

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

**Part Number:** [0436440024](#)  
**Status:** **Active**  
**Description:** 4.20mm (.165") Pitch Mini-Fit Jr.™ BMI Header, Dual Row, Right Angle, 24 Circuits, PA Polyamide Nylon 6/6 94V-0, with Gold (Au) Plating

**Documents:**

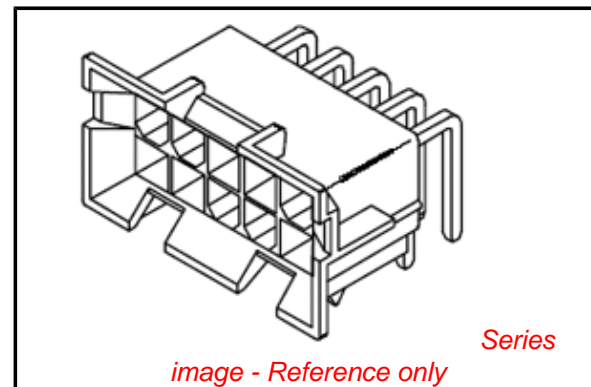
[3D Model](#) [Product Specification PS-5556-002 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family	PCB Headers
Series	<a href="#">43644</a>
Application	Board-to-Board, Wire-to-Board
Comments	Current = 13A max. per circuit when header is mated to a receptacle loaded with <a href="#">45750</a> Mini-Fit Plus HCS™ Crimp Terminal Crimped to to 16 AWG wire. . See Molex Product specification PS-5556-002 for additional current de-rating information.
Product Name	Mini-Fit BMI™

**Physical**

Breakaway	No
Circuits (Loaded)	24
Circuits (maximum)	24
Color - Resin	Natural (White)
Durability (mating cycles max)	30
First Mate / Last Break	No
Glow-Wire Compliant	No
Guide to Mating Part	No
Keying to Mating Part	None
Lock to Mating Part	None
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	None
PCB Thickness Recommended (in)	0.093 In
PCB Thickness Recommended (mm)	2.40 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)	2.54
Polarized to PCB	Yes
Shrouded	Partial
Stackable	No
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole



**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**

[43644Series](#)

**Mates With**

[44516](#) Slide-and-Lock Receptacle, [42474](#) Receptacle Housing, [44475](#) Mini-Fit HCS™ Receptacle Header, [5557d](#) Receptacle Housing, [42385](#) Receptacle Header

**Electrical**

Current - Maximum per Contact	13A
Voltage - Maximum	600V

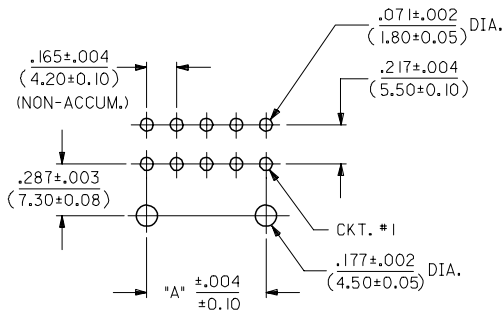
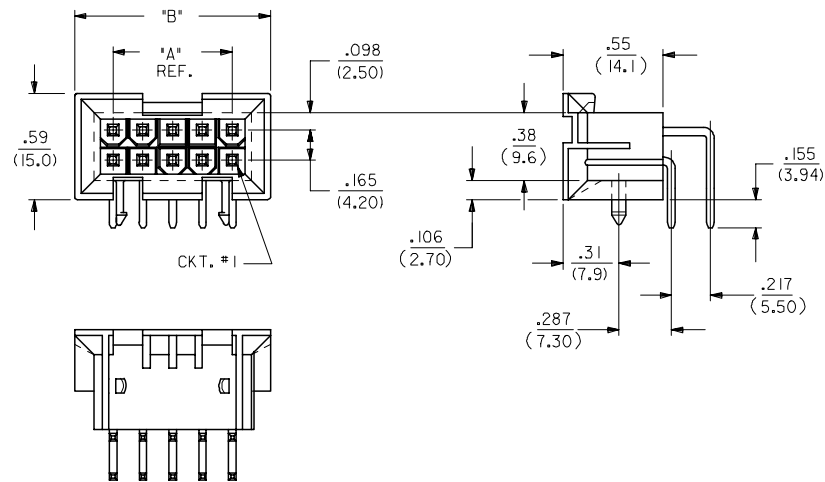
**Material Info****Reference - Drawing Numbers**

