

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

**Part Number:** [0015246041](#)  
**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-2, Tin (Sn) Plating, without Drain Holes

**Documents:**

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

**Agency Certification**

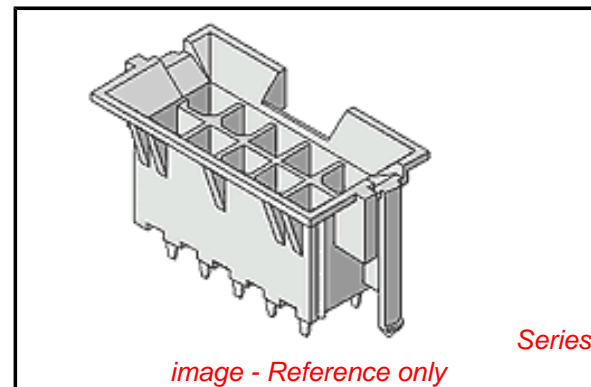
CSA	LR19980
TUV	R72082037
UL	E29179

**General**

Product Family	PCB Headers
Series	<a href="#">42440</a>
Application	Board-to-Board, Wire-to-Board
Comments	Current = 13A max. per circuit when header is mated to a receptacle loaded with <a href="#">45750</a> 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
Durability (mating cycles max)	30
Flammability	94V-2
Glow-Wire Compliant	No
Guide to Mating Part	Yes
Lock to Mating Part	Yes
Material - Metal	Brass
Material - Plating Mating	Tin
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)	100
Plating min: Mating (µm)	2.50
Plating min: Termination (µin)	100
Plating min: Termination (µm)	2.50



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**Halogen-Free Status**

**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**

[42440Series](#)

**Mates With**

[15-06-0040](#) Mini-Fit BMI™ Panel Mount Receptacle, [15-24-7040](#) Mini-Fit BMI™ Vertical Receptacle Header, [39-01-3042](#) Mini-Fit Jr.™ Receptacle

Polarized to Mating Part	Yes
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**

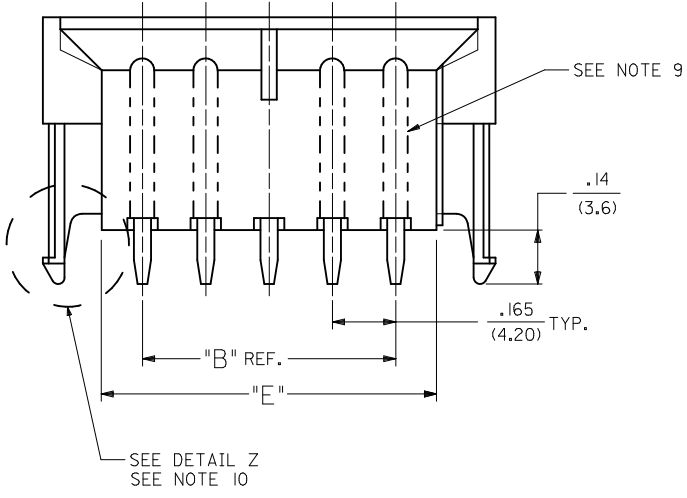
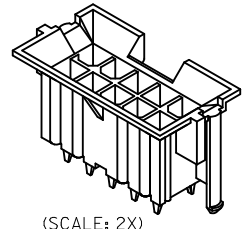
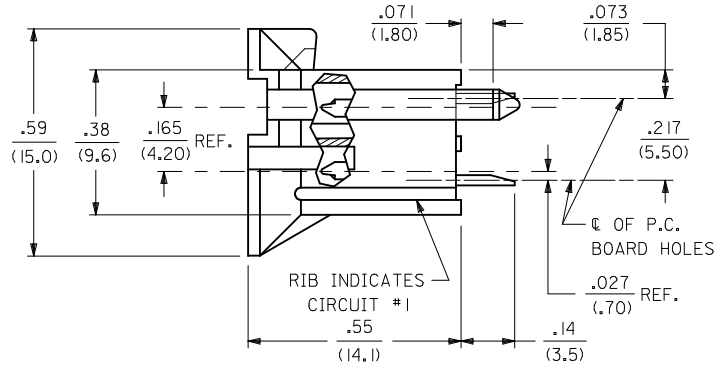
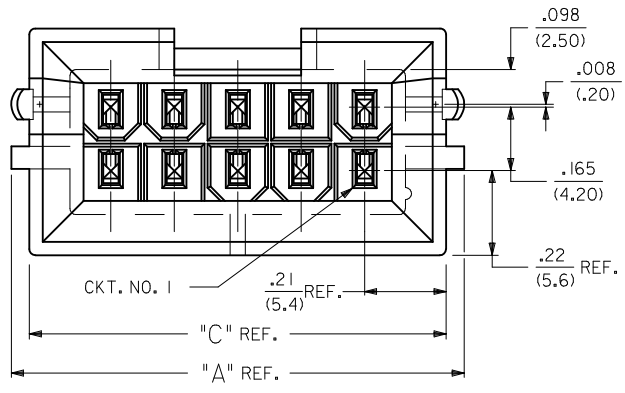
Old Part Number	A-42440-0411
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**Reference - Drawing Numbers**

