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Part Number: [0015249065](#)
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 Overall 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 Gold
 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) 30.4
 Plating min: Mating (µm) 0.76
 Plating min: Termination (µin) 30.4
 Plating min: Termination (µm) 0.76
 Polarized to Mating Part Yes
 Polarized to PCB Yes

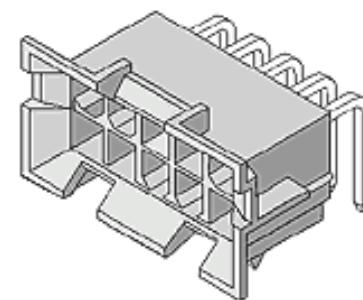


image - Reference only

Series

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
 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	A-42404-06B2
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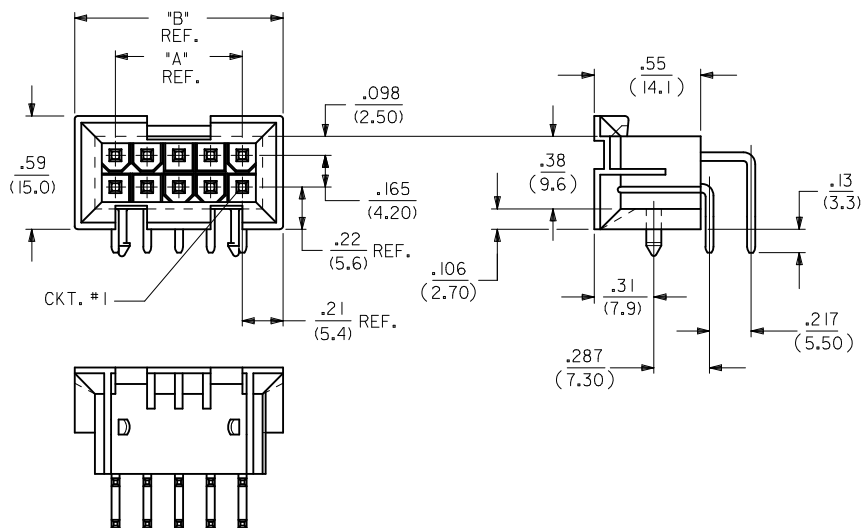
Reference - Drawing Numbers

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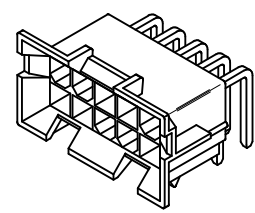
CIRCUIT SIZE	DIM. "A"	DIM. "B"
6	.331 (8.40)	.76 (19.2)
8	.496 (12.60)	.92 (23.4)
10	.661 (16.80)	1.09 (27.6)
12	.827 (21.00)	1.25 (31.8)
14	.992 (25.20)	1.42 (36.0)
16	1.157 (29.40)	1.58 (40.2)
18	1.323 (33.60)	1.75 (44.4)
20	1.488 (37.80)	1.91 (48.6)
22	1.654 (42.00)	2.08 (52.8)
24	1.819 (46.20)	2.24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



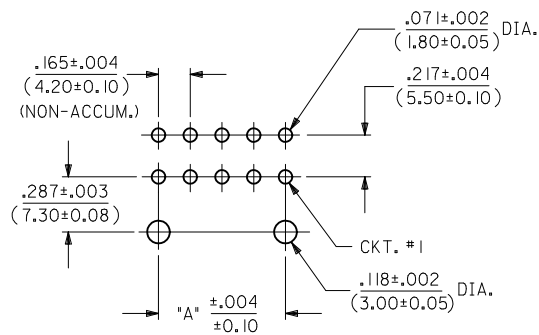
NOTES:

- 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.*

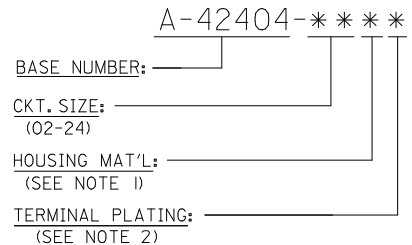


A-42404-****



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
2-24	PHOS. BRZ.	PHOS. BRZ.	GOLD
2-24	PHOS. BRZ.	PHOS. BRZ.	TIN
2-24	BRASS	BRASS	GOLD
2-24	BRASS	BRASS	TIN

