

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

**Part Number:** [0444281201](#)  
**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, 12 Circuits, Tin (Sn) Plating

**Documents:**

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

**Agency Certification**

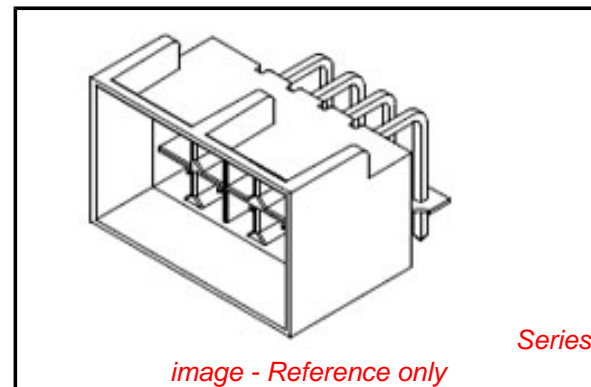
CSA LR19980  
TUV R72081037  
UL E29179

**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 Literature Order No USA-106  
Product Name Micro-Fit 3.0 BMI™

**Physical**

Breakaway No  
Circuits (Loaded) 12  
Circuits (maximum) 12  
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



**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](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**

[44428Series](#)

**Mates With**

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

Polarized to PCB	Yes
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

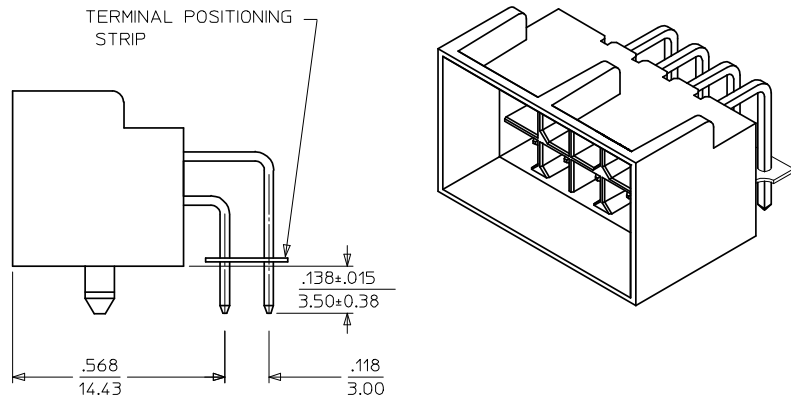
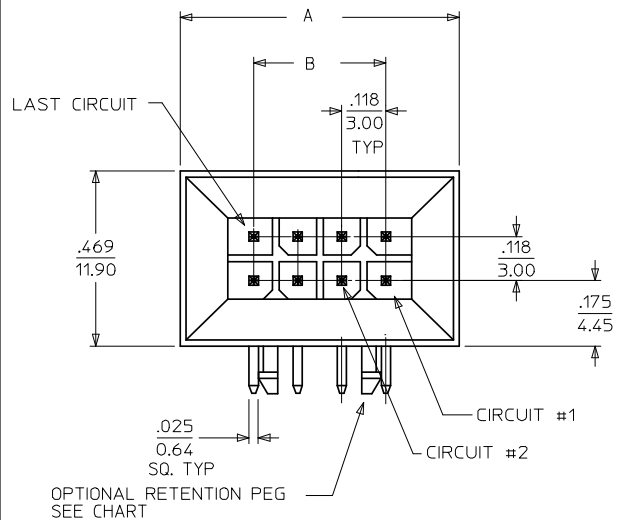
### **Material Info**

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

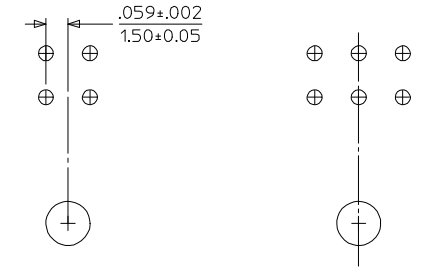
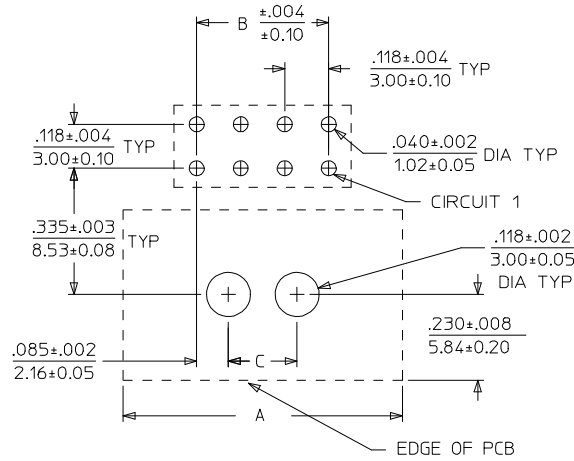
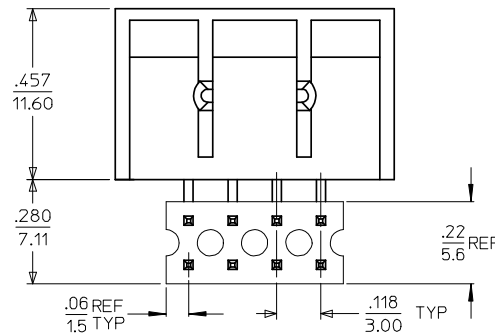
Packaging Specification	PK-44428-001
Product Specification	PS-44300-001, RPS-44300-001
Sales Drawing	SD-44428-001

This document was generated on 05/24/2010

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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 :

- 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)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		4 PLACES ±--- ±---	3 PLACES ±--- ±.010	2 PLACES ±0.25 ±.015	1 PLACE ±0.38 ±---	ANGULAR ±1/2°	DRAWN BY MUELLER	DATE 1999/11/29
H2	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY EDGLEY		DATE 1999/11/30	MATERIAL NO. SEE CHART	
		SIZE C		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		DOCUMENT NO. SD-44428-001	SHEET NO. 1 OF 2	

	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;"><b>POLARIZATION LAYOUT</b> <b>4-24 CIRCUITS</b></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 4:1 DESIGN UNITS METRIC THIRD ANGLE PROJECTION	
				IN/MM			TITLE
		4 PLACES ± --- ± ---		DRAWN BY DATE			MICRO FIT (3.0) DUAL ROW RIGHT ANGLE BMI HEADER ASS'Y <b>MOLEX INCORPORATED</b>
		3 PLACES ± --- ±.010		MUELLER 1999/11/29			
2 PLACES ±0.25 ±.015		CHECKED BY DATE					
1 PLACE ±0.38 ± ---		MUELLER 1999/11/29		MATERIAL NO. SD-44428-001 DOCUMENT NO. SHEET NO. 2 OF 2			
ANGULAR ±1/2°		APPROVED BY DATE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
EDGLEY 1999/11/30		MUELLER 1999/11/29					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART					