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Part Number: [0444321002](#)
Status: **Active**
Overview: [microfit_30](#)
Description: 3.00mm (.118") Pitch Micro-Fit 3.0 BMI™ Header, Surface Mount Compatible, Dual Row, Vertical, with PCB Polarizing Peg, 10 Circuits, 0.38µm (15µ") Gold (Au) Selective 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 | 44432 |
| Application | Board-to-Board, Wire-to-Board |
| Comments | High Temperature Square Pin Offset Through Hole Mounting Solder Type |
| Overview | microfit_30 |
| Product Literature Order No | USA-106 |
| Product Name | Micro-Fit 3.0 BMI™ |

Physical

| | |
|--------------------------------|--------------------------------|
| Breakaway | No |
| Circuits (Loaded) | 10 |
| Circuits (maximum) | 10 |
| Color - Resin | Black |
| Durability (mating cycles max) | 30 |
| Flammability | 94V-0 |
| Glow-Wire Compliant | No |
| Material - Metal | Brass |
| Material - Plating Mating | Gold |
| Material - Plating Termination | Tin |
| Material - Resin | High Temperature Thermoplastic |
| Number of Rows | 2 |
| Orientation | Vertical |
| PC Tail Length (in) | 0.130 In |
| PC Tail Length (mm) | 3.30 mm |
| PCB Locator | Yes |
| PCB Retention | Yes |
| PCB Thickness Recommended (in) | 0.062 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) | 15.2 |
| Plating min: Mating (µm) | 0.38 |
| Plating min: Termination (µin) | 100 |
| Plating min: Termination (µm) | 2.5 |
| Polarized to PCB | Yes |
| Shrouded | Fully |
| Stackable | No |

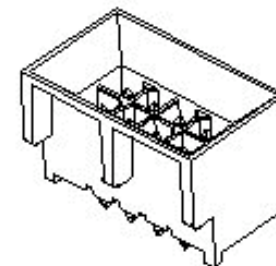


image - Reference only

Series

EU RoHS

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

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

[44432Series](#)

Mates With

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

| | |
|--------------------------------|-----------------|
| 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

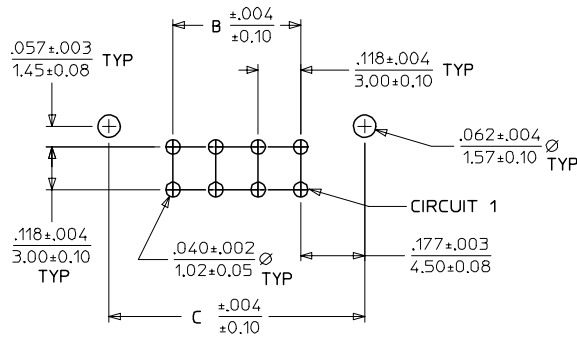
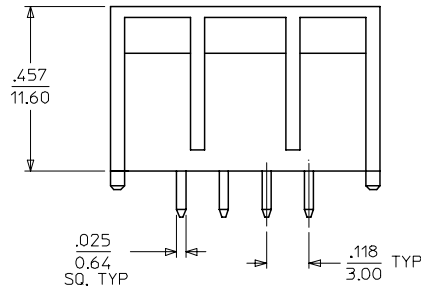
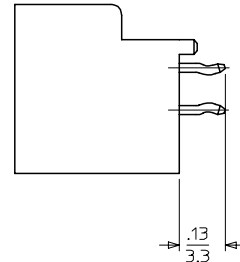
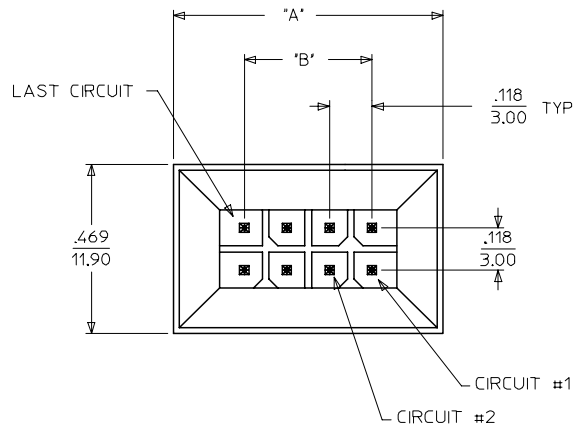
Reference - Drawing Numbers

| | |
|-------------------------|-----------------------------|
| Packaging Specification | PK-44432-001 |
| Product Specification | PS-44300-001, RPS-44300-001 |
| Sales Drawing | SD-44432-001 |

