

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

**Part Number:** [0447642001](#)  
**Status:** **Active**  
**Overview:** [microfit\\_30](#)  
**Description:** 3.00mm (.118") Pitch Micro-Fit 3.0, BMI™ Receptacle Header, Dual Row, Right Angle, with Press-fit Plastic Pegs, 2.54µm (100µ") Tin (Sn), 20 Circuits

**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 Receptacles  
Series [44764](#)  
Application Board-to-Board, Wire-to-Board  
Overview [microfit\\_30](#)  
Product Literature Order No USA-106  
Product Name Micro-Fit 3.0 BMI™

**Physical**

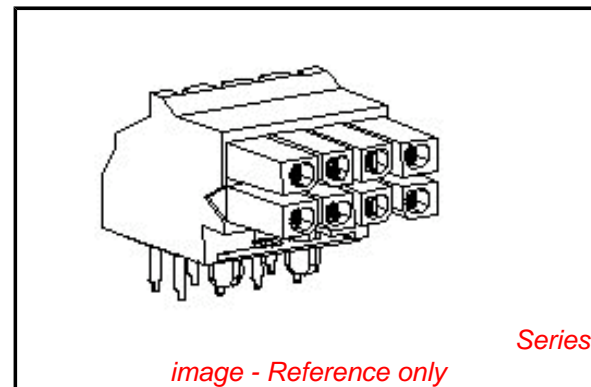
Circuits (Loaded) 20  
Durability (mating cycles max) 30  
Flammability 94V-0  
Glow-Wire Compliant No  
