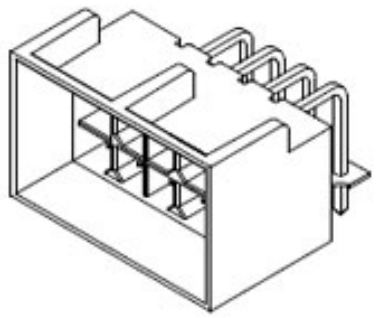
This document was generated on 05/24/2010

**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



*Series image - Reference only*

**Documents:**

- 3D Model
- Drawing (PDF)
- Product Specification PS-44300-001 (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 |

**EU RoHS**
**ELV and RoHS Compliant**
**REACH SVHC**
**Contains SVHC: No**
**Halogen-Free Status**
**Not Halogen-Free**

**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**
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 |

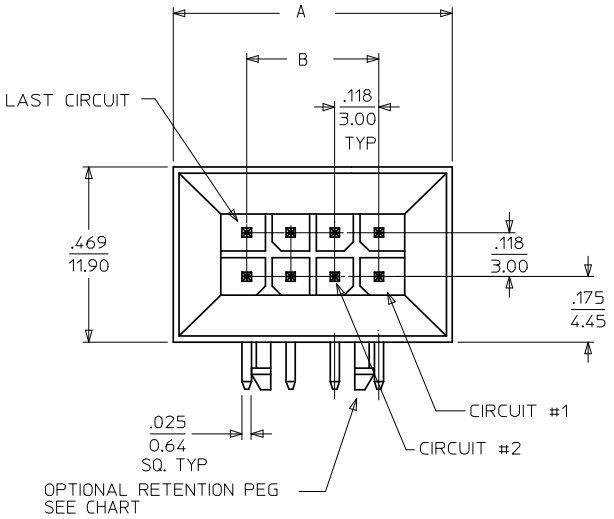
## Solder Process Data

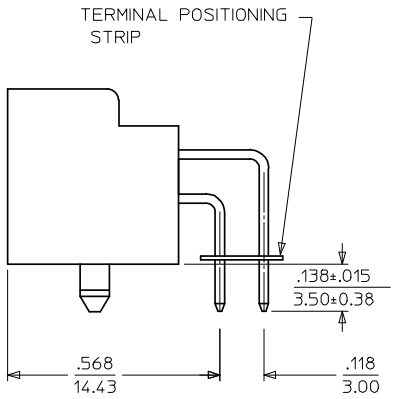
| | |
|---|---|
| Duration at Max. Process Temperature (seconds) | 5 |
| Lead-free Process Capability | Wave Capable (TH only) |
| Max. Cycles at Max. Process Temperature | 1 |
| Process Temperature max. C | 260 |

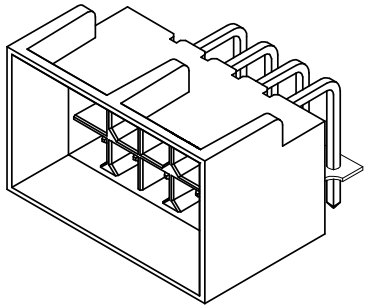
## Material Info

## Reference - Drawing Numbers

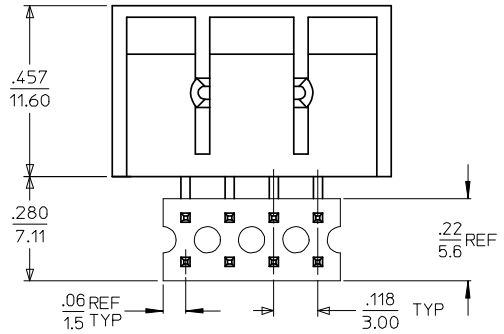
| | |
|---|---|
| Packaging Specification | PK-44428-001 |
| Product Specification | PS-44300-001, RPS-44300-001 |
| Sales Drawing | SD-44428-001 |

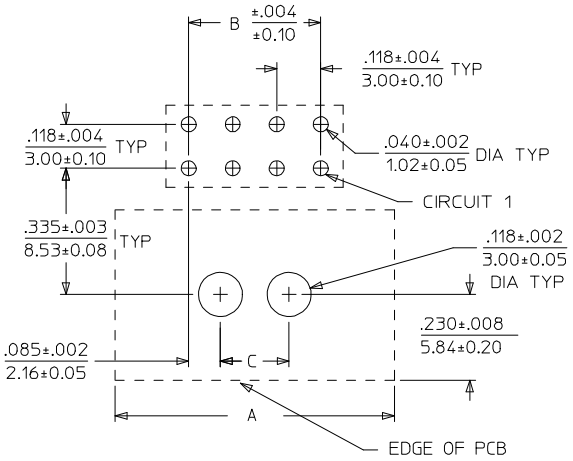


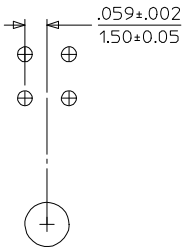
| CIRCUIT SIZE | A | B | C |
|---|---|---|---|
| 04 | .512 / 13.00 | .118 / 3.00 | NA |
| 06 | .630 / 16.00 | .236 / 6.00 | NA |
| 08 | .748 / 19.00 | .354 / 9.00 | .184 / 4.68 |
| 10 | .866 / 22.00 | .472 / 12.00 | .302 / 7.68 |
| 12 | .984 / 25.00 | .590 / 15.00 | .420 / 10.68 |
| 14 | 1.102 / 28.00 | .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 |



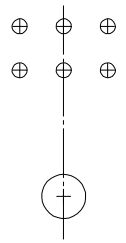

PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS .062/1.57

8 THRU 24 CIRCUITS




PCB LAYOUT:
COMPONENT SIDE

4 CIRCUIT ONLY



PCB LAYOUT:
COMPONENT SIDE

6 CIRCUIT ONLY

NOTES :

1. MATERIALS -
   HOUSING : NYLON , GLASS-FILLED, UL94V-0 COLOR - BLACK
   TERMINAL : BRASS ALLOY
   TERMINAL POSITIONING STRIP : MYLAR, COLOR - NATURAL
2. 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.
3. PRODUCT SPECIFICATION : PS-44300-001
4. PACKAGING SPECIFICATION : PK-44428-001
5. 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).
6. THIS PART CONFORMS TO CLASS 'B' REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

CORRECT .230 DIM. 2007/12/12
EC NO: UCP2008-0675 2007/12/14
DRWN:MKIPPER 2007/12/14
CH'KD:SSOUSEK
APPR:FSMITH
DESCRIPTION
H2
REV

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° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: 4:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

| | | DATE |
|---|---|---|
| DRAWN BY | MUELLER | 1999/11/29 |
| CHECKED BY | MUELLER | 1999/11/29 |
| APPROVED BY | EDGLEY | 1999/11/30 |

TITLE
MICRO FIT (3.0)
DUAL ROW RIGHT ANGLE
BMI HEADER ASS'Y

MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-44428-001
SHEET NO.: 1 OF 2

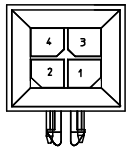
SIZE C

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

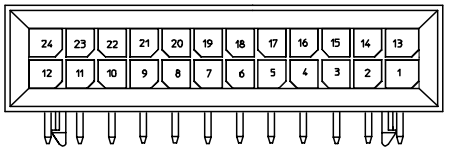
| MATERIAL NUMBER | NUMBER OF CIRCUITS | FINISH OPTION | RETENTION PEG OPTION |
|---|---|---|---|
| 44428-0401 | 04 | A | YES |
| 44428-0402 | 04 | B | YES |
| 44428-0403 | 04 | C | YES |
| 44428-0404 | 04 | A | NO |
| 44428-0405 | 04 | B | NO |
| 44428-0406 | 04 | C | NO |
| 44428-0601 | 06 | A | YES |
| 44428-0602 | 06 | B | YES |
| 44428-0603 | 06 | C | YES |
| 44428-0604 | 06 | A | NO |
| 44428-0605 | 06 | B | NO |
| 44428-0606 | 06 | C | NO |
| 44428-0801 | 08 | A | YES |
| 44428-0802 | 08 | B | YES |
| 44428-0803 | 08 | C | YES |
| 44428-0804 | 08 | A | NO |
| 44428-0805 | 08 | B | NO |
| 44428-0806 | 08 | C | NO |
| 44428-1001 | 10 | A | YES |
| 44428-1002 | 10 | B | YES |
| 44428-1003 | 10 | C | YES |
| 44428-1004 | 10 | A | NO |
| 44428-1005 | 10 | B | NO |
| 44428-1006 | 10 | C | NO |
| 44428-1201 | 12 | A | YES |
| 44428-1202 | 12 | B | YES |
| 44428-1203 | 12 | C | YES |
| 44428-1204 | 12 | A | NO |
| 44428-1205 | 12 | B | NO |
| 44428-1206 | 12 | C | NO |
| 44428-1401 | 14 | A | YES |
| 44428-1402 | 14 | B | YES |
| 44428-1403 | 14 | C | YES |
| 44428-1404 | 14 | A | NO |
| 44428-1405 | 14 | B | NO |
| 44428-1406 | 14 | C | NO |

| MATERIAL NUMBER | NUMBER OF CIRCUITS | FINISH OPTION | RETENTION PEG OPTION |
|---|---|---|---|
| 44428-1601 | 16 | A | YES |
| 44428-1602 | 16 | B | YES |
| 44428-1603 | 16 | C | YES |
| 44428-1604 | 16 | A | NO |
| 44428-1605 | 16 | B | NO |
| 44428-1606 | 16 | C | NO |
| 44428-1801 | 18 | A | YES |
| 44428-1802 | 18 | B | YES |
| 44428-1803 | 18 | C | YES |
| 44428-1804 | 18 | A | NO |
| 44428-1805 | 18 | B | NO |
| 44428-1806 | 18 | C | NO |
| 44428-2001 | 20 | A | YES |
| 44428-2002 | 20 | B | YES |
| 44428-2003 | 20 | C | YES |
| 44428-2004 | 20 | A | NO |
| 44428-2005 | 20 | B | NO |
| 44428-2006 | 20 | C | NO |
| 44428-2201 | 22 | A | YES |
| 44428-2202 | 22 | B | YES |
| 44428-2203 | 22 | C | YES |
| 44428-2204 | 22 | A | NO |
| 44428-2205 | 22 | B | NO |
| 44428-2206 | 22 | C | NO |
| 44428-2401 | 24 | A | YES |
| 44428-2402 | 24 | B | YES |
| 44428-2403 | 24 | C | YES |
| 44428-2404 | 24 | A | NO |
| 44428-2405 | 24 | B | NO |
| 44428-2406 | 24 | C | NO |

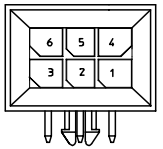
POLARIZATION LAYOUT
4-24 CIRCUITS



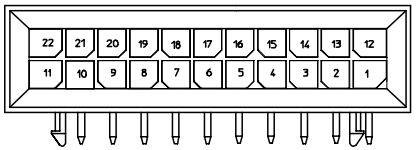
4 CIRCUIT



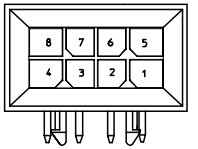
24 CIRCUIT



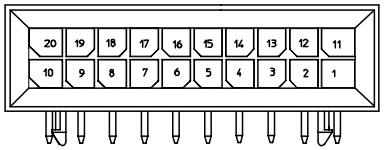
6 CIRCUIT



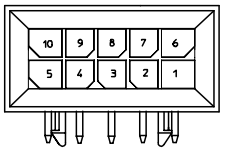
22 CIRCUIT



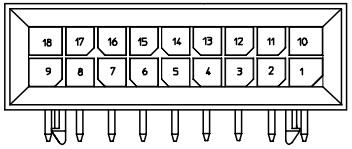
8 CIRCUIT



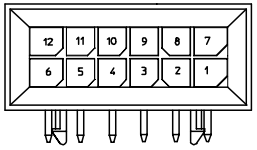
20 CIRCUIT



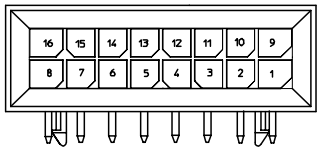
10 CIRCUIT



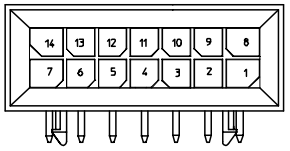
18 CIRCUIT



12 CIRCUIT



16 CIRCUIT



14 CIRCUIT

SEE SHEET 1
EC NO: UCP2007-0836 2006/10/04
DRWN:MKIPPER 2006/10/04
CH'KD:SSOUSEK 2006/10/05
APPR:FSMITH
DESCRIPTION
REV
H1

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° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: 4:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

| | | |
|---|---|---|
| DRAWN BY | MUELLER | DATE 1999/11/29 |
| CHECKED BY | MUELLER | DATE 1999/11/29 |
| APPROVED BY | EDGLEY | DATE 1999/11/30 |

TITLE
MICRO FIT (3.0)
DUAL ROW RIGHT ANGLE
BMI HEADER ASS'Y

molex MOLEX INCORPORATED

MATERIAL NO. SEE CHART
DOCUMENT NO. SD-44428-001
SHEET NO. 2 OF 2

SIZE C

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LifeElectronics
Живое партнерство

**ООО «ЛайфЭлектроникс»** **“LifeElectronics” LLC**

*ИНН 7805602321 КПП 780501001 Р/С 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 30101810900000000703 БИК 044030703*

*Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.*

*С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров*

*Мы предлагаем:*

- *Конкурентоспособные цены и скидки постоянным клиентам.*
- *Специальные условия для постоянных клиентов.*
- *Подбор аналогов.*
- *Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.*

- *Приемлемые сроки поставки, возможна ускоренная поставка.*
- *Доставку товара в любую точку России и стран СНГ.*
- *Комплексную поставку.*
- *Работу по проектам и поставку образцов.*
- *Формирование склада под заказчика.*

- *Сертификаты соответствия на поставляемую продукцию (по желанию клиента).*
- *Тестирование поставляемой продукции.*
- *Поставку компонентов, требующих военную и космическую приемку.*
- *Входной контроль качества.*
- *Наличие сертификата ISO.*

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*Конструкторский отдел помогает осуществить:*

- *Регистрацию проекта у производителя компонентов.*
- *Техническую поддержку проекта.*
- *Защиту от снятия компонента с производства.*
- *Оценку стоимости проекта по компонентам.*
- *Изготовление тестовой платы монтаж и пусконаладочные работы.*

*Тел: +7 (812) 336 43 04 (многоканальный)*
*Email: org@lifeelectronics.ru*

***www.lifeelectronics.ru***