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| 44432 | | | |
|--------------|----------------|----------------|----------------|
| CIRCUIT SIZE | "A" | "B" | C |
| 04 | .512 13.00 | .118 3.00 | .472 12.00 |
| 06 | .630 16.00 | .236 6.00 | .590 15.00 |
| 08 | .748 19.00 | .354 9.00 | .709 18.00 |
| 10 | .866 22.00 | .472 12.00 | .827 21.00 |
| 12 | .984 25.00 | .590 15.00 | .945 24.00 |
| 14 | 1.102 27.70 | .709 18.00 | 1.063 27.00 |
| 16 | 1.220 31.00 | .827 21.00 | 1.181 30.00 |
| 18 | 1.338 34.00 | .945 24.00 | 1.299 33.00 |
| 20 | 1.457 37.00 | 1.063 27.00 | 1.417 36.00 |
| 22 | 1.575 40.00 | 1.181 30.00 | 1.535 39.00 |
| 24 | 1.693 43.00 | 1.299 33.00 | 1.653 42.00 |



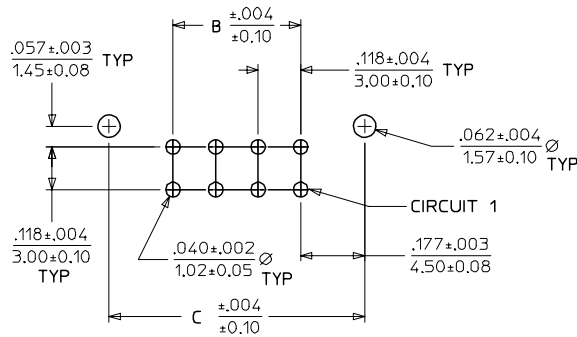
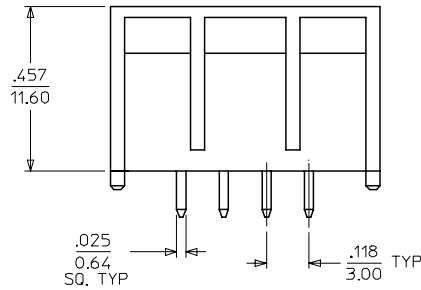
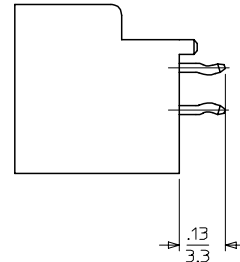
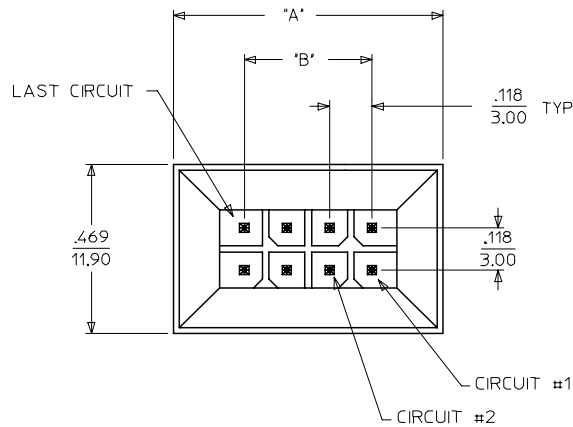
PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS .062/1.57

NOTES :

- MATERIALS -
HOUSING : NYLON , GLASS-FILLED, UL94V-0 COLOR - BLACK
TERMINAL : BRASS ALLOY
- 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. SELECT 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. SELECT 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-44432-001
- THIS ASSEMBLY MATES WITH MOLEX BMI PANEL MOUNT RECEPTACLE
(SEE DRAWING SD-44133-001) & FEMALE CRIMP TERMINAL (SEE DRAWING SD-43030-****)
- SEE SHEET 2 FOR PART NUMBER CHART.

| | | | | | | | | |
|---|-----------------------------------|--|-----------------------|-----------------------|---------------------|--|---------------------------|------------------|
| LEAD FREE EC NO: UCP/2004-1228 DRAWN: JCERNY 2004/03/12 CHKD: 2004/03/31 APPR: F SMITH 2004/04/05 | QUALITY SYMBOLS ▽ = 0 ▽ = 0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | SCALE 4:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | REVISE ON CAD ONLY | |
| | | mm | INCH | DIMENSION STYLE IN/MM | | TITLE | | |
| | | 4 PLACES ± --- ± --- | 3 PLACES ± --- ± .010 | DRAWN BY MUELLER | DATE 1999/11/29 | MICRO FIT (3.0) DUAL ROW VERTICAL BMI HEADER ASS'Y | | |
| | | 2 PLACES ± 0.25 ± .015 | 1 PLACE ± 0.38 ± --- | CHECKED BY MUELLER | DATE 1999/11/29 | | | |
| ANGULAR ±1/2° | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | APPROVED BY EDGLEY | DATE 1999/11/30 | MATERIAL NO. SEE CHART | DOCUMENT NO. SD-44432-001 | SHEET NO. 1 OF 2 |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | |

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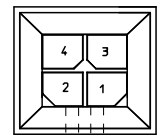
PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS .062/1.57

NOTES :