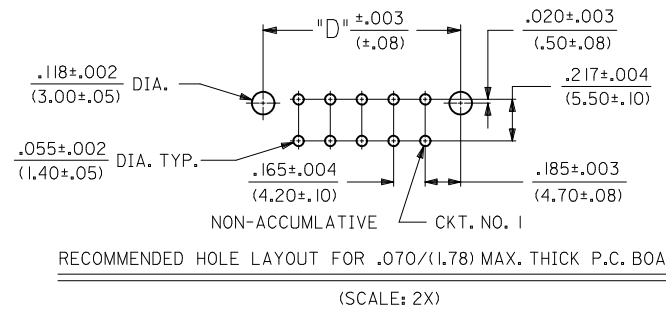
Packaging Specification	PK-42440-001
Product Specification	PS-5556-002
Sales Drawing	SDA-42440-****
Test Summary	TS-5556-002

This document was generated on 05/11/2010

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**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)  

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

 ANGULAR ± 5 °

DRAFT WHERE APPLICABLE  
 MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE  
 IN/MM

SCALE  
 1:1

DESIGN UNITS  
 METRIC

THIRD ANGLE PROJECTION

DRAWN BY  
 GEP

DATE  
 1989/04/06

CHECKED BY  
 R/JF

DATE  
 1989/04/06

APPROVED BY  
 RAS

DATE  
 1989/04/06

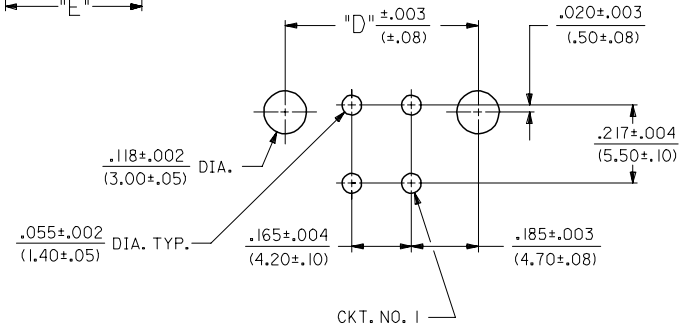
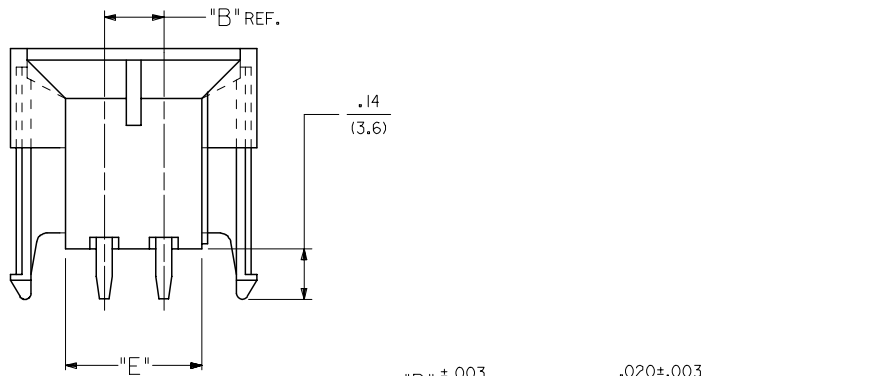
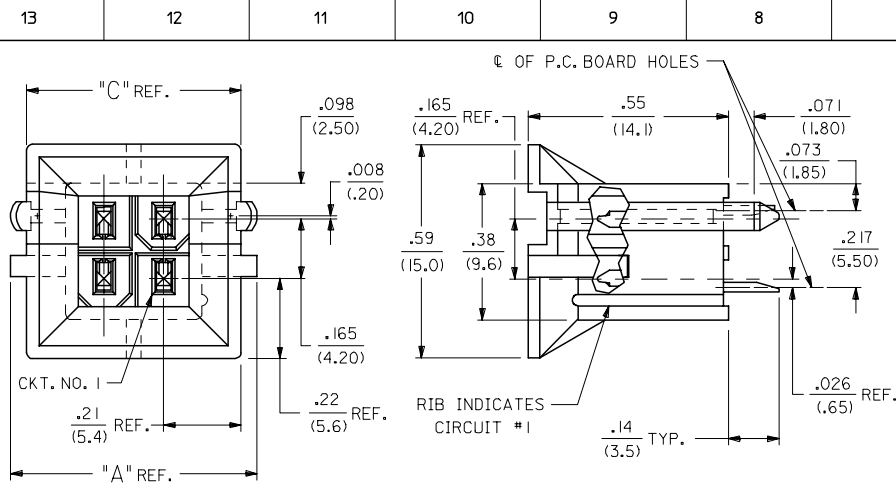
TITLE  
 MINI-FIT B.M.I.  
 VERTICAL HEADER ASSY  
 WITH DRAIN HOLE OPTION

