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Part Number: [0015246163](#)
Status: **Active**
Description: 4.20mm (.165") Pitch Mini-Fit BMI™ Header, Dual Row, Right Angle, with Snap-in Plastic Peg PCB Lock, 16 Circuits, PA Polyamide Nylon 6/6 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

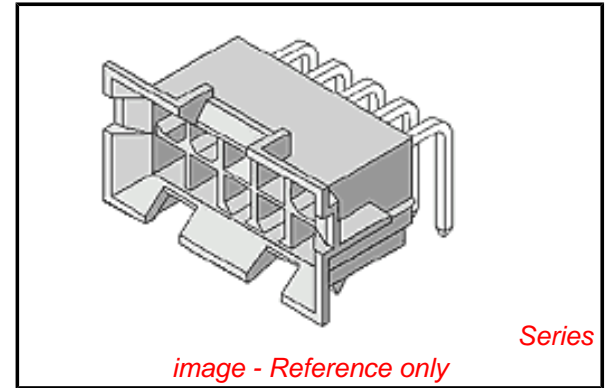
CSA LR19980
 UL E29179

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) 16
 Circuits (maximum) 16
 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



Not Reviewed

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

[39-01-2165](#) Mini-Fit Jr.™ Receptacle,
[15-24-7163](#) 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	42404-16B5
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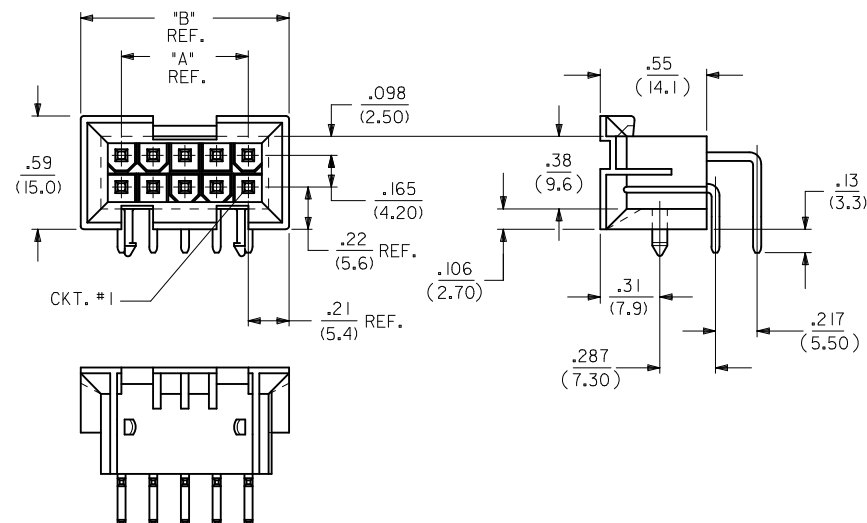
Reference - Drawing Numbers

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

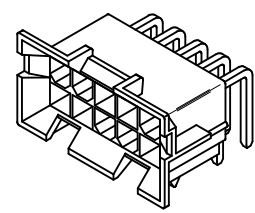
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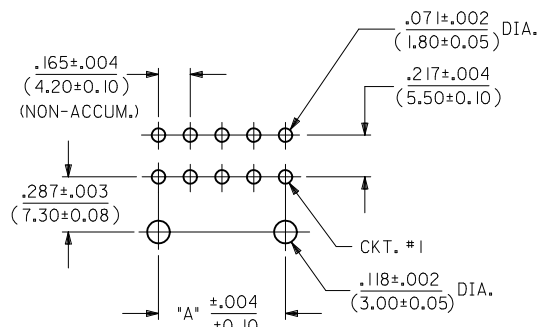
CIRCUIT SIZE	DIM. "A"	DIM. "B"
6	.331 (8.40)	.76 (19.2)
8	.496 (12.60)	.92 (23.4)
10	.661 (16.80)	1.09 (27.6)
12	.827 (21.00)	1.25 (31.8)
14	.992 (25.20)	1.42 (36.0)
16	1.157 (29.40)	1.58 (40.2)
18	1.323 (33.60)	1.75 (44.4)
20	1.488 (37.80)	1.91 (48.6)
22	1.654 (42.00)	2.08 (52.8)
24	1.819 (46.20)	2.24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