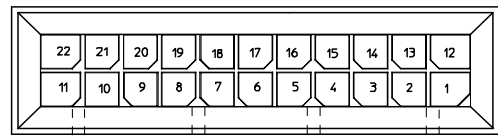
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| | | | | | | | | |
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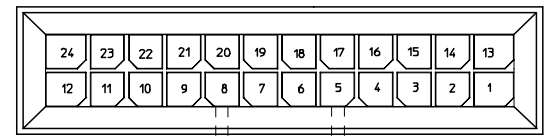
| | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 |
|---|-----------------|---------------------|----------------|----|---|---|---|---|---|---|---|---|
| J | MATERIAL NUMBER | NUMBER OF POSITIONS | PLATING OPTION | | | | | | | | | |
| | 44432-0401 | 04 | A | | | | | | | | | |
| | 44432-0402 | 04 | B | | | | | | | | | |
| | 44432-0403 | 04 | C | | | | | | | | | |
| I | 44432-0601 | 06 | A | | | | | | | | | |
| | 44432-0602 | 06 | B | | | | | | | | | |
| | 44432-0603 | 06 | C | | | | | | | | | |
| | 44432-0801 | 08 | A | | | | | | | | | |
| | 44432-0802 | 08 | B | | | | | | | | | |
| | 44432-0803 | 08 | C | | | | | | | | | |
| H | 44432-1001 | 10 | A | | | | | | | | | |
| | 44432-1002 | 10 | B | | | | | | | | | |
| | 44432-1003 | 10 | C | | | | | | | | | |
| | 44432-1201 | 12 | A | | | | | | | | | |
| | 44432-1202 | 12 | B | | | | | | | | | |
| G | 44432-1203 | 12 | C | | | | | | | | | |
| | 44432-1401 | 14 | A | | | | | | | | | |
| | 44432-1402 | 14 | B | | | | | | | | | |
| | 44432-1403 | 14 | C | | | | | | | | | |
| F | 44432-1601 | 16 | A | | | | | | | | | |
| | 44432-1602 | 16 | B | | | | | | | | | |
| | 44432-1603 | 16 | C | | | | | | | | | |
| | 44432-1801 | 18 | A | | | | | | | | | |
| | 44432-1802 | 18 | B | | | | | | | | | |
| | 44432-1803 | 18 | C | | | | | | | | | |
| E | 44432-2001 | 20 | A | | | | | | | | | |
| | 44432-2002 | 20 | B | | | | | | | | | |
| | 44432-2003 | 20 | C | | | | | | | | | |
| | 44432-2201 | 22 | A | | | | | | | | | |
| | 44432-2202 | 22 | B | | | | | | | | | |
| | 44432-2203 | 22 | C | | | | | | | | | |
| | 44432-2401 | 24 | A | | | | | | | | | |
| | 44432-2402 | 24 | B | | | | | | | | | |
| | 44432-2403 | 24 | C | | | | | | | | | |



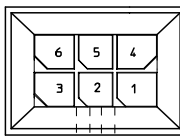
4 CIRCUIT



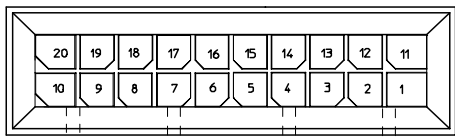
22 CIRCUIT



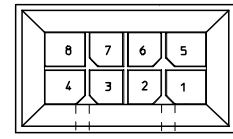
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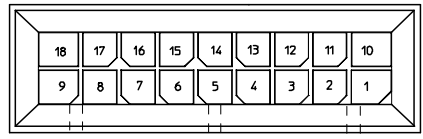
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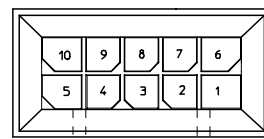
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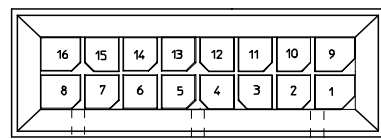
8 CIRCUIT



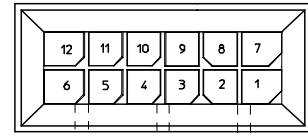
18 CIRCUIT



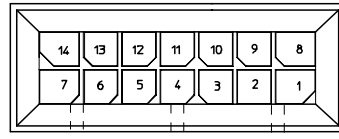
10 CIRCUIT



16 CIRCUIT



12 CIRCUIT



14 CIRCUIT

POLARIZATION LAYOUT
4-24 CIRCUITS

| | | | | | | |
|--|-----------------|--|---|---------------------|--|--------------------|
| REDRAWN EC NO: UCP2004-1228 DRAWN: ICERNY 2004/03/12 CHKD: 2004/03/31 APPR: F SMITH 2004/04/05 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | SCALE 4:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | REVISE ON CAD ONLY |
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| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | DRAWN BY DATE MUELLER 1999/11/29 | | MICRO FIT (3.0) DUAL ROW VERTICAL BMI HEADER ASS'Y | |
| | | | CHECKED BY DATE MUELLER 1999/11/29 | | MATERIAL NO. DOCUMENT NO. SEE CHART SD-44432-001 | |
| | | | APPROVED BY DATE EDGLEY 1999/11/30 | | SHEET NO. 2 OF 2 | |
| | | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | |