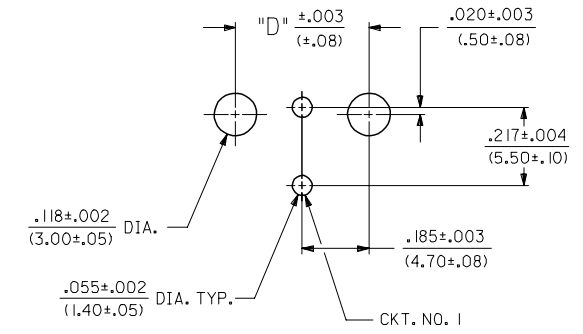
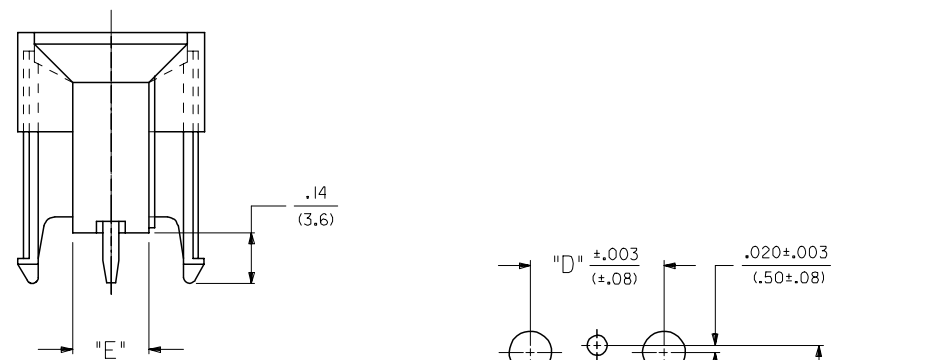
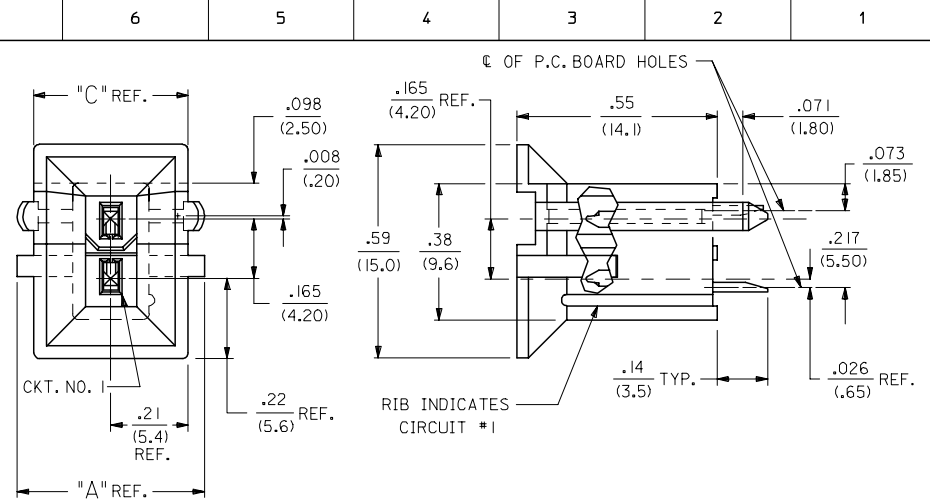
6	Q
5	Q
4	Q
3	P1
2	P
1	Q
SHT	REV

--*22, --*42	42474--*21, 5556-PBGS*P	94V-0	PHOS. BRZ.	GOLD
--*12, --*32	42474--*11, 5556-PBGS*P	94V-2		
--*22, --*42, --*23, --*43	42474--*21, 5556-GS*P	94V-0	BRASS	GOLD
--*12, --*32, --*13, --*33	42474--*11, 5556-GS*P	94V-2		
--*21, --*41	42474--*21, 5556-PBS*P	94V-0	PHOS. BRZ.	TIN
--*11, --*31	42474--*11, 5556-PBS*P	94V-2		
--*21, --*41	42474--*21, 5556-S*P	94V-0	BRASS	TIN
--*11, --*31	42474--*11, 5556-S*P	94V-2		
--*22, --*42	A-42385--*D2, --*D4	94V-0	PHOS. BRZ.	GOLD
--*12, --*32	A-42385--*C2, --*C4	94V-2		
--*22, --*42, --*23, --*43	A-42385--*B2, --*B4	94V-0	BRASS	GOLD
--*12, --*32, --*13, --*33	A-42385--*A2, --*A4	94V-2		
--*21, --*41	A-42385--*D1	94V-0	PHOS. BRZ.	TIN
--*11, --*31	A-42385--*C1	94V-2		
--*21, --*41	A-42385--*B1	94V-0	BRASS	TIN
--*11, --*31	A-42385--*A1	94V-2		
VERT. HEADER A-42440	MATING CONNECTOR	HSG. MAT'L. TERM. MAT'L. PLATING	MATING CONNECTOR FEATURES	

ADDED PART #S EC NO: UCP2010-0472 DRWN: JAGUILAR 2009/11/11 CHKD: BELL 2009/12/01 APPR: FSMITH 2009/12/01	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr><th>mm</th><th>INCH</th></tr> <tr><td>4 PLACES ± ---</td><td>± ---</td></tr> <tr><td>3 PLACES ± ---</td><td>± .010</td></tr> <tr><td>2 PLACES ± 0.25</td><td>± .015</td></tr> <tr><td>1 PLACE ± 0.38</td><td>± ---</td></tr> </table> ANGULAR ± 5°	mm	INCH	4 PLACES ± ---	± ---	3 PLACES ± ---	± .010	2 PLACES ± 0.25	± .015	1 PLACE ± 0.38	± ---	DIMENSION STYLE IN/MM	SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
			mm	INCH												
4 PLACES ± ---	± ---															
3 PLACES ± ---	± .010															
2 PLACES ± 0.25	± .015															
1 PLACE ± 0.38	± ---															
DRAWN BY GEP	DATE 1989/04/06	CHECKED BY RJF	DATE 1989/04/06	APPROVED BY RAS	DATE 1989/04/06	TITLE MINI-FIT B.M.I. VERTICAL HEADER ASSY WITH DRAIN HOLE OPTION MOLEX INCORPORATED										
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE CHART		DOCUMENT NO. SDA-42440-****		SHEET NO. 1 OF 6										
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																



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



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

UPDATED LETTER DIMS EC NO: UCP2007-2152 DRW: NLSCHM10T 2007/03/12 CHKD: ADERR 2007/03/19 APPR: FSM TH 2007/03/19 REV DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	$\nabla=0$ $\nabla=0$	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± .015 1 PLACE ± 0.38 ± --- ANGULAR ± 5 °	IN/MM	4:1	METRIC		
			DRAWN BY DATE	TITLE	MINI-FIT B.M.I. VERTICAL HEADER ASSY WITH DRAIN HOLE OPTION		
			CHECKED BY DATE		MOLEX INCORPORATED		
		APPROVED BY DATE		MATERIAL NO. DOCUMENT NO. SHEET NO.			
				RAS 1989/04/06 SEE SHEET 4 SDA-42440-**** 2 OF 4			
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

NOTES:

- 1) MATERIAL:
 - HOUSING MATERIAL AND OPTIONS:
 - 1 = NYLON 6/6, UL 94V-2, COLOR: NATURAL, WITHOUT DRAIN HOLES
 - 2 = NYLON 6/6, UL 94V-0, COLOR: NATURAL, WITHOUT DRAIN HOLES
 - 3 = NYLON 6/6, UL 94V-2, COLOR: NATURAL, WITH DRAIN HOLES
 - 4 = NYLON 6/6, UL 94V-0, COLOR: NATURAL, WITH DRAIN HOLES
 - TERMINALS: BRASS
- 2) TERMINAL PLATING:
 - S = .000100/(0.00254) MIN. BRIGHT TIN OVER .000050/(0.00127) MIN. NICKEL
 - *GS = .000030/(0.00076) MIN. SELECT GOLD AND .000100/(0.00254) MIN. SELECT MATTE TIN OVER .000050/(0.00127) MIN. NICKEL OVERALL
 - *GS3 = .000050/(0.00127) MIN. SELECT GOLD AND .000100/(0.00254) MIN. SELECT MATTE TIN OVER .000050/(0.00127) MIN. NICKEL OVERALL
 - *THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 200/53/EC"; CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH TIN-LEAD PLATING.
- 3) PRODUCT SPECIFICATION AND PROCESSING PARAMETERS: PS-5556-002
- 4) PACKAGING: SEE CHARTS
- 5) 6-24 CIRCUIT PARTS MATE WITH MINI-FIT JR. RECEPTACLES #5557 AND HEADERS #42385 AND #42474; 2 AND 4 CIRCUIT PARTS MATE WITH 42385 AND 42474 HEADERS ONLY.
- 6) PART ALLOWS FOR UP TO .100/(2.54) MISALIGNMENT WITH MATING RECEPTACLE IN ANY DIRECTION. SEE MATING CONNECTOR DRAWINGS FOR SPECIFIC ALLOWANCES.
- 7) CONNECTOR IS NOT DESIGNED FOR CURRENT SHARING.
- 8) CONNECTOR ASSEMBLIES ARE NOT BE MATED OR UNMATED WHILE CIRCUITS ARE LIVE.
- 9) OPTIONAL RIBS MAY BE FOUND ON PARTS MANUFACTURED AFTER 08/11/1997. RIB LOCATION IS DETERMINED BY MOLD DESIGN FOR MANUFACTURING EASE AND THE LOCATION DOES NOT AFFECT PART FUNCTION OR PERFORMANCE. LOCATION OF RIBS MAY VARY ON PARTS WITHIN MAUFACTURING LOT OR SHIPMENT. THIS DRAWING SHOWS TYPICAL RIB LOCATIONS.
- 10) PARTS MANUFACTURED AFTER 8/15/1997 MAY HAVE REVISED LOCK PEG.
- 11) PART CONFORMS TO CLASS "B" REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

SEE SHEET ONE FC NO: UCP2007-2479 DRAWN:LSCHMIDT 2007/04/04 CHKD:JBELL 2007/04/11 APPR:FSM TH 2007/04/16 P1	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		mm	INCH	DRAWN BY GEP	DATE 1989/04/06	TITLE MINI-FIT B.M.I. VERTICAL HEADER ASSY WITH DRAIN HOLE OPTION				
		4 PLACES ±---	±---	CHECKED BY RJF	DATE 1989/04/06	MATERIAL NO. SDA-42440-****				
		3 PLACES ±---	±---	APPROVED BY RAS	DATE 1989/04/06	DOCUMENT NO. 3 OF 6				
2 PLACES ±---	±---	ANGULAR ±---°		SIZE C		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
1 PLACE ±---	±---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS								

	13		12		11		10		9		8		7		6		5		4		3		2		1
J	PLATING:	50 M.I. SELECT GOLD (SEE NOTE 2 OPTION *GS3*)				PLATING:	50 M.I. SELECT GOLD (SEE NOTE 2 OPTION *GS3*)				PLATING:					PLATING:									
	DRAINS:	WITHOUT DRAIN HOLES				DRAINS:	WITHOUT DRAIN HOLES				DRAINS:					DRAINS:									
	PEGS:	WITH PEGS				PEGS:	WITH PEGS				PEGS:					PEGS:									
	MAT'L:	94V-2 [NATURAL]				MAT'L:	94V-0 [NATURAL]				MAT'L:					MAT'L:									
	PACKAGING:	TRAY PER PK-42440-001				PACKAGING:	TRAY PER PK-42440-001				PACKAGING:					PACKAGING:									
I	PART NO.	ENG NO.			CKTS	PART NO.	ENG NO.			CKTS	PART NO.	ENG NO.			CKTS	PART NO.	ENG NO.			CKTS					
	NO EDP	A-42440-0213	-		2	NO EDP	A-42440-0223	-		2	NO EDP	-	-		2	NO EDP	-	-		2					
	NO EDP	A-42440-0413	-		4	NO EDP	A-42440-0423	-		4	NO EDP	-	-		4	NO EDP	-	-		4					
	NO EDP	A-42440-0613	-		6	NO EDP	A-42440-0623	-		6	NO EDP	-	-		6	NO EDP	-	-		6					
	NO EDP	A-42440-0813	-		8	NO EDP	A-42440-0823	-		8	NO EDP	-	-		8	NO EDP	-	-		8					
	NO EDP	A-42440-1013	-		10	NO EDP	A-42440-1023	-		10	NO EDP	-	-		10	NO EDP	-	-		10					
	NO EDP	A-42440-1213	-		12	NO EDP	A-42440-1223	-		12	NO EDP	-	-		12	NO EDP	-	-		12					
	NO EDP	A-42440-1413	-		14	NO EDP	A-42440-1423	-		14	NO EDP	-	-		14	NO EDP	-	-		14					
	NO EDP	A-42440-1613	-		16	NO EDP	A-42440-1623	-		16	NO EDP	-	-		16	NO EDP	-	-		16					
	NO EDP	A-42440-1813	-		18	NO EDP	A-42440-1823	-		18	NO EDP	-	-		18	NO EDP	-	-		18					
	NO EDP	A-42440-2013	-		20	NO EDP	A-42440-2023	-		20	NO EDP	-	-		20	NO EDP	-	-		20					
	NO EDP	A-42440-2213	-		22	NO EDP	A-42440-2223	-		22	NO EDP	-	-		22	NO EDP	-	-		22					
	NO EDP	A-42440-2413	-		24	NO EDP	A-42440-2423	-		24	NO EDP	-	-		24	NO EDP	-	-		24					
		-	-				-	-				-	-				-	-				-	-		

G	PLATING:	TIN (SEE NOTE 2 OPTION *S')				PLATING:	TIN (SEE NOTE 2 OPTION *S')				PLATING:	30 M.I. SELECT GOLD (SEE NOTE 2 OPTION *GS')				PLATING:	30 M.I. SELECT GOLD (SEE NOTE 2 OPTION *GS')			
	DRAINS:	WITHOUT DRAIN HOLES				DRAINS:	WITHOUT DRAIN HOLES				DRAINS:	WITHOUT DRAIN HOLES				DRAINS:	WITHOUT 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:	TUBE PER PK-40873-0151				PACKAGING:	TUBE PER PK-40873-0151				PACKAGING:	TUBE PER PK-40873-0151				PACKAGING:	TUBE PER PK-40873-0151			
F	ITEM NO.				CKTS	ITEM NO.				CKTS	ITEM NO.				CKTS	ITEM NO.				CKTS
	-				2	-				2	-				2	-				2
	42440-3002				4	42440-3014				4	42440-3026				4	42440-3038				4
	42440-3003				6	-				6	42440-3027				6	-				6
	-				8	-				8	-				8	-				8
	42440-3005				10	42440-3017				10	42440-3029				10	42440-3041				10
	-				12	-				12	-				12	-				12
	42440-3007				14	42440-3019				14	42440-3031				14	42440-3043				14
	-				16	-				16	-				16	-				16
	42440-3009				18	42440-3021				18	42440-3033				18	42440-3045				18
	-				20	-				20	-				20	-				20
	-				22	-				22	-				22	-				22
	42440-3012				24	42440-3024				24	42440-3036				24	42440-3048				24

SEE SHEET 1 EC NO: UCP2010-0472 DRWN: JAGUILAR 2009/11/11 CHKD: J.BELL 2009/12/01 APPR: F.S.MITH 2009/12/01	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	▽=0 ▽=0	mm INCH	IN/MM	1:1	METRIC		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± ---	DRAWN BY DATE ERH 2000/02/23	TITLE MINI-FIT B.M.I. VERTICAL HEADER ASSY WITH DRAIN HOLE OPTION			
		ANGULAR ±1/2°	CHECKED BY DATE MB 2000/02/23	MOLEX INCORPORATED			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	APPROVED BY DATE RE 2000/02/23	MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
			SEE CHART		SDA-42440-****	5 OF 6	
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

