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Part Number: [0015246143](#)
Status: **Active**
Description: 4.20mm (.165") Pitch Mini-Fit BMI™ Header, Dual Row, Right Angle, with Snap-in Plastic Peg PCB Lock, 14 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

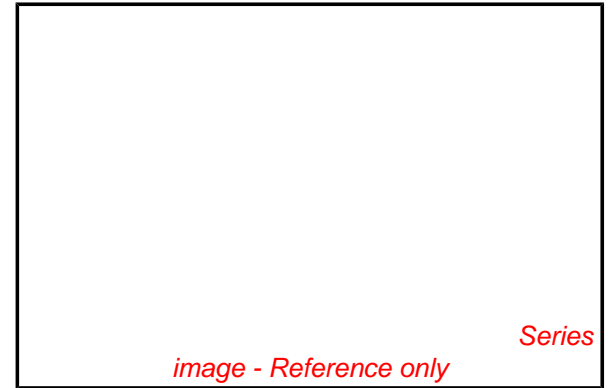
CSA LR19980
 UL E29179

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) 14
 Circuits (maximum) 14
 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
 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

[15-06-0141](#) Mini-Fit BMI™ Panel Mount Receptacle, [39-01-2145](#) Mini-Fit Jr.™ Receptacle, [15-24-7143](#) 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	42404-14B5
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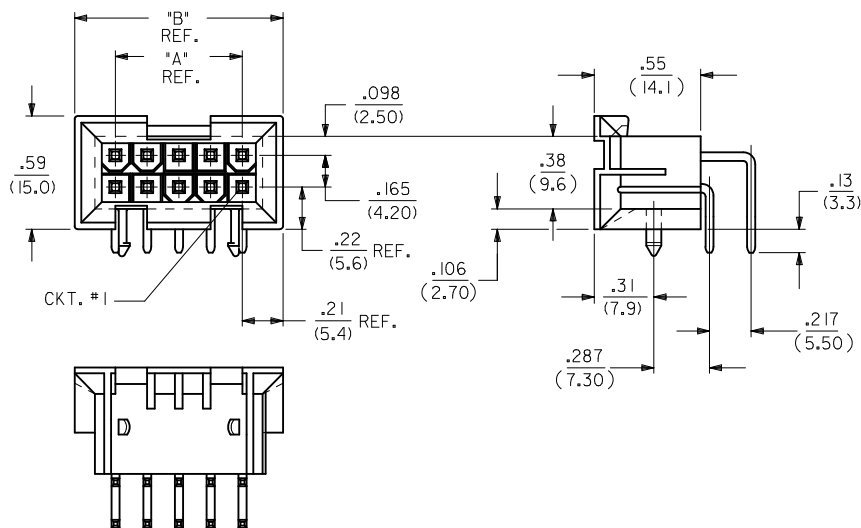
Reference - Drawing Numbers

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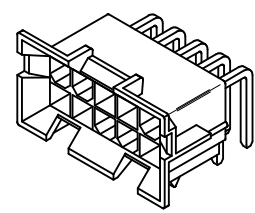
CIRCUIT SIZE	DIM. "A"	DIM. "B"
6	.331 (8.40)	.76 (19.2)
8	.496 (12.60)	.92 (23.4)
10	.661 (16.80)	1.09 (27.6)
12	.827 (21.00)	1.25 (31.8)
14	.992 (25.20)	1.42 (36.0)
16	1.157 (29.40)	1.58 (40.2)
18	1.323 (33.60)	1.75 (44.4)
20	1.488 (37.80)	1.91 (48.6)
22	1.654 (42.00)	2.08 (52.8)
24	1.819 (46.20)	2.24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



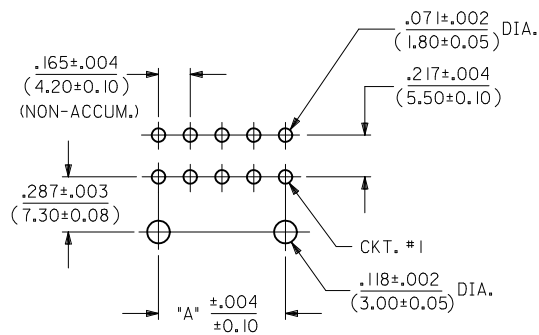
NOTES:

