

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

**Part Number:** [0444322002](#)  
**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, 20 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	<a href="#">44432</a>
Application	Board-to-Board, Wire-to-Board
Comments	High Temperature Square Pin Offset Through Hole Mounting Solder Type
Overview	<a href="#">microfit_30</a>
Product Literature Order No	USA-106
Product Name	Micro-Fit 3.0 BMI™

**Physical**

Breakaway	No
Circuits (Loaded)	20
Circuits (maximum)	20
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

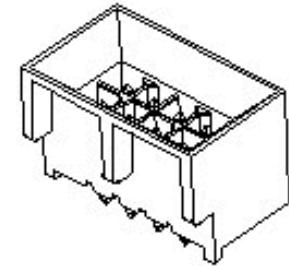


image - Reference only

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](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**

[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**

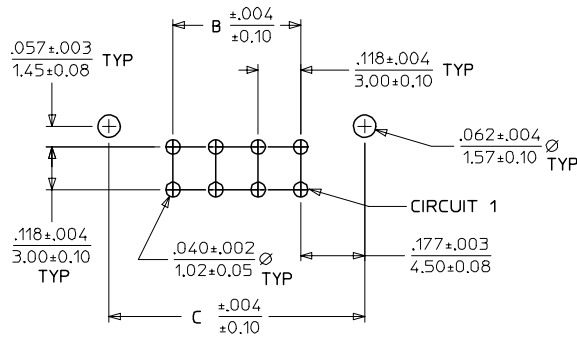
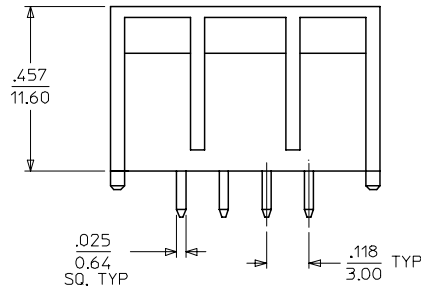
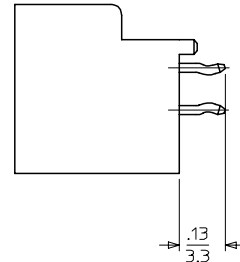
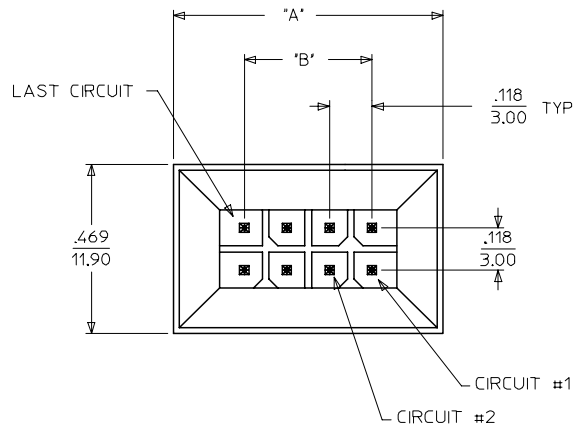
#### **Reference - Drawing Numbers**

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

This document was generated on 05/24/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**

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 27.99	.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



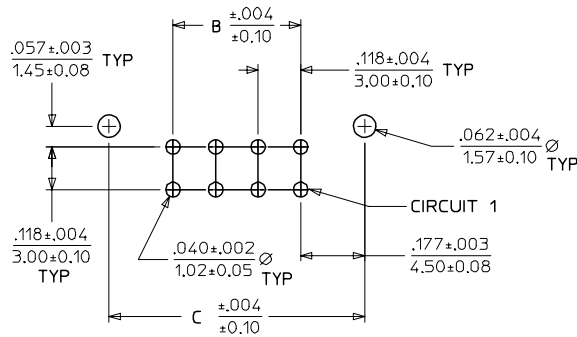
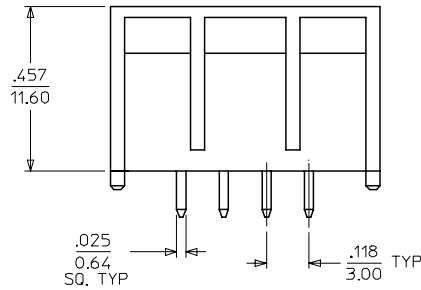
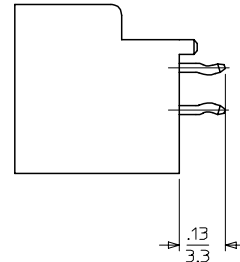
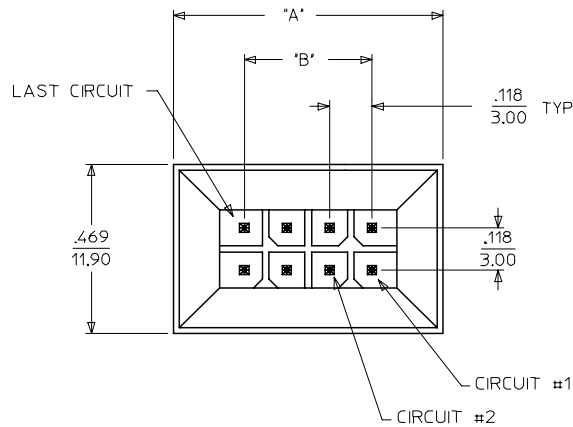
PCB LAYOUT: COMPONENT SIDE  
RECOMMENDED PCB THICKNESS .062/1.57

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: UCP2004-1228 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								

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 27.99	.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



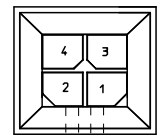
PCB LAYOUT: COMPONENT SIDE  
RECOMMENDED PCB THICKNESS .062/1.57

NOTES :

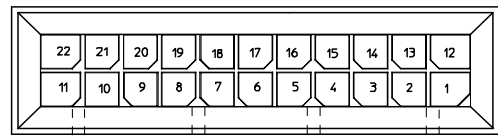
- MATERIALS -  
HOUSING : NYLON , GLASS-FILLED, UL94V-0 COLOR - BLACK  
TERMINAL : BRASS ALLOY
- FINISH:  
A = .000200/(0,00508) MIN. TIN OVER .000050/(0,00127) MIN. NICKEL.  
B = .000015/(0,00038) MIN. SELECT GOLD IN CONTACT AREA,  
.000100/(0,00254) MIN. SELECT TIN ON SOLDER TAILS,  
BOTH OVER .000050/(0,00127) 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	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						SHEET NO. 1 OF 2		

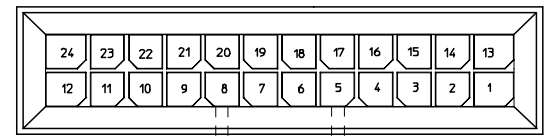
	13	12	11	10	9	8	7	6	5	4	3	2
J	MATERIAL NUMBER	NUMBER OF POSITIONS	PLATING OPTION									
	44432-0401	04	A									
	44432-0402	04	B									
	44432-0403	04	C									
I	44432-0601	06	A									
	44432-0602	06	B									
	44432-0603	06	C									
	44432-0801	08	A									
	44432-0802	08	B									
	44432-0803	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									



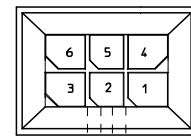
4 CIRCUIT



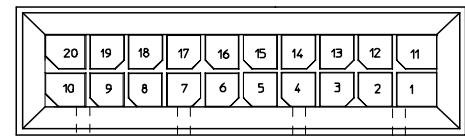
22 CIRCUIT



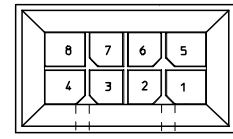
24 CIRCUIT



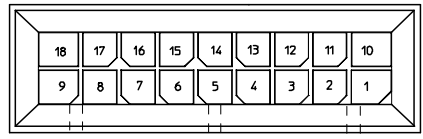
6 CIRCUIT



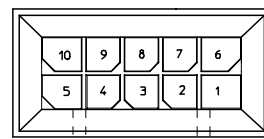
20 CIRCUIT



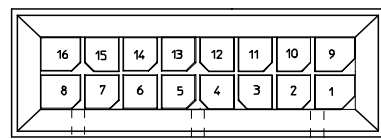
8 CIRCUIT



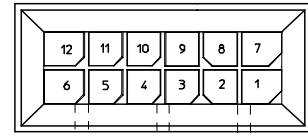
18 CIRCUIT



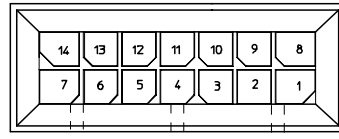
10 CIRCUIT



16 CIRCUIT



12 CIRCUIT



14 CIRCUIT

POLARIZATION LAYOUT  
4-24 CIRCUITS

REDRAWN EC NO: UCP2004-1228 DRWN: ICERNY 2004/03/12 CHKD: 2004/03/31 APPR: FSMITH 2004/04/05	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY
	▽ = 0 ▽ = 0	4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± .015 1 PLACE ± 0.36 ± --- ANGULAR ±1/2°	DIMENSION STYLE IN/MM		TITLE	
		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			