MATERIAL NO.  
 SEE CHART

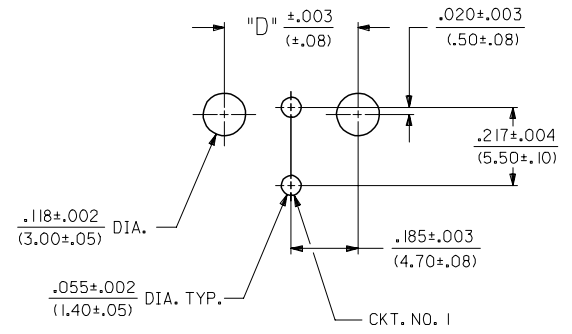
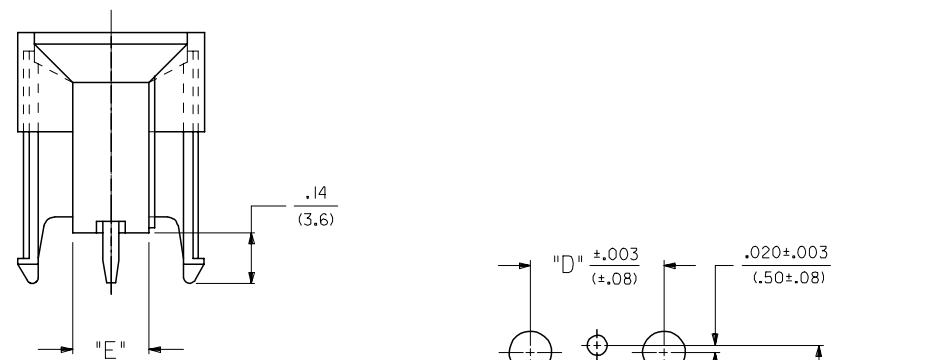
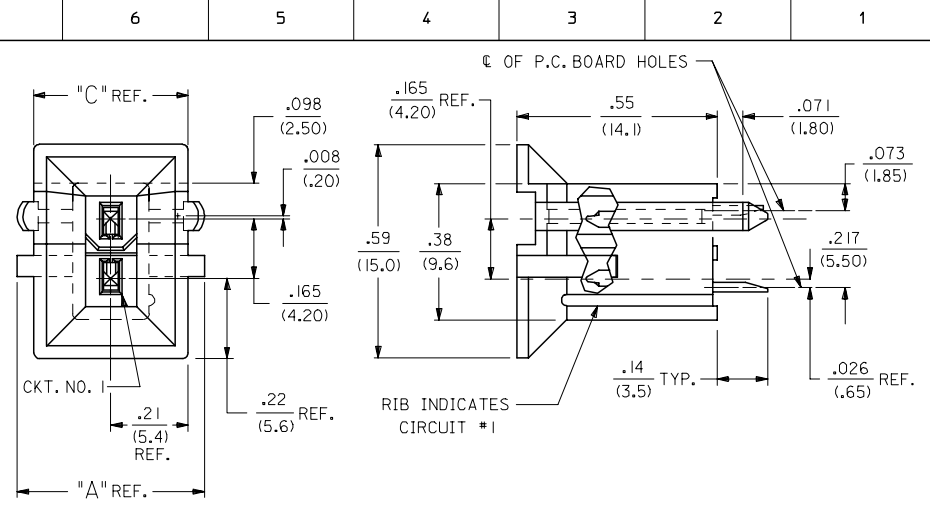
DOCUMENT NO.  
 SDA-42440-\*\*\*\*

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: NLSCHMIDT 2007/03/12 CHKD: ADERR 2007/03/19 APPR: FSM TH 2007/03/19 REV:	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	
	DESCRIPTION	MATERIAL	DRAWN BY	DATE	TITLE	MINI-FIT B.M.I. VERTICAL HEADER ASSY WITH DRAIN HOLE OPTION MOLEX INCORPORATED
			GEP	1989/04/06		
		CHECKED BY	DATE		DOCUMENT NO.	SHEET NO.
		RJF	1989/04/06		SDA-42440-****	2 OF 4
		APPROVED BY	DATE			
		RAS	1989/04/06			
		MATERIAL NO.				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE SHEET 4			

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	MOLEX INCORPORATED MATERIAL NO. SDA-42440-**** DOCUMENT NO. SHEET NO. 3 OF 6			
		3 PLACES ±---	±---	±---	APPROVED BY RAS	DATE 1989/04/06				
2 PLACES ±---	±---	±---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
1 PLACE ±---	±---	±---			SIZE C					

	13	12	11	10	9	8	7	6	5	4	3	2	1			
J	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: TRAY PER PK-42440-001				PACKAGING: TRAY PER PK-42440-001				PACKAGING: TRAY PER PK-42440-001				PACKAGING: TRAY PER PK-42440-001			
I	PART NO.	ENG NO.		CKTS	PART NO.	ENG NO.		CKTS	PART NO.	ENG NO.		CKTS	PART NO.	ENG NO.		CKTS
	NO EDP	A-42440-021I	-	2	NO EDP	A-42440-022I	-	2	NO EDP	A-42440-0212	-	2	NO EDP	A-42440-0222	-	2
	15-24-6041	A-42440-041I	-	4	15-24-6042	A-42440-042I	-	4	15-28-6041	A-42440-0412	-	4	15-28-6042	A-42440-0422	-	4
	15-24-6061	A-42440-061I	-	6	NO EDP	A-42440-062I	-	6	15-28-6061	A-42440-0612	-	6	NO EDP	A-42440-0622	-	6
	NO EDP	A-42440-081I	-	8	NO EDP	A-42440-082I	-	8	NO EDP	A-42440-0812	-	8	NO EDP	A-42440-0822	-	8
	15-24-6101	A-42440-101I	-	10	15-24-6102	A-42440-102I	-	10	15-28-6101	A-42440-1012	-	10	15-28-6102	A-42440-1022	-	10
	15-24-6121	A-42440-121I	NOT TOOLED	12	15-24-6122	A-42440-122I	NOT TOOLED	12	15-28-6121	A-42440-1212	NOT TOOLED	12	15-28-6122	A-42440-1222	NOT TOOLED	12
	15-24-6141	A-42440-141I	-	14	15-24-6142	A-42440-142I	-	14	15-28-6141	A-42440-1412	-	14	15-28-6142	A-42440-1422	-	14
	15-24-6161	A-42440-161I	-	16	15-24-6162	A-42440-162I	-	16	15-28-6161	A-42440-1612	-	16	NO EDP	A-42440-1622	-	16
H	15-24-6181	A-42440-181I	-	18	15-24-6182	A-42440-182I	-	18	15-28-6181	A-42440-1812	-	18	15-28-6182	A-42440-1822	-	18
	NO EDP	A-42440-201I	-	20	NO EDP	A-42440-202I	-	20	NO EDP	A-42440-2012	-	20	NO EDP	A-42440-2022	-	20
	NO EDP	A-42440-221I	-	22	NO EDP	A-42440-222I	-	22	NO EDP	A-42440-2212	-	22	NO EDP	A-42440-2222	-	22
	15-24-6241	A-42440-241I	-	24	15-24-6242	A-42440-242I	-	24	15-28-6241	A-42440-2412	-	24	15-28-6242	A-42440-2422	-	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: WITH DRAIN HOLES				DRAINS: WITH 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: TRAY PER PK-42440-001				PACKAGING: TRAY PER PK-42440-001				PACKAGING: TRAY PER PK-42440-001				PACKAGING: TRAY PER PK-42440-001			
F	PART NO.	ENG NO.		CKTS	PART NO.	ENG NO.		CKTS	PART NO.	ENG NO.		CKTS	PART NO.	ENG NO.		CKTS
	NO EDP	A-42440-023I	-	2	NO EDP	A-42440-024I	-	2	NO EDP	A-42440-0232	-	2	NO EDP	A-42440-0242	-	2
	15-24-6046	A-42440-043I	-	4	15-24-6047	A-42440-044I	-	4	15-28-6046	A-42440-0432	-	4	15-28-6047	A-42440-0442	-	4
	NO EDP	A-42440-063I	-	6	NO EDP	A-42440-064I	-	6	NO EDP	A-42440-0632	-	6	NO EDP	A-42440-0642	-	6
	NO EDP	A-42440-083I	-	8	NO EDP	A-42440-084I	-	8	NO EDP	A-42440-0832	-	8	NO EDP	A-42440-0842	-	8
	15-24-6106	A-42440-103I	-	10	15-24-6107	A-42440-104I	-	10	15-28-6106	A-42440-1032	-	10	15-28-6107	A-42440-1042	-	10
E	NO EDP	A-42440-123I	-	12	NO EDP	A-42440-124I	-	12	NO EDP	A-42440-1232	-	12	NO EDP	A-42440-1242	-	12
	15-24-6146	A-42440-143I	-	14	15-24-6147	A-42440-144I	-	14	15-28-6146	A-42440-1432	-	14	15-28-6147	A-42440-1442	-	14
	NO EDP	A-42440-163I	-	16	NO EDP	A-42440-164I	-	16	NO EDP	A-42440-1632	-	16	NO EDP	A-42440-1642	-	16
	15-24-6186	A-42440-183I	-	18	15-24-6187	A-42440-184I	-	18	15-28-6186	A-42440-1832	-	18	15-28-6187	A-42440-1842	-	18
	NO EDP	A-42440-203I	-	20	NO EDP	A-42440-204I	-	20	NO EDP	A-42440-2032	-	20	NO EDP	A-42440-2042	-	20
	NO EDP	A-42440-223I	-	22	NO EDP	A-42440-224I	-	22	NO EDP	A-42440-2232	-	22	NO EDP	A-42440-2242	-	22
	15-24-6246	A-42440-243I	-	24	15-24-6247	A-42440-244I	-	24	15-28-6246	A-42440-2432	-	24	15-28-6247	A-42440-2442	-	24
D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SEE SHEET 1 EC NO: UCP2010-0472 DRWN: JAGUILAR 2009/11/11 CHKD: JELL 2009/12/01 APPR: FSMITH 2009/12/01	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE IN/MM	SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		4 PLACES ± --- INCH	DRAWN BY GEP	DATE 1995/03/03	TITLE MINI-FIT B.M.I. VERTICAL HEADER ASSY WITH DRAIN HOLE OPTION	
		3 PLACES ± --- INCH	CHECKED BY RJF	DATE 1995/03/03	MOLEX INCORPORATED	
		2 PLACES ± --- INCH	APPROVED BY RJF	DATE 1995/03/03	DOCUMENT NO. SDA-42440-****	
		1 PLACE ± --- INCH	MATERIAL NO. SEE CHART		SHEET NO. 4 OF 6	
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				