- 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.*

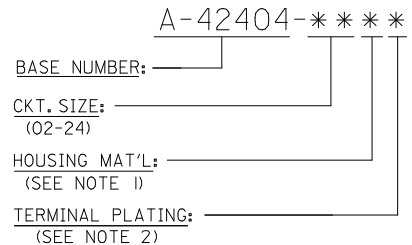


A-42404-****



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
--**B2, _**B4	42474-**-21, 5556-PBGS*P	94V-0	PHOS. BRZ.
			GOLD
--**A2, _**A4	42474-**-11, 5556-PBGS*P	94V-2	PHOS. BRZ.
			TIN
--**B1, _**B3	42474-**-21, 5556-PBS*P	94V-0	BRASS
			GOLD
--**A1, _**A3	42474-**-11, 5556-PBS*P	94V-2	BRASS
			TIN
--**B2, _**B4	42474-**-21, 5556-GS*P	94V-0	PHOS. BRZ.
			GOLD
--**A2, _**A4	42474-**-11, 5556-GS*P	94V-2	PHOS. BRZ.
			TIN
--**B1, _**B3	42474-**-21, 5556-S*P	94V-0	BRASS
			GOLD
--**A1, _**A3	42474-**-11, 5556-S*P	94V-2	BRASS
			TIN
--**B2, _**B4	A-42385-**-D2	94V-0	PHOS. BRZ.
			GOLD
--**A2, _**A4	A-42385-**-C2	94V-2	PHOS. BRZ.
			TIN
--**B1, _**B3	A-42385-**-D1	94V-0	BRASS
			GOLD
--**A1, _**A3	A-42385-**-C1	94V-2	BRASS
			TIN
--**B2, _**B4	A-42385-**-B2	94V-0	PHOS. BRZ.
			GOLD
--**A2, _**A4	A-42385-**-A2	94V-2	PHOS. BRZ.
			TIN
--**B1, _**B3	A-42385-**-B1	94V-0	BRASS
			GOLD
--**A1, _**A3	A-42385-**-A1	94V-2	BRASS
			TIN

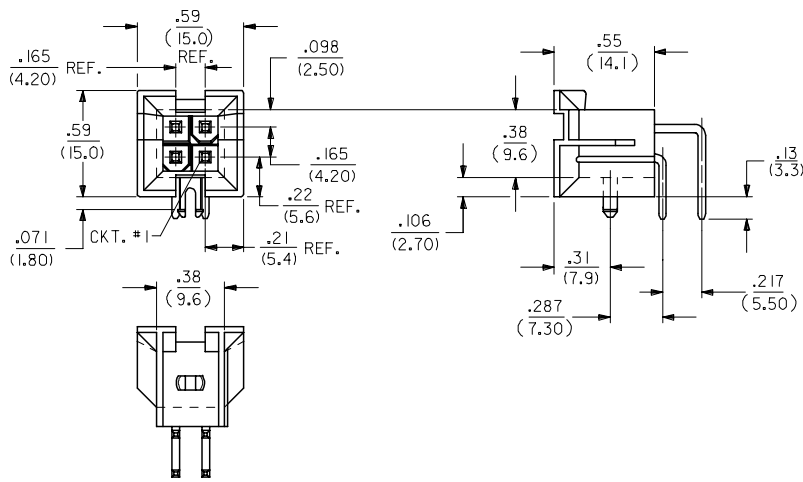
R.A. HEADER	MATING CONNECTOR	HSG. MAT'L.	TERM. MAT'L.	PLATING
A-42404				
		MATING CONNECTOR FEATURES		

REVISE NOTES EC NO: UCP2010-0864 DRWNG: JAGUILAR 2010/01/18 CHKD: JEBEL 2010/01/06 APPR: FSMITH 2010/03/16 DESCRIPTION REV: R2	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM	SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION															
		<table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES ±</td> <td>---</td> <td>---</td> </tr> <tr> <td>3 PLACES ±</td> <td>---</td> <td>±.010</td> </tr> <tr> <td>2 PLACES ±</td> <td>0.25</td> <td>±.015</td> </tr> <tr> <td>1 PLACE ±</td> <td>0.38</td> <td>±---</td> </tr> </tbody> </table>			mm	INCH	4 PLACES ±	---	---	3 PLACES ±	---	±.010	2 PLACES ±	0.25	±.015	1 PLACE ±	0.38	±---	DRAWN BY: RWK DATE: 2/7/89	CHECKED BY: RWF DATE: 2/7/89	TITLE MINI-FIT JR. 2-24 CKT RIGHT ANGLE HEADER ASSY (BLIND MATE)	
			mm	INCH																		
		4 PLACES ±	---	---																		
3 PLACES ±	---	±.010																				
2 PLACES ±	0.25	±.015																				
1 PLACE ±	0.38	±---																				
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		ANGULAR ±1/2°		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																		

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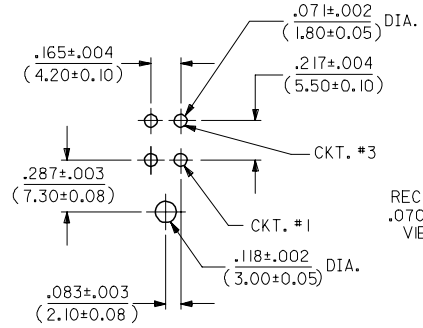
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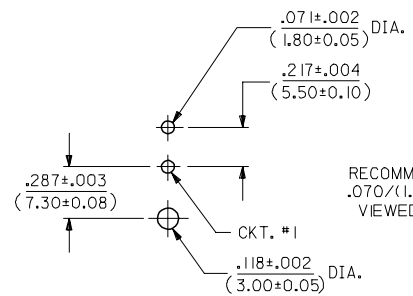
A-42404-04**



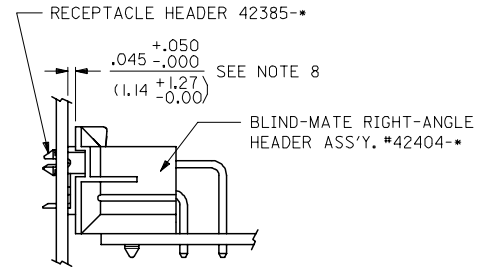
A-42404-02**



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



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



PANEL-TO-P.C.BOARD

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 ± .010 3 PLACES ± .015 2 PLACES ± .025 1 PLACE ± .038 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	DATE: 1989/02/07 DATE: 1989/02/07 DATE: 1989/02/07	MATERIAL NO. DOCUMENT NO.	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 SIZE C	MOLEX INCORPORATED	SDA-42404-****	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	PLATING (NOTE 5)	HOUSING MATERIAL	CKT. SIZE	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	SELECT GOLD OVER NICKEL	94V-2	02	A-42404-02A5	NOT TOOLED	SELECT GOLD OVER NICKEL	94V-2	02	A-42404-02A5	NOT TOOLED
			04	A-42404-04B5	15-24-6043			04	A-42404-04A5	15-24-9047			04	A-42404-04A5	15-24-9047
			06	A-42404-06B5	15-24-6063			06	A-42404-06A5	15-24-9067			06	A-42404-06A5	15-24-9067
			08	A-42404-08B5	NOT TOOLED			08	A-42404-08A5	NOT TOOLED			08	A-42404-08A5	NOT TOOLED
			10	A-42404-10B5	15-24-6103			10	A-42404-10A5	15-24-9107			10	A-42404-10A5	15-24-9107
			12	A-42404-12B5	NOT TOOLED			12	A-42404-12A5	NOT TOOLED			12	A-42404-12A5	NOT TOOLED
			14	A-42404-14B5	15-24-6143			14	A-42404-14A5	15-24-9147			14	A-42404-14A5	15-24-9147
			16	A-42404-16B5	15-24-6163			16	A-42404-16A5	NOT TOOLED			16	A-42404-16A5	NOT TOOLED
			18	A-42404-18B5	15-24-6183			18	A-42404-18A5	15-24-9187			18	A-42404-18A5	15-24-9187
			20	A-42404-20B5	NOT TOOLED			20	A-42404-20A5	NOT TOOLED			20	A-42404-20A5	NOT TOOLED
			22	A-42404-22B5	NOT TOOLED			22	A-42404-22A5	NOT TOOLED			22	A-42404-22A5	NOT TOOLED
	SELECT GOLD OVER NICKEL	94V-0	24	A-42404-24B5	15-24-6243	SELECT GOLD OVER NICKEL	94V-2	24	A-42404-24A5	15-24-9247	SELECT GOLD OVER NICKEL	94V-2	24	A-42404-24A5	15-24-9247
			02					02					02		
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SEE SHEET 1
 FCC NO: UCP2006-1780
 DRAWN: AD RATNOL 2006/02/03
 CHKD: GPOLGAR 2006/02/03
 APPR: JCOMERCI 2006/02/06

QUALITY SYMBOLS

 GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± .005	± .0004
3 PLACES	± .003	± .0002
2 PLACES	± .002	± .0001
1 PLACE	± .001	± .00005

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

DIMENSION STYLE
 IN/MM
 DRAWN BY: AD RATNOL
 CHECKED BY: GPOLGAR
 APPROVED BY: JCOMERCI
 MATERIAL NO.
 SEE CHARTS

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