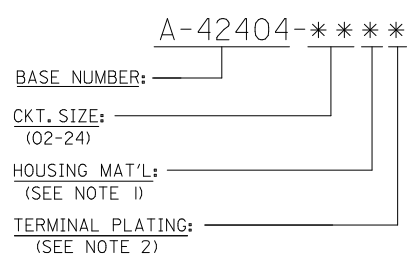


A-42404-****



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

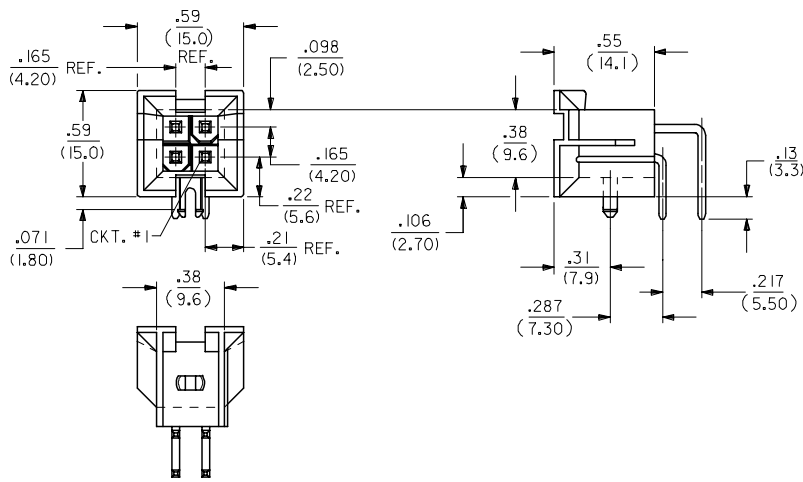
DESCRIPTION	REVISION
R.A. HEADER	R2
MATING CONNECTOR	
HSG. MAT'L, TERM. MAT'L, PLATING	
MATING CONNECTOR FEATURES	

REVISE NOTES EC NO: UCP2010-0864 DRWNG: JAGUILAR 2010/01/18 CHKD: JEBELL 2010/01/06 APPR: FSMITH 2010/03/16 DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <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	±---	DIMENSION STYLE IN/MM DRAWN BY: RWK DATE: 2/7/89 CHECKED BY: RJF DATE: 2/7/89 APPROVED BY: FSMITH DATE: 2010/03/16	SCALE 1:1 DESIGN UNITS METRIC THIRD ANGLE PROJECTION	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	±---																		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE SHTS 3&4	DOCUMENT NO. SDA-42404-****	SHEET NO. 1 OF 4	MOLEX MOLEX INCORPORATED															
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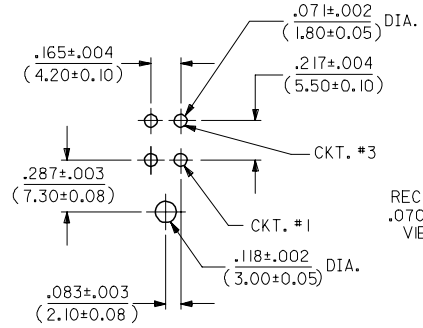
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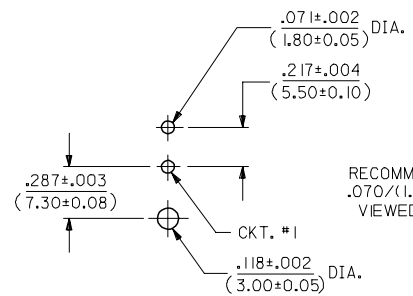
A-42404-04**



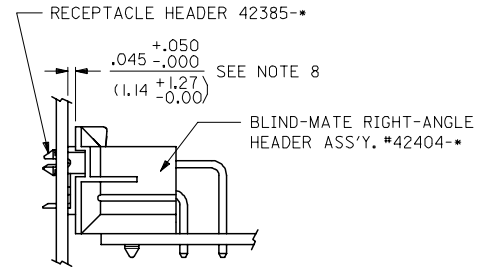
A-42404-02**



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 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		
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	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	94V-2	02	A-42404-02A5	SELECT GOLD OVER NICKEL	94V-2	02	A-42404-02A5	NOT TOOLED
		04	A-42404-04B5	15-24-6043		04	A-42404-04A5			04	A-42404-04A5	15-24-9047
		06	A-42404-06B5	15-24-6063		06	A-42404-06A5			06	A-42404-06A5	15-24-9067
		08	A-42404-08B5	NOT TOOLED		08	A-42404-08A5			08	A-42404-08A5	NOT TOOLED
		10	A-42404-10B5	15-24-6103		10	A-42404-10A5			10	A-42404-10A5	15-24-9107
		12	A-42404-12B5	NOT TOOLED		12	A-42404-12A5			12	A-42404-12A5	NOT TOOLED
		14	A-42404-14B5	15-24-6143		14	A-42404-14A5			14	A-42404-14A5	15-24-9147
		16	A-42404-16B5	15-24-6163		16	A-42404-16A5			16	A-42404-16A5	NOT TOOLED
		18	A-42404-18B5	15-24-6183		18	A-42404-18A5			18	A-42404-18A5	15-24-9187
		20	A-42404-20B5	NOT TOOLED		20	A-42404-20A5			20	A-42404-20A5	NOT TOOLED
		22	A-42404-22B5	NOT TOOLED		22	A-42404-22A5			22	A-42404-22A5	NOT TOOLED
SELECT GOLD OVER NICKEL	94V-0	24	A-42404-24B5	15-24-6243	94V-2	24	A-42404-24A5	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		
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		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: 2006/02/01
 CHECKED BY: GPOLGAR DATE: 2006/02/01
 APPROVED BY: JCOMERCI DATE: 2006/02/01
 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
SEE CHARTS
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