Packaging Specification	PK-42404-002
Product Specification	PS-5556-002
Sales Drawing	SD-43644-002
Test Summary	TS-5556-002

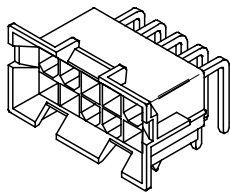
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CIRCUIT SIZE	DIM. 'A'	DIM. 'B'
6	.331 (8.40)	.76 (19.2)
8	.496 (12.60)	.92 (23.4)
10	.661 (16.80)	1.09 (27.6)
12	.827 (21.00)	1.25 (31.8)
14	.992 (25.20)	1.42 (36.0)
16	1.157 (29.40)	1.58 (40.2)
18	1.323 (33.60)	1.75 (44.4)
20	1.488 (37.80)	1.91 (48.6)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



RECOMMENDED HOLE LAYOUT FOR  
.101/(2.56) MAX. THICK P.C. BOARD  
(VIEWED FROM COMPONENT SIDE)



43644\*\*\*\*

**NOTES:**

- HOUSING MATERIAL:  
1 = NYLON 6/6, U.L. 94V-0, COLOR: NATURAL.
- TERMINAL MATERIAL: BRASS, ALLOY 260.
- 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.
- 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.
- TERMINAL PLATING:  
1 = .000100/(.00254) MIN. BRIGHT TIN OVER .000050/(.00127) MIN. NICKEL OVERALL.  
2 = .000030/(.00076) MIN. SELECT GOLD .000100/(.00254) MIN. SELECT MATTE TIN OVER .000050/(.00127) MIN. NICKEL OVERALL.
- PRODUCT SPECIFICATION: PS-5556-002
- CONNECTOR ASSEMBLIES ARE NOT TO BE MATED OR UNMATED WHILE CIRCUITS ARE LIVE.
- THIS HOLE PATTERN DOES NOT PROVIDE FOR LOCKING THE HOUSING TO THE P.C. BOARD
- ITEM NUMBERS PRECEDED BY AN 'X' ARE NOT TOOLED.
- THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

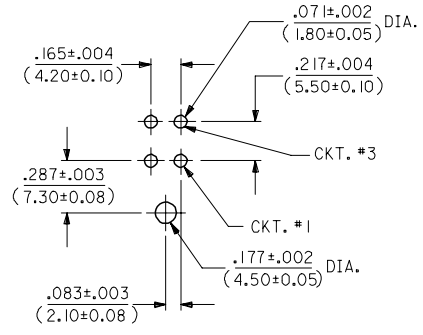
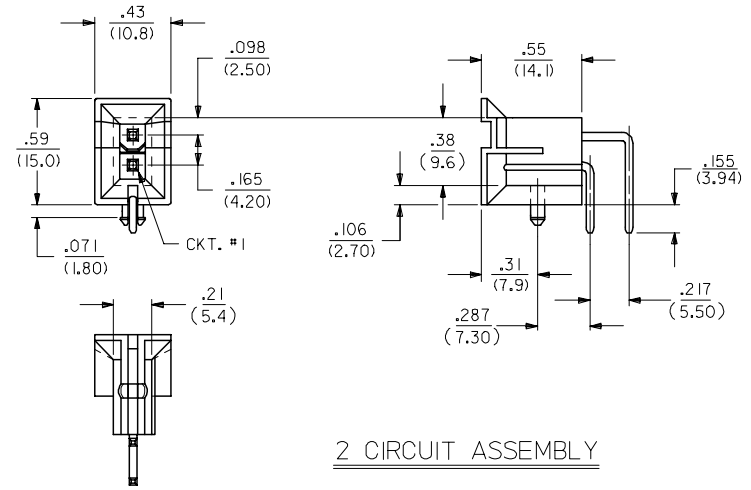
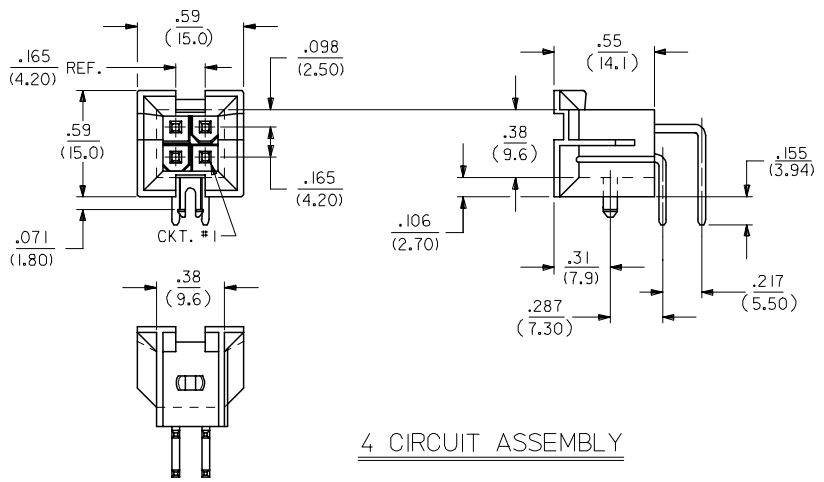
3	2
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SHT. REV.	

ADD NOTE 11 FC NO: UCP2007-2082 DRAWING STEWART 2007/02/22 CHKD: GPOLGAR 2007/02/22 APPR: APATEL 2007/02/22	QUALITY SYMBOLS =0 =0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		4 PLACES ± --- ± ---	3 PLACES ± --- ± .010	2 PLACES ± 0.25 ± .015	1 PLACE ± 0.38 ± ---	DRAWN BY ADRATNOL	DATE 2005/12/05	TITLE MINI-FIT JR BMI RIGHT ANGLE HDR ASSY FOR .094/(2.40) PCB
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		ANGULAR ±1/2°		APPROVED BY JCOMERC I		DATE 2005/12/05	MATERIAL NO. DOCUMENT NO. SD-43644-002	
SEE SHEET 3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		SHEET NO. 1 OF 3				

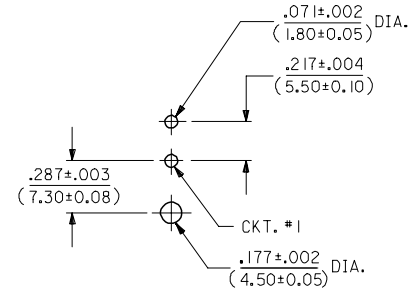
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SEE SHEET ONE FCC NO: UCP2007-2082 2 DRAWING: STEWART 2007/02/22 CHKD: GPOLGAR 2007/02/22 APPR: APATEL 2007/02/22 REV DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± .015 1 PLACE ± 0.38 ± --- ANGULAR ±1/2°	DIMENSION STYLE IN/MM DRAWN BY DATE ADRATNOL 2005/12/05 CHECKED BY DATE GPOLGAR 2005/12/05 APPROVED BY DATE JCOMERC I 2005/12/05 MATERIAL NO.	SCALE 2:1 DESIGN UNITS METRIC THIRD ANGLE PROJECTION	TITLE MINI-FIT JR BMI RIGHT ANGLE HDR ASSY FOR .094/(2.40) PCB MOLEX INCORPORATED DOCUMENT NO. SD-43644-002 SHEET NO. 2 OF 3	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

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