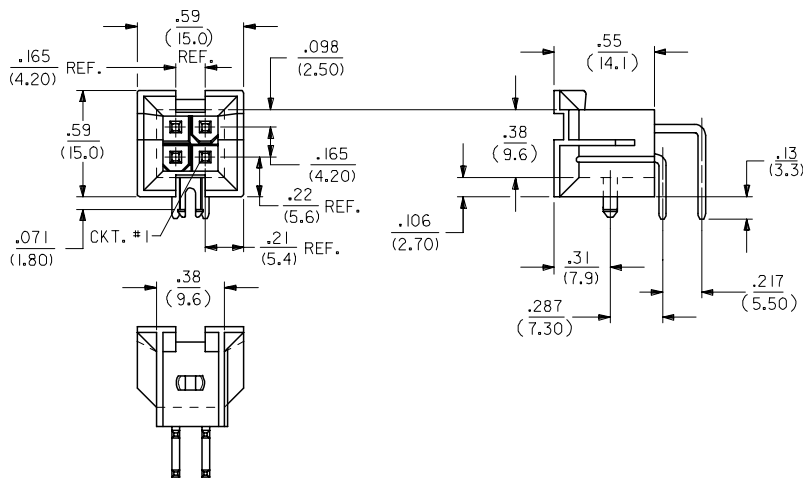
REVISION	DESCRIPTION	DATE	BY
R2	REVISED TO INCLUDE CHANGES FOR 2010/03/16	2010/03/16	SMITH

REVISIONS EC NO: UCP2010-0864 DRWNG: JAGUILAR 2010/01/18 CHKD: JEBEL 2010/01/06 APPR: FSMITH 2010/03/16	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE 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 ± --- ANGULAR ± 1/2°	mm INCH DRAWN BY DATE RWK 2/7/89 CHECKED BY DATE RJF 2/7/89 APPROVED BY DATE FSMITH 2010/03/16	TITLE MINI-FIT JR. 2-24 CKT RIGHT ANGLE HEADER ASSY (BLIND MATE)			MATERIAL NO. SEE SHTS 3&4	DOCUMENT NO. SDA-42404-****
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						

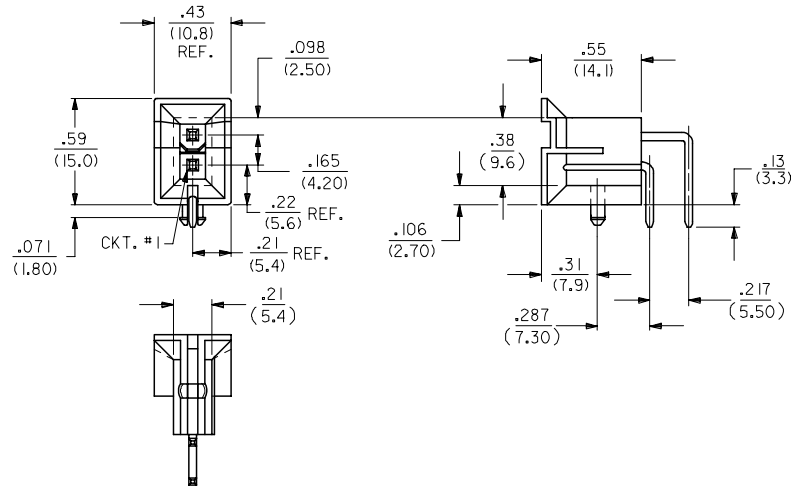
13 12 11 10 9 8 7 6 5 4 3 2 1

J
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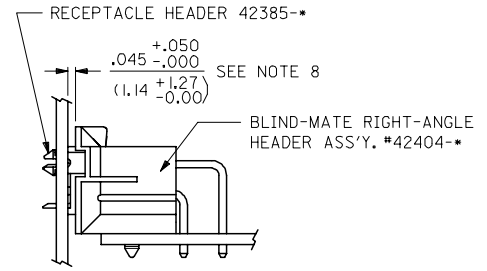
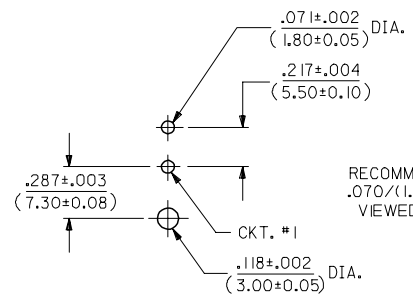
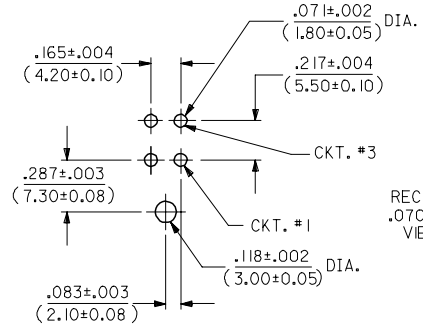
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A-42404-04**



A-42404-02**



SEE SHEET 1 FC NO: UCP2006-1780 DRAWN: ADRIANOL 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	

J	I	H	G	F	E	D	C	B	A
PLATING (NOTE 5)	HOUSING MATERIAL	CKT. SIZE	ENG. NUMBER	PART NUMBER	PLATING (NOTE 5)	HOUSING MATERIAL	CKT. SIZE	ENG. NUMBER	PART NUMBER
MATTE TIN OVER NICKEL	94V-2	2	A-42404-02A3	TOOLED	BRIGHT TIN OVER NICKEL	94V-2	2	A-42404-02A1	TOOLED
		4	-04A3	TOOLED			4	-04A1	5-24-6040
		6	-06A3	TOOLED			6	-06A1	5-24-6060
		8	-08A3	TOOLED			8	-08A1	NOT TOOLED
		10	-10A3	TOOLED			10	-10A1	5-24-6100
		12	-12A3	TOOLED			12	-12A1	NOT TOOLED
		14	-14A3	TOOLED			14	-14A1	5-24-6140
		16	-16A3	TOOLED			16	-16A1	NOT TOOLED
		18	-18A3	TOOLED			18	-18A1	5-24-6180
		20	-20A3	TOOLED			20	-20A1	NOT TOOLED
		22	-22A3	TOOLED			22	-22A1	NOT TOOLED
MATTE TIN OVER NICKEL	94V-2	24	A-42404-24A3	TOOLED	BRIGHT TIN OVER NICKEL	94V-2	24	A-42404-24A1	5-24-6240

F	E	D	C	B	A
PLATING (NOTE 5)	HOUSING MATERIAL	CKT. SIZE	ENG. NUMBER	PART NUMBER	PLATING (NOTE 5)
30 M.I. GOLD	94V-2	2	A-42404-02A2	TOOLED	BRIGHT TIN OVER NICKEL
		4	-04A2	5-24-9043	
		6	-06A2	5-24-9063	
		8	-08A2	NOT TOOLED	
		10	-10A2	5-24-9103	
		12	-12A2	NOT TOOLED	
		14	-14A2	5-24-9143	
		16	-16A2	NOT TOOLED	
		18	-18A2	5-24-9183	
		20	-20A2	NOT TOOLED	
		22	-22A2	NOT TOOLED	
		24	A-42404-24A2	5-24-9243	30 M.I. GOLD
		2	A-42404-02B1	NOT TOOLED	BRIGHT TIN OVER NICKEL
		4	-04B1	5-24-9044	
		6	-06B1	5-24-9064	
		8	-08B1	NOT TOOLED	
		10	-10B1	5-24-9104	
		12	-12B1	NOT TOOLED	
		14	-14B1	5-24-9144	
		16	-16B1	5-24-9164	
		18	-18B1	5-24-9184	
		20	-20B1	NOT TOOLED	
		22	-22B1	NOT TOOLED	
		24	A-42404-24B1	5-24-9244	BRIGHT TIN OVER NICKEL
		2	A-42404-02B2	NOT TOOLED	30 M.I. GOLD
		4	-04B2	5-24-9045	
		6	-06B2	5-24-9065	
		8	-08B2	NOT TOOLED	
		10	-10B2	5-24-9105	
		12	-12B2	NOT TOOLED	
		14	-14B2	5-24-9145	
		16	-16B2	5-24-9165	
		18	-18B2	5-24-9185	
		20	-20B2	NOT TOOLED	
		22	-22B2	NOT TOOLED	
		24	A-42404-24B2	5-24-9245	30 M.I. GOLD

REMOVE PLATE CODE
 EC NO: UCP2010-0864
 DRWN: JAGUILAR 2010/01/18
 CHKD: J.BELL 2010/01/06
 APPR: FSMITH 2010/03/16



QUALITY SYMBOLS
 GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± .005	± .0004
3 PLACES	± .005	± .0004
2 PLACES	± .005	± .0004
1 PLACE	± .005	± .0004

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

DIMENSION STYLE
IN/MM
 DRAWN BY DATE
 RWK 1989/02/08
 CHECKED BY DATE
 RJF 1989/02/08
 APPROVED BY DATE
 FSMITH 2010/03/16

SCALE --- METRIC
 DESIGN UNITS METRIC
 THIRD ANGLE PROJECTION
MOLEX INCORPORATED
 MINI-FIT JR. 2-24 CKT
 RIGHT ANGLE HEADER ASSY
 (BLIND MATE)
 DOCUMENT NO. SDA-42404-****
 SHEET NO. 3 OF 4
 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION