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Part Number: [0015249067](#)
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-2, with Select Gold (Au) Plating

Documents:

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

Agency Certification

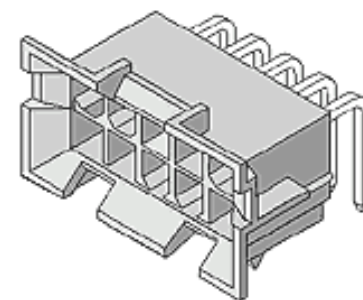
CSA LR19980
 UL E29179

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) 6
 Circuits (maximum) 6
 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



Series

image - Reference only

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
 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

[15-06-0060](#) Mini-Fit BMI™ Panel Mount Receptacle, [39-01-2060](#) Mini-Fit Jr.™ Receptacle, [15-24-7062](#) 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 | 42404-06A5 |
|-----------------|------------|

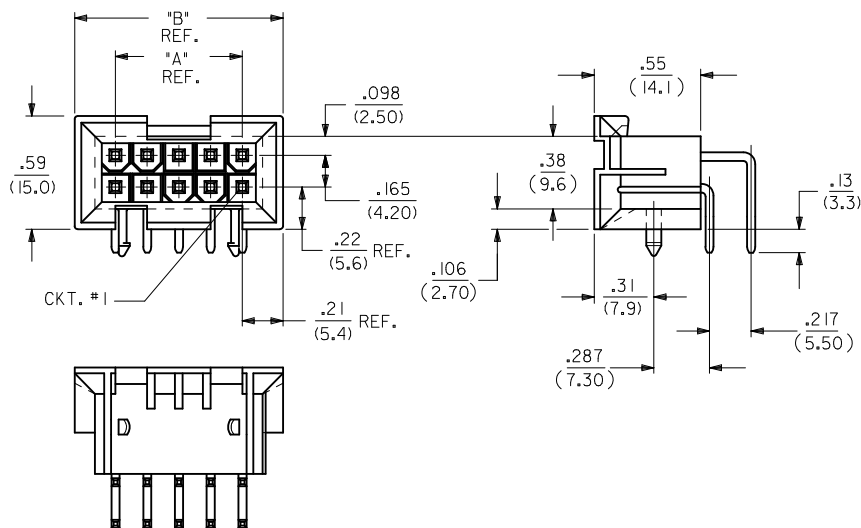
Reference - Drawing Numbers

| | |
|-------------------------|----------------|
| 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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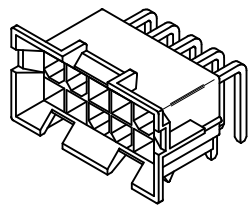
| CIRCUIT SIZE | DIM. "A" | DIM. "B" |
|--------------|------------------|----------------|
| 6 | .331 (8.40) | .76 (19.2) |
| 8 | .496 (12.60) | .92 (23.4) |
| 10 | .661 (16.80) | 1.09 (27.6) |
| 12 | .827 (21.00) | 1.25 (31.8) |
| 14 | .992 (25.20) | 1.42 (36.0) |
| 16 | 1.157 (29.40) | 1.58 (40.2) |
| 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) |



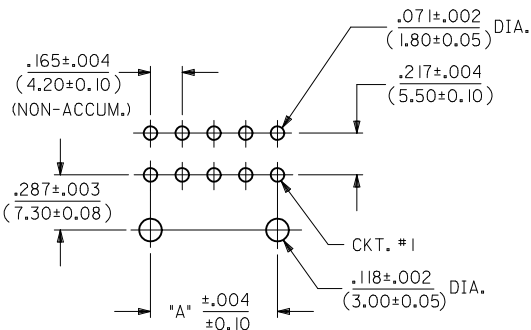
NOTES:

- 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.*

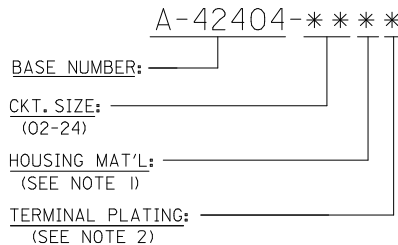


A-42404-****



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

LEGEND:

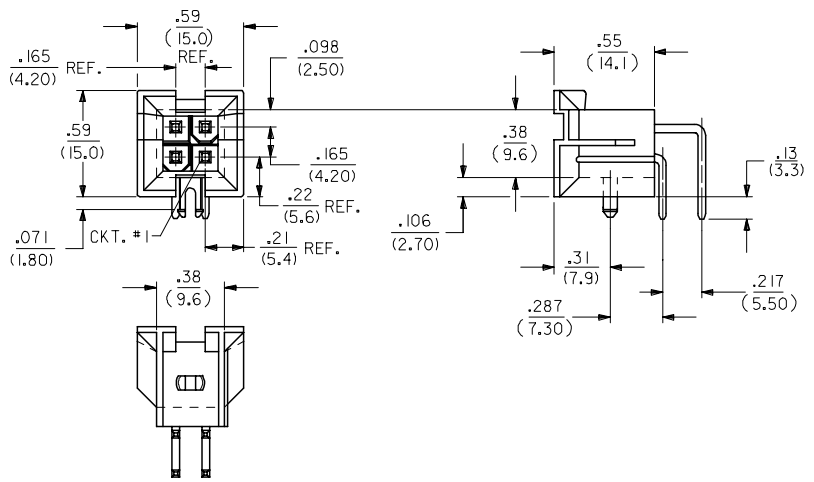


| Part No. | Part Description | Material | Plating |
|---------------|--------------------------|----------|---------|
| --**B2, _**B4 | 42474-**-21, 5556-PBGS*P | 94V-0 | GOLD |
| --**A2, _**A4 | 42474-**-11, 5556-PBGS*P | 94V-2 | GOLD |
| --**B1, _**B3 | 42474-**-21, 5556-PBS*P | 94V-0 | TIN |
| --**A1, _**A3 | 42474-**-11, 5556-PBS*P | 94V-2 | TIN |
| --**B2, _**B4 | 42474-**-21, 5556-GS*P | 94V-0 | GOLD |
| --**A2, _**A4 | 42474-**-11, 5556-GS*P | 94V-2 | GOLD |
| --**B1, _**B3 | 42474-**-21, 5556-S*P | 94V-0 | TIN |
| --**A1, _**A3 | 42474-**-11, 5556-S*P | 94V-2 | TIN |
| --**B2, _**B4 | A-42385-**-D2 | 94V-0 | GOLD |
| --**A2, _**A4 | A-42385-**-C2 | 94V-2 | GOLD |
| --**B1, _**B3 | A-42385-**-D1 | 94V-0 | TIN |
| --**A1, _**A3 | A-42385-**-C1 | 94V-2 | TIN |
| --**B2, _**B4 | A-42385-**-B2 | 94V-0 | GOLD |
| --**A2, _**A4 | A-42385-**-A2 | 94V-2 | GOLD |
| --**B1, _**B3 | A-42385-**-B1 | 94V-0 | TIN |
| --**A1, _**A3 | A-42385-**-A1 | 94V-2 | TIN |

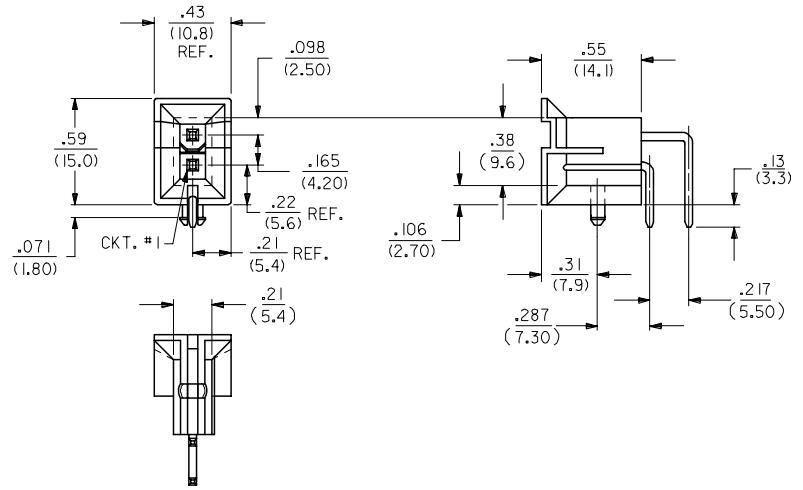
| Part No. | Part Description | HSG. MAT'L. | TERM. MAT'L. | PLATING |
|---------------------|------------------|---------------------------|--------------|---------|
| R.A. HEADER A-42404 | MATING CONNECTOR | | | |
| | | MATING CONNECTOR FEATURES | | |

| | | | | | |
|--|-------------------------------|---|---|--|------------------------|
| REVISE NOTES 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) 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 RWK 2/7/89 CHECKED BY DATE RJF 2/7/89 APPROVED BY DATE FSMITH 2010/03/16 | SCALE 1:1 DESIGN UNITS METRIC | THIRD ANGLE PROJECTION |
| R2 | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | MATERIAL NO. SEE SHTS 3&4 | DOCUMENT NO. SDA-42404-**** | SHEET NO. 1 OF 4 |

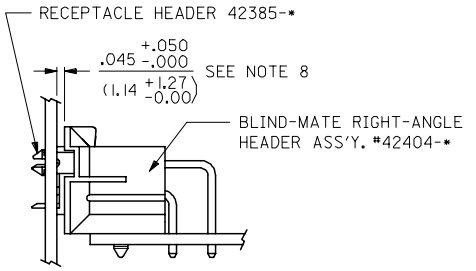
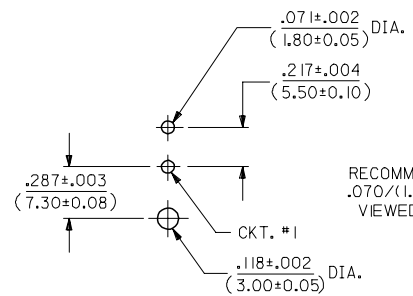
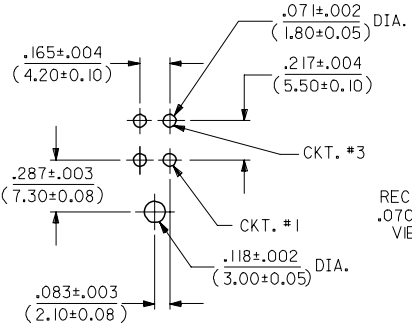
| | |
|---|--|
| MINI-FIT JR. 2-24 CKT RIGHT ANGLE HEADER ASSY (BLIND MATE) | |
| MOLEX MOLEX INCORPORATED | |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | |



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 | 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 | MOLEX INCORPORATED | SDA-42404-**** | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |
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| 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 | ENG. NUMBER | PART NUMBER | PLATING (NOTE 5) | HOUSING MATERIAL | ENG. NUMBER | PART NUMBER | PLATING (NOTE 5) | HOUSING MATERIAL | ENG. NUMBER | PART NUMBER | PLATING (NOTE 5) | HOUSING MATERIAL | ENG. NUMBER | PART NUMBER | PLATING (NOTE 5) | HOUSING MATERIAL | ENG. NUMBER | PART NUMBER | PLATING (NOTE 5) | HOUSING MATERIAL | ENG. NUMBER | PART NUMBER | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | 02 | 04 | 06 | 08 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | SELECT GOLD OVER NICKEL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | 02 | 04 | 06 | 08 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | SELECT GOLD OVER NICKEL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | 02 | 04 | 06 | 08 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | SELECT GOLD OVER NICKEL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | 02 | 04 | 06 | 08 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | SELECT GOLD OVER NICKEL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | 02 | 04 | 06 | 08 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | SELECT GOLD OVER NICKEL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SEE SHEET 1
 FC NO: UCP2006-1780
 DRWN:ADRNOL 2006/02/03
 CHKD:GPOLGAR 2006/02/03
 APPR:JCOMERCI 2006/02/06

DESCRIPTION
 REV

QUALITY SYMBOLS

GENERAL TOLERANCES (UNLESS SPECIFIED)
 mm INCH
 4 PLACES ± --- ± ---
 3 PLACES ± --- ± ---
 2 PLACES ± --- ± ---
 1 PLACE ± --- ± ---
 ANGULAR ±1/2°

DRAFT WHERE APPLICABLE
 MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE
 IN/MM

DRAWN BY DATE
 ADRNOL 2006/02/01

CHECKED BY DATE
 GPOLGAR 2006/02/01

APPROVED BY DATE
 JCOMERCI 2006/02/01

MATERIAL NO.

SEE CHARTS

SCALE

DESIGN UNITS
 METRIC

THIRD ANGLE PROJECTION

TITLE
**MINI-FIT JR. 2-24 CKT
 RIGHT ANGLE HEADER ASSY
 (BLIND MATE)**

MOLEX INCORPORATED

DOCUMENT NO. SDA-42404-****
 SHEET NO. 4 OF 4

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