

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0444282401](#)
Status: **Active**
Overview: [microfit_30](#)
Description: 3.00mm (.118") Pitch Micro-Fit 3.0 BMI™ Header, Surface Mount Compatible, Dual Row, Right Angle, with Snap-in Plastic Peg PCB Lock, 24 Circuits, Tin (Sn) Plating

Documents:

[3D Model](#) [Product Specification PS-44300-001 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
TUV R72081037
UL E29179

General

Product Family PCB Headers
Series [44428](#)
Application Board-to-Board, Wire-to-Board
Comments High Temperature|Square Pin|Solder Type|Polarized to Mating Part
Overview [microfit_30](#)
Product Name Micro-Fit 3.0 BMI™

Physical

Breakaway No
Circuits (Loaded) 24
Circuits (maximum) 24
Color - Resin Black
Durability (mating cycles max) 30
First Mate / Last Break No
Flammability 94V-0
Glow-Wire Compliant No
Guide to Mating Part No
Keying to Mating Part None
Lock to Mating Part Yes
Material - Metal Brass
Material - Plating Mating Tin
Material - Plating Termination Tin
Material - Resin High Temperature Thermoplastic
Number of Rows 2
Orientation Right Angle
PC Tail Length (in) 0.138 In
PC Tail Length (mm) 3.50 mm
PCB Locator Yes
PCB Retention Yes
PCB Thickness Recommended (in) 0.062 In
PCB Thickness Recommended (mm) 1.60 mm
Packaging Type Tray
Pitch - Mating Interface (in) 0.118 In
Pitch - Mating Interface (mm) 3.00 mm
Plating min: Mating (µin) 200
Plating min: Mating (µm) 5.08
Plating min: Termination (µin) 200
Plating min: Termination (µm) 5.08
Polarized to PCB Yes

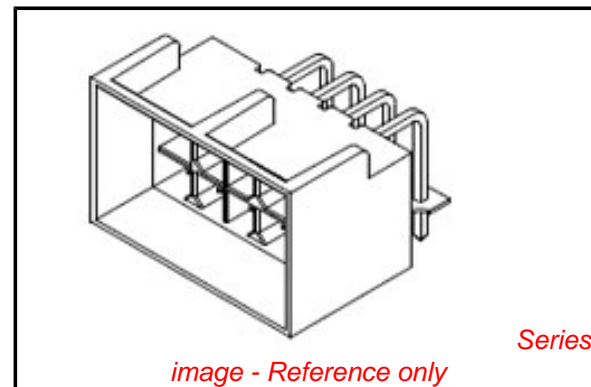


image - Reference only

EU RoHS

ELV and RoHS Compliant
REACH SVHC Contains SVHC: No
Halogen-Free Status

China RoHS



Not 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

[44428Series](#)

Mates With

[44133](#) , [44764](#) , [44769](#)

| | |
|--------------------------------|-----------------|
| Shrouded | Fully |
| Stackable | No |
| Surface Mount Compatible (SMC) | Yes |
| Temperature Range - Operating | -40°C to +105°C |
| Termination Interface: Style | Through Hole |

Electrical

| | |
|-------------------------------|------|
| Current - Maximum per Contact | 5A |
| Voltage - Maximum | 250V |

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 | 260 |

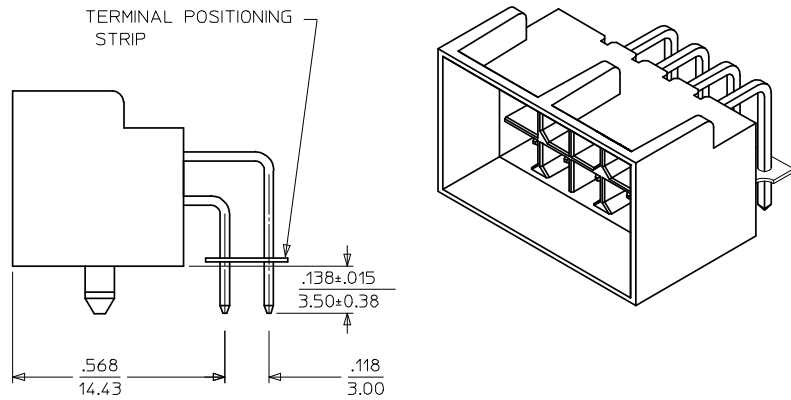
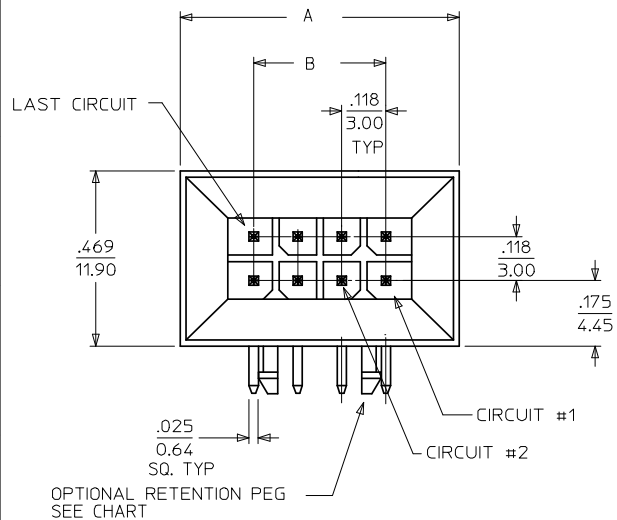
Material Info

Reference - Drawing Numbers

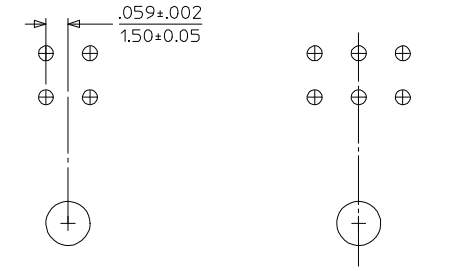
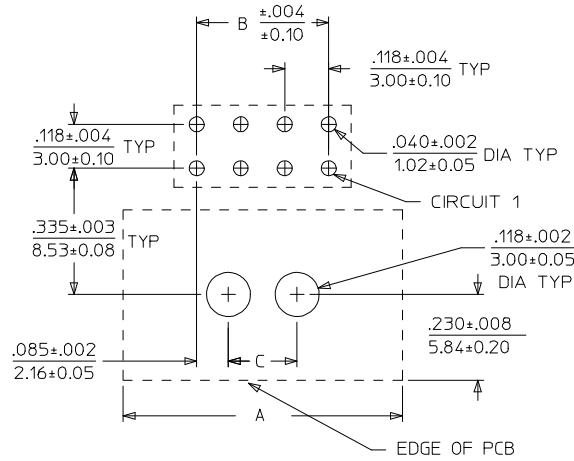
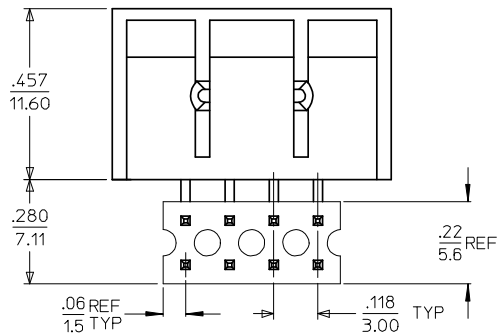
| | |
|-------------------------|-----------------------------|
| Packaging Specification | PK-44428-001 |
| Product Specification | PS-44300-001, RPS-44300-001 |
| Sales Drawing | SD-44428-001 |

This document was generated on 05/24/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION



| CIRCUIT SIZE | A | B | C |
|--------------|----------------|----------------|----------------|
| 04 | .512 13.00 | .118 3.00 | NA |
| 06 | .630 16.00 | .236 6.00 | NA |
| 08 | .748 19.00 | .354 9.00 | .184 4.68 |
| 10 | .866 22.00 | .472 12.00 | .302 7.68 |
| 12 | .984 25.00 | .590 15.00 | .420 10.68 |
| 14 | 1.102 28.00 | .709 18.00 | .539 13.68 |
| 16 | 1.220 31.00 | .827 21.00 | .657 16.68 |
| 18 | 1.338 34.00 | .945 24.00 | .775 19.68 |
| 20 | 1.457 37.00 | 1.063 27.00 | .893 22.68 |
| 22 | 1.575 40.00 | 1.181 30.00 | 1.011 25.68 |
| 24 | 1.693 43.00 | 1.299 33.00 | 1.129 28.68 |



