

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

**Part Number:** [0015249187](#)  
**Status:** **Active**  
**Description:** 4.20mm (.165") Pitch Mini-Fit BMI™ Header, Dual Row, Right Angle, with Snap-in Plastic Peg PCB Lock, 18 Circuits, PA Polyamide Nylon 6/6, UL 94V-2, with Select Gold (Au) Plating

**Documents:**

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

**Agency Certification**

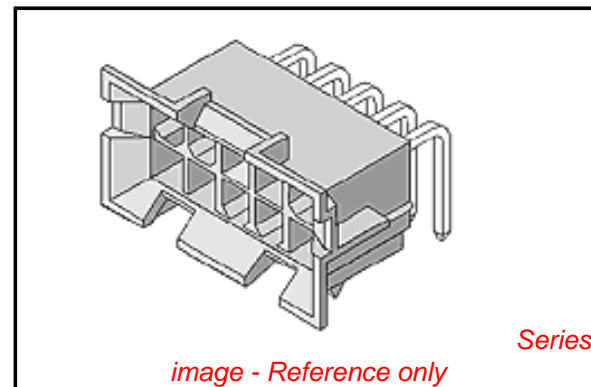
CSA LR19980  
 UL E29179

**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) 18  
 Circuits (maximum) 18  
 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 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**  
**Not Reviewed**

**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**

[42404Series](#)

**Mates With**

[15-06-0180](#) Mini-Fit BMI™ Panel Mount Receptacle, [39-01-2180](#) Mini-Fit Jr.™ Receptacle, [15-24-7182](#) 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	42404-18A5
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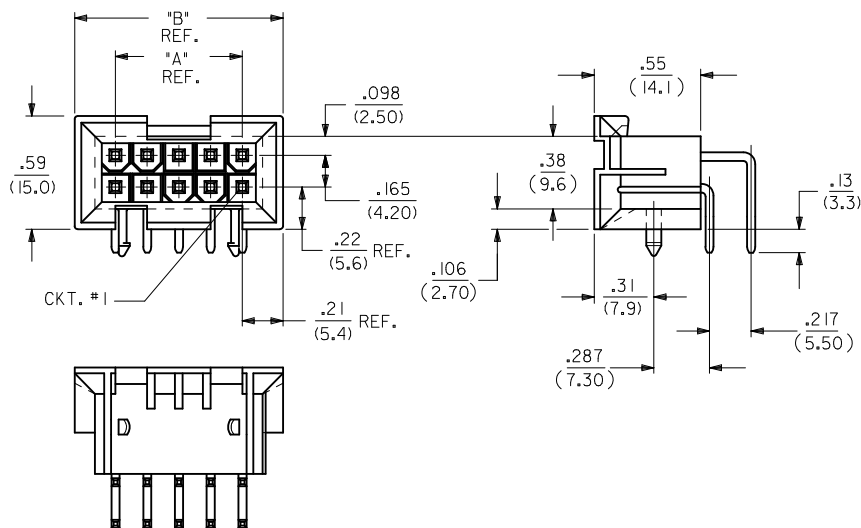
**Reference - Drawing Numbers**

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

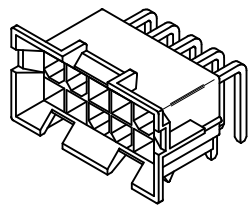
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CIRCUIT SIZE	DIM. "A"	DIM. "B"
6	.331 (8.40)	.76 (19.2)
8	.496 (12.60)	.92 (23.4)
10	.661 (16.80)	1.09 (27.6)
12	.827 (21.00)	1.25 (31.8)
14	.992 (25.20)	1.42 (36.0)
16	1.157 (29.40)	1.58 (40.2)
18	1.323 (33.60)	1.75 (44.4)
20	1.488 (37.80)	1.91 (48.6)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

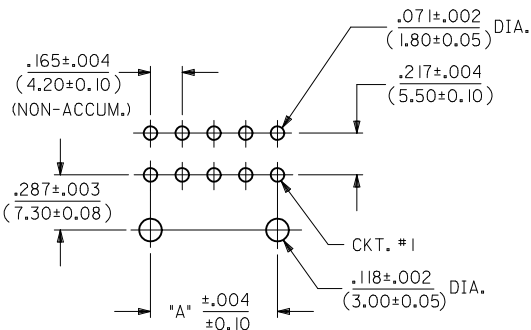


**NOTES:**

- 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.
  - .000100/(.00254) MIN. MATTE TIN OVER .000050/(.00127) MIN. NICKEL OVERALL.
  - .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."

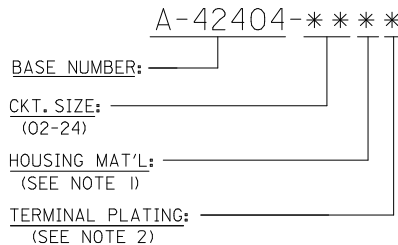


A-42404-\*\*\*\*



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	PHOS. BRZ.	PHOS. BRZ.	GOLD
2-4	PHOS. BRZ.	PHOS. BRZ.	TIN
2-4	BRASS	BRASS	GOLD
2-4	BRASS	BRASS	TIN
2-4	PHOS. BRZ.	PHOS. BRZ.	GOLD
2-4	PHOS. BRZ.	PHOS. BRZ.	TIN
2-4	BRASS	BRASS	GOLD
2-4	BRASS	BRASS	TIN

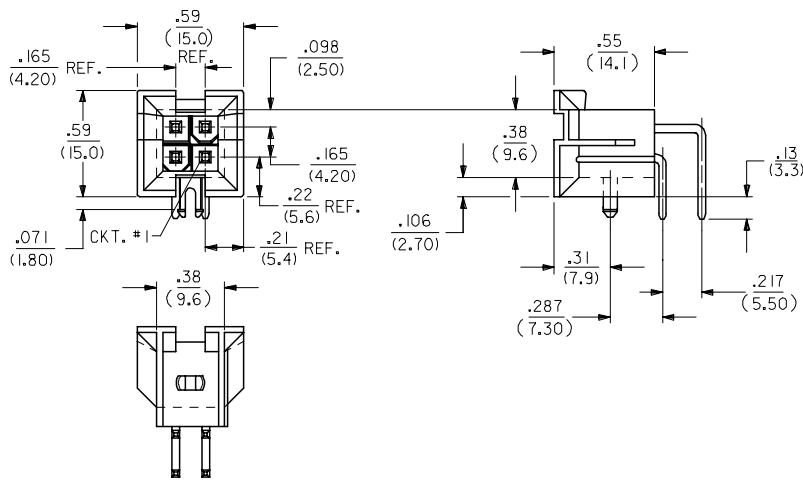
DESCRIPTION	REVISION
R.A. HEADER A-42404	R2
MATING CONNECTOR	
HSG. MAT'L. TERM. MAT'L. PLATING	
MATING CONNECTOR FEATURES	

<b>REVISE NOTES</b> EC NO: UCP2010-0864 DRWNG: 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	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± .015 1 PLACE ± 0.38 ± ---	mm INCH	DRAWN BY RWK	DATE 2/7/89	TITLE <b>MINI-FIT JR. 2-24 CKT RIGHT ANGLE HEADER ASSY (BLIND MATE)</b>			
		ANGULAR ± 1/2°		CHECKED BY RJF	DATE 2/7/89	MATERIAL NO. <b>SEE SHTS 3&amp;4 SDA-42404-****</b>			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY FSMITH	DATE 2010/03/16	MOLEX <b>MOLEX INCORPORATED</b>		DOCUMENT NO.	SHEET NO. 1 OF 4

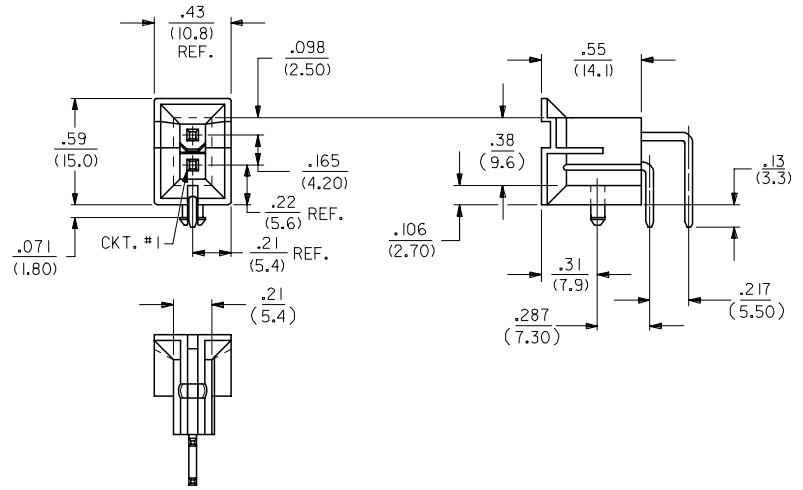
13 12 11 10 9 8 7 6 5 4 3 2 1

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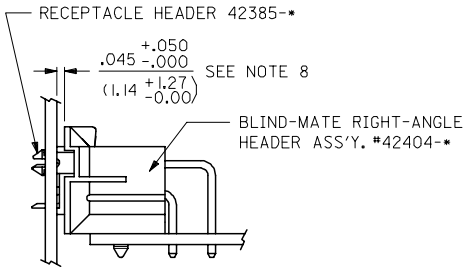
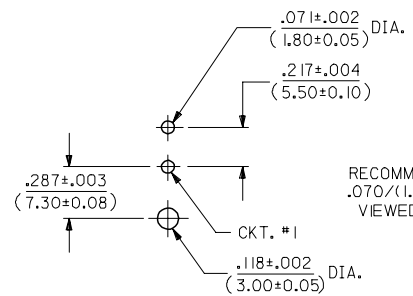
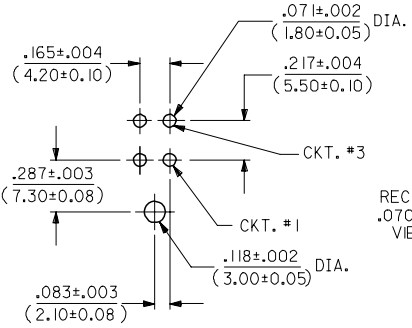
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A-42404-04\*\*



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	SCALE 2:1 DESIGN UNITS METRIC THIRD ANGLE PROJECTION
	DRAWN BY RWK CHECKED BY RJF APPROVED BY RAS MATERIAL NO. DATE 1989/02/07 DATE 1989/02/07 DATE 1989/02/07	TITLE MINI-FIT JR. 2-24 CKT RIGHT ANGLE HEADER ASSY (BLIND MATE)	MOLEX INCORPORATED	SHEET NO. 2 OF 4
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE SHTS 3&4 SDA-42404-****	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	

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

