

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

**Part Number:** [0015246063](#)  
**Status:** **Active**  
**Description:** 4.20mm (.165") Pitch Mini-Fit BMI™ Header, Dual Row, Right Angle, with Snap-in Plastic Peg PCB Lock, 6 Circuits, PA Polyamide Nylon 6/6, UL 94V-0, with Select Gold (Au) Plating

**Documents:**

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

**Agency Certification**

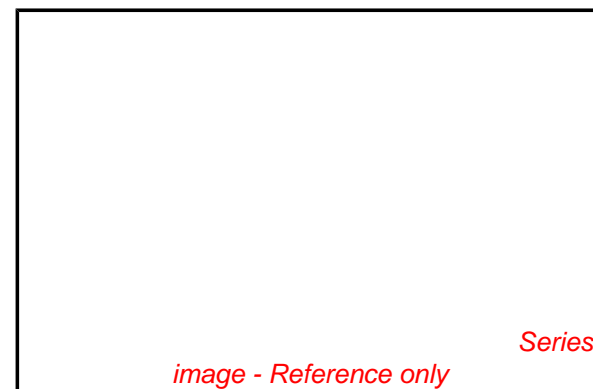
CSA LR19980  
 UL E29179

**General**

Product Family PCB Headers  
 Series [42404](#)  
 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.  
 Product Name Mini-Fit BMI™

**Physical**

Breakaway No  
 Circuits (Loaded) 6  
 Circuits (maximum) 6  
 Color - Resin Natural (White)  
 Durability (mating cycles max) 30  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Guide to Mating Part Yes  
 Lock to Mating Part Yes  
 Material - Metal Brass  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin Nylon  
 Number of Rows 2  
 Orientation Right Angle  
 PC Tail Length (in) 0.130 In  
 PC Tail Length (mm) 3.30 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  
 Polarized to PCB Yes



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC**  
 Not Reviewed  
**Halogen-Free Status**

**China RoHS**



**Halogen-Free**

**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**

[42404Series](#)

**Mates With**

[15-06-0061](#) Mini-Fit BMI™ Panel Mount Receptacle, [39-01-2065](#) Mini-Fit Jr.™ Receptacle, [15-24-7063](#) Mini-Fit BMI™ Vertical Receptacle Header

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	42404-06B5
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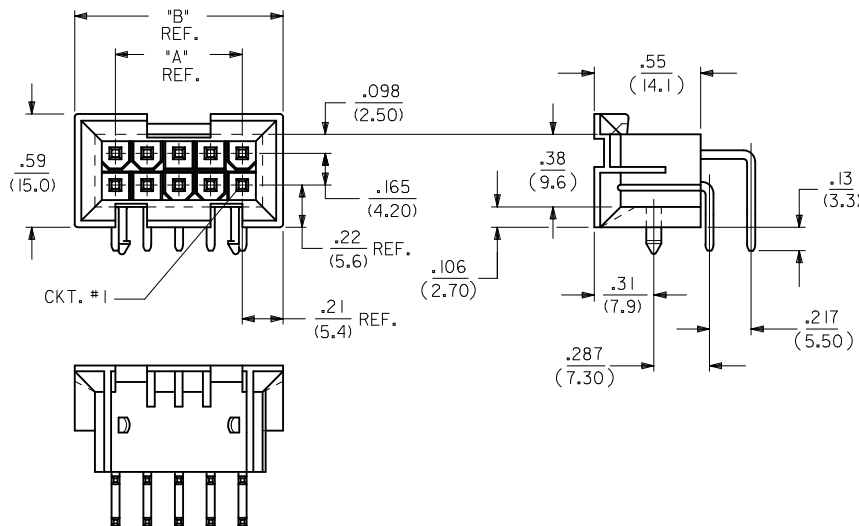
**Reference - Drawing Numbers**

Packaging Specification	PK-42404-002
Product Specification	PS-5556-002
Sales Drawing	SDA-42404-****
Test Summary	TS-5556-002

This document was generated on 05/11/2010

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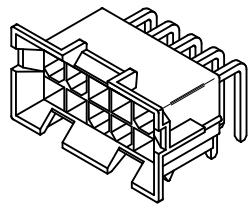
CIRCUIT SIZE	DIM. "A"	DIM. "B"
6	.331 (8.40)	.76 (19.2)
8	.496 (12.60)	.92 (23.4)
10	.661 (16.80)	1.09 (27.6)
12	.827 (21.00)	1.25 (31.8)
14	.992 (25.20)	1.42 (36.0)
16	1.157 (29.40)	1.58 (40.2)
18	1.323 (33.60)	1.75 (44.4)
20	1.488 (37.80)	1.91 (48.6)
22	1.654 (42.00)	2.08 (52.8)
24	1.819 (46.20)	2.24 (57.0)



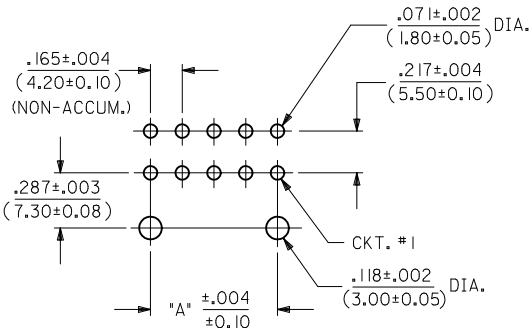
**NOTES:**

- MATERIAL: HOUSING: "A" = NYLON 6/6, U.L. 94V-2, COLOR: NATURAL. "B" = NYLON 6/6, U.L. 94V-0, COLOR: NATURAL. TERMINAL: BRASS ALLOY 260.
- TERMINAL PLATING:
  - .000100/(.00254) MIN. BRIGHT TIN OVER .000050/(.00127) MIN. NICKEL OVERALL.
  - .000030/(.00076) MIN. GOLD OVER .000050/(.00127) MIN. NICKEL OVERALL.
  - \*3 = .000100/(.00254) MIN. MATTE TIN OVER .000050/(.00127) MIN. NICKEL OVERALL.
  - 5 = .000030/(.00076) MIN. GOLD AND .000100/(.00254) MIN. MATTE TIN OVER .000050/(.00127) MIN. NICKEL OVERALL.

\*THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC." CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH TIN-LEAD PLATING.
- PRODUCT SPECIFICATION AND PROCESSING PARAMETERS: SEE PS-5556-002
- PACKAGING SPECIFICATION: PK-42404-002.
- 4-24 CKT. PARTS MATE WITH MINI-FIT JR. RECEPTACLES #5557, #42385 AND #42474. 2 CKT. PART MATES WITH #42385 AND #42474 ONLY.
- PART ALLOWS FOR UP TO .100/(2.54) MISALIGNMENT WITH MATING RECEPTACLE IN ANY DIRECTION. SEE MATING CONNECTOR DRAWINGS FOR SPECIFIC ALLOWANCES.
- CONNECTOR ASSEMBLIES ARE NOT TO BE MATED OR UNMATED WHILE CIRCUITS ARE LIVE.
- A MAXIMUM TOLERANCE OF .050/(1.27) ALLOWS FOR 2 POINTS OF ELECTRICAL CONTACT. A MAXIMUM TOLERANCE OF .020/(.51) ALLOWS FOR 4 POINTS OF CONTACT.
- DISCOLORATION IN THE BANDOLIER CARRIER AREA OF THE PIN IS INHERENT TO THE PLATING PROCESS AND IS DUE TO THE MASKING EFFECT OF THE CARRIER. THIS DISCOLORATION IS IN A NON-FUNCTIONAL AREA OF THE PIN AND WILL NOT AFFECT THE PERFORMANCE OF THE HEADER ASSEMBLY.
- PART IS NOT DESIGNED FOR CURRENT SHARING.
- PART IS NOT INTENDED TO PROVIDE ANY ALIGNMENT OF CUSTOMER COMPONENTS OR MODULES, SUCH AS POWER SUPPLIES AND CHASSIS.
- PARTS CONFORM TO CLASS 'B' REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.\*

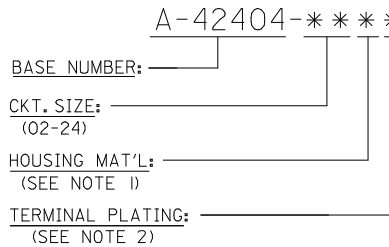


A-42404-\*\*\*\*



RECOMMENDED HOLE LAYOUT FOR .070/(1.78) MAX. THICK P.C. BOARD VIEWED FROM COMPONENT SIDE

**LEGEND:**



CKT. SIZE	HOUSING MAT'L	TERMINAL MAT'L	PLATING
2-4	BRASS	PHOS. BRZ.	GOLD
2-4	BRASS	PHOS. BRZ.	TIN
2-4	BRASS	BRASS	GOLD
2-4	BRASS	BRASS	TIN
2-4	BRASS	PHOS. BRZ.	GOLD
2-4	BRASS	PHOS. BRZ.	TIN
2-4	BRASS	BRASS	GOLD
2-4	BRASS	BRASS	TIN

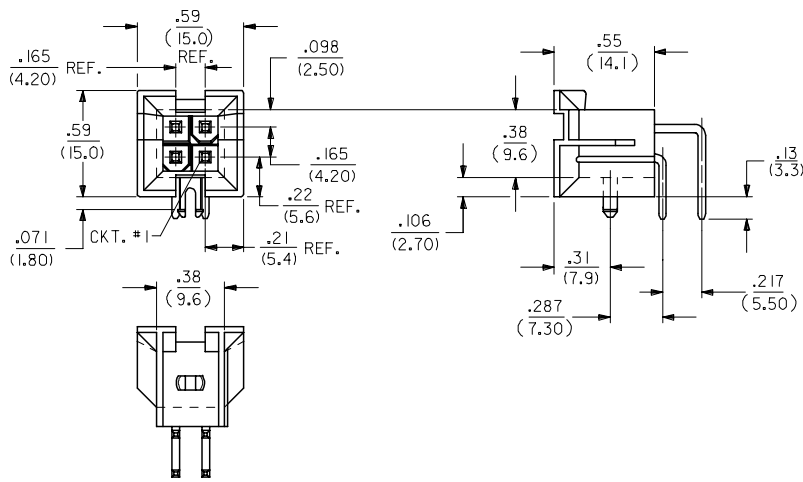
DESCRIPTION	REVISION
R.A. HEADER	R2
MATING CONNECTOR	
HSG. MAT'L, TERM. MAT'L, PLATING	
MATING CONNECTOR FEATURES	

<b>REVISE NOTES</b> EC NO: UCP2010-0864 DRWN: JAGUILAR 2010/01/18 CHKD: JEBEL 2010/01/06 APPR: FSMITH 2010/03/16 DESCRIPTION REV	<b>QUALITY SYMBOLS</b> ▽=0 ▽=0	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b>		<b>DIMENSION STYLE</b> IN/MM		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		mm      INCH		DRAWN BY RWK	DATE 2/7/89	TITLE MINI-FIT JR. 2-24 CKT RIGHT ANGLE HEADER ASSY (BLIND MATE)			
		4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± .015 1 PLACE ± 0.38 ± ---		CHECKED BY RJF	DATE 2/7/89	MOLEX MOLEX INCORPORATED			
		ANGULAR ± 1/2°		APPROVED BY FSMITH	DATE 2010/03/16	MATERIAL NO. SEE SHTS 3&4		DOCUMENT NO. SDA-42404-****	SHEET NO. 1 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	

13 12 11 10 9 8 7 6 5 4 3 2 1

J  
I  
H  
G  
F  
E  
D  
C  
B  
A

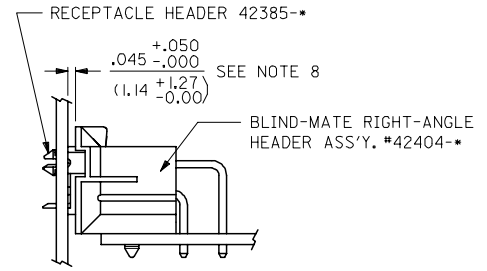
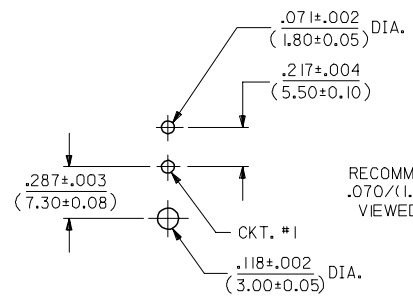
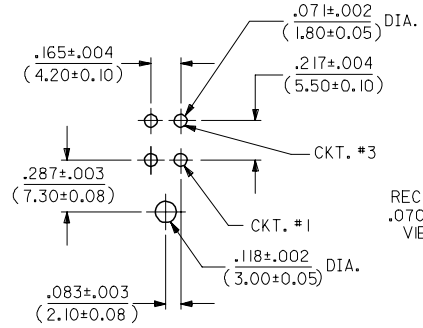
J  
I  
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G  
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D  
C  
B  
A



A-42404-04\*\*



A-42404-02\*\*



SEE SHEET 1 FC NO: UCP2006-1780 DRW:ADRAINOL 2006/02/03 CHKD:GPOLGAR 2006/02/03 APPR:ICOMERCJ 2006/02/06 REV:	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) 4 PLACES ± --- ± --- 3 PLACES ± --- ± .01 2 PLACES ± 0.25 ± .015 1 PLACE ± 0.38 ± --- ANGULAR ±1/2°	DIMENSION STYLE IN/MM DRAWN BY DATE RWK 1989/02/07 CHECKED BY DATE RJF 1989/02/07 APPROVED BY DATE RAS 1989/02/07 MATERIAL NO. DOCUMENT NO.	SCALE 2:1 DESIGN UNITS METRIC THIRD ANGLE PROJECTION	TITLE MINI-FIT JR. 2-24 CKT RIGHT ANGLE HEADER ASSY (BLIND MATE)	SHEET NO. 2 OF 4
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE SHTS 3&4 SDA-42404-****	MOLEX INCORPORATED	
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
	MOLEX INCORPORATED					

12 11 10 9 8 7 6 5 4 3 2 1

J	I	H	G	F	E	D	C	B	A			
13	12	11	10	9	8	7	6	5	4	3	2	1
PLATING (NOTE 5)	HOUSING MATERIAL	CKT. SIZE	ENG. NUMBER	PART NUMBER	NOT TOOLED	ENG. NUMBER	PART NUMBER	PLATING (NOTE 5)	HOUSING MATERIAL	CKT. SIZE	ENG. NUMBER	PART NUMBER
SELECT GOLD OVER NICKEL	94V-0	02	A-42404-02B5	NOT TOOLED	A-42404-02A5	02	NOT TOOLED	SELECT GOLD OVER NICKEL	94V-2	02	A-42404-02A5	NOT TOOLED
		04	A-42404-04B5	15-24-6043	A-42404-04A5	04	15-24-9047			04	A-42404-04A5	15-24-9047
		06	A-42404-06B5	15-24-6063	A-42404-06A5	06	15-24-9067			06	A-42404-06A5	15-24-9067
		08	A-42404-08B5	NOT TOOLED	A-42404-08A5	08	NOT TOOLED			08	A-42404-08A5	NOT TOOLED
		10	A-42404-10B5	15-24-6103	A-42404-10A5	10	15-24-9107			10	A-42404-10A5	15-24-9107
		12	A-42404-12B5	NOT TOOLED	A-42404-12A5	12	NOT TOOLED			12	A-42404-12A5	NOT TOOLED
		14	A-42404-14B5	15-24-6143	A-42404-14A5	14	15-24-9147			14	A-42404-14A5	15-24-9147
		16	A-42404-16B5	15-24-6163	A-42404-16A5	16	NOT TOOLED			16	A-42404-16A5	NOT TOOLED
		18	A-42404-18B5	15-24-6183	A-42404-18A5	18	15-24-9187			18	A-42404-18A5	15-24-9187
		20	A-42404-20B5	NOT TOOLED	A-42404-20A5	20	NOT TOOLED			20	A-42404-20A5	NOT TOOLED
		22	A-42404-22B5	NOT TOOLED	A-42404-22A5	22	NOT TOOLED			22	A-42404-22A5	NOT TOOLED
SELECT GOLD OVER NICKEL	94V-0	24	A-42404-24B5	15-24-6243	A-42404-24A5	24	15-24-9247	SELECT GOLD OVER NICKEL	94V-2	24	A-42404-24A5	15-24-9247
		02				02				02		
		04				04				04		
		06				06				06		
		08				08				08		
		10				10				10		
		12				12				12		
		14				14				14		
		16				16				16		
		18				18				18		
		20				20				20		
		22				22				22		
		24				24				24		
		02				02				02		
		04				04				04		
		06				06				06		
		08				08				08		
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		16				16				16		
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		20				20				20		
		22				22				22		
		24				24				24		
		02				02				02		
		04				04				04		
		06				06				06		
		08				08				08		
		10				10				10		
		12				12				12		
		14				14				14		
		16				16				16		
		18				18				18		
		20				20				20		
		22				22				22		
		24				24				24		

**SEE SHEET 1**  
 FC NO: UCP2006-1780  
 DRAWN: AD RATNOL 2006/02/03  
 CHKD: GPOLGAR 2006/02/03  
 APPR: JCOMERCI 2006/02/06  
 REV DESCRIPTION

**QUALITY SYMBOLS**  
  
**GENERAL TOLERANCES (UNLESS SPECIFIED)**  

	mm	INCH
4 PLACES	± .005	± .0002
3 PLACES	± .008	± .0003
2 PLACES	± .015	± .0005
1 PLACE	± .030	± .0010

 ANGULAR ±1/2°  
**DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS**

**DIMENSION STYLE**  
 IN/MM  
 DRAWN BY: AD RATNOL DATE: 2006/02/03  
 CHECKED BY: GPOLGAR DATE: 2006/02/03  
 APPROVED BY: JCOMERCI DATE: 2006/02/06  
 MATERIAL NO.

**SCALE**  
 ---  
**DESIGN UNITS**  
 METRIC  
**THIRD ANGLE PROJECTION**  
**TITLE**  
 MINI-FIT JR. 2-24 CKT  
 RIGHT ANGLE HEADER ASSY  
 (BLIND MATE)  
**molex MOLEX INCORPORATED**  
 DOCUMENT NO. SDA-42404-\*\*\*\*  
 SHEET NO. 4 OF 4  
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