PCB LAYOUT:
COMPONENT SIDE
4 CIRCUIT ONLY

PCB LAYOUT:
COMPONENT SIDE
6 CIRCUIT ONLY

PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS .062/1.57
8 THRU 24 CIRCUITS

NOTES :

- MATERIALS - HOUSING : NYLON , GLASS-FILLED, UL94V-0 COLOR - BLACK
TERMINAL : BRASS ALLOY
TERMINAL POSITIONING STRIP : MYLAR, COLOR - NATURAL
- FINISH:
A= .000200/(0.00508) MIN. TIN OVER .000050/(0.00127) MIN. NICKEL.
B= .000015/(0.00038) MIN. SELECT GOLD IN CONTACT AREA, .000100/(0.00254) MIN. MATTE TIN ON SOLDER TAILS, BOTH OVER .000050/(0.00127) MIN. NICKEL.
C= .000030/(0.00076) MIN. SELECT GOLD IN CONTACT AREA, .000100/(0.00254) MIN. MATTE TIN ON SOLDER TAILS, BOTH OVER .000050/(0.00127) MIN. NICKEL.
* 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 IN THE PC TAIL AREA.
- PRODUCT SPECIFICATION : PS-44300-001
- PACKAGING SPECIFICATION : PK-44428-001
- THIS ASSEMBLY MATES WITH MOLEX BMI PANEL MOUNT RECEPTACLE (SEE DRAWING SD-44133-001) WITH FEMALE CRIMP TERMINAL (SEE DRAWING SD-43030-****) AND BMI RECEPTACLE HEADERS (SEE DRAWING SD-44764-001 OR SD-44769-001).
- THIS PART CONFORMS TO CLASS 'B' REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

| | | | | | | |
|---|-------------------------------|---|--------------------------|------------------------------|---|------------------------|
| CORRECT .230 DIM. EC NO: UCP2008-0675 DRAWN:KIPER 2007/12/12 CHKD:SSOUSEK 2007/12/14 APPR:FSMLTH 2007/12/14 | QUALITY SYMBOLS ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) 4 PLACES ±--- ±--- 3 PLACES ±--- ±.010 2 PLACES ±0.25 ±.015 1 PLACE ±0.38 ±--- ANGULAR ±1/2° | DIMENSION STYLE IN/MM | SCALE 4:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION |
| | | | DRAWN BY MUELLER | DATE 1999/11/29 | TITLE MICRO FIT (3.0) DUAL ROW RIGHT ANGLE BMI HEADER ASS'Y | |
| H2 | REV | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | APPROVED BY EDGLEY | DATE 1999/11/30 | MOLEX INCORPORATED | SHEET NO. 1 OF 2 |
| | | | SEE CHART | DOCUMENT NO. SD-44428-001 | 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 | MATERIAL NUMBER | NUMBER OF CIRCUITS | FINISH OPTION | RETENTION PEG OPTION | MATERIAL NUMBER | NUMBER OF CIRCUITS | FINISH OPTION | RETENTION PEG OPTION | <p style="text-align: center;">POLARIZATION LAYOUT 4-24 CIRCUITS</p> | | | | | J |
| I | 44428-0401 | 04 | A | YES | 44428-1601 | 16 | A | YES | | | | | | I |
| | 44428-0402 | 04 | B | YES | 44428-1602 | 16 | B | YES | | | | | | |
| | 44428-0403 | 04 | C | YES | 44428-1603 | 16 | C | YES | | | | | | |
| | 44428-0404 | 04 | A | NO | 44428-1604 | 16 | A | NO | | | | | | |
| | 44428-0405 | 04 | B | NO | 44428-1605 | 16 | B | NO | | | | | | |
| | 44428-0406 | 04 | C | NO | 44428-1606 | 16 | C | NO | | | | | | |
| H | 44428-0601 | 06 | A | YES | 44428-1801 | 18 | A | YES | | | | | | H |
| | 44428-0602 | 06 | B | YES | 44428-1802 | 18 | B | YES | | | | | | |
| | 44428-0603 | 06 | C | YES | 44428-1803 | 18 | C | YES | | | | | | |
| | 44428-0604 | 06 | A | NO | 44428-1804 | 18 | A | NO | | | | | | |
| | 44428-0605 | 06 | B | NO | 44428-1805 | 18 | B | NO | | | | | | |
| | 44428-0606 | 06 | C | NO | 44428-1806 | 18 | C | NO | | | | | | |
| G | 44428-0801 | 08 | A | YES | 44428-2001 | 20 | A | YES | | | | | | G |
| | 44428-0802 | 08 | B | YES | 44428-2002 | 20 | B | YES | | | | | | |
| | 44428-0803 | 08 | C | YES | 44428-2003 | 20 | C | YES | | | | | | |
| | 44428-0804 | 08 | A | NO | 44428-2004 | 20 | A | NO | | | | | | |
| | 44428-0805 | 08 | B | NO | 44428-2005 | 20 | B | NO | | | | | | |
| | 44428-0806 | 08 | C | NO | 44428-2006 | 20 | C | NO | | | | | | |
| F | 44428-1001 | 10 | A | YES | 44428-2201 | 22 | A | YES | | | | | | F |
| | 44428-1002 | 10 | B | YES | 44428-2202 | 22 | B | YES | | | | | | |
| | 44428-1003 | 10 | C | YES | 44428-2203 | 22 | C | YES | | | | | | |
| | 44428-1004 | 10 | A | NO | 44428-2204 | 22 | A | NO | | | | | | |
| | 44428-1005 | 10 | B | NO | 44428-2205 | 22 | B | NO | | | | | | |
| E | 44428-1006 | 10 | C | NO | 44428-2206 | 22 | C | NO | E | | | | | |
| | 44428-1201 | 12 | A | YES | 44428-2401 | 24 | A | YES | | | | | | |
| | 44428-1202 | 12 | B | YES | 44428-2402 | 24 | B | YES | | | | | | |
| | 44428-1203 | 12 | C | YES | 44428-2403 | 24 | C | YES | | | | | | |
| | 44428-1204 | 12 | A | NO | 44428-2404 | 24 | A | NO | | | | | | |
| D | 44428-1205 | 12 | B | NO | 44428-2405 | 24 | B | NO | D | | | | | |
| | 44428-1206 | 12 | C | NO | 44428-2406 | 24 | C | NO | | | | | | |
| | 44428-1401 | 14 | A | YES | | | | | | | | | | |
| | 44428-1402 | 14 | B | YES | | | | | | | | | | |
| | 44428-1403 | 14 | C | YES | | | | | | | | | | |
| C | 44428-1404 | 14 | A | NO | | | | | C | | | | | |
| | 44428-1405 | 14 | B | NO | | | | | | | | | | |
| | 44428-1406 | 14 | C | NO | | | | | | | | | | |

| | | | | | | | | | | | |
|--|---------------------|---------------------------------------|--|---|--|-------------------------------------|--------------|---|--|--|--|
| SEE SHEET 1 FCC NO: UICP2007-0836 DRAWN/KIPPER 2006/10/04 CHKD:SSOUSEK 2006/10/04 APPR:FSM TH 2006/10/05 H1 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE | | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION | | | |
| | | | | IN/MM | | 4:1 | METRIC | | | | |
| | | | | | | DRAWN BY DATE | | TITLE | | | |
| | | | | | | CHECKED BY DATE | | MICRO FIT (3.0) DUAL ROW RIGHT ANGLE BMI HEADER ASS'Y | | | |
| | | | | APPROVED BY DATE | | MATERIAL NO. DOCUMENT NO. SHEET NO. | | | | | |
| | | | | ANGULAR ±1/2° | | SD-44428-001 | | | | | |
| | | | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | MATERIAL NO. DOCUMENT NO. SHEET NO. | | | | | |
| | | | | SEE CHART | | SD-44428-001 | | | | | |
| | | | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | SD-44428-001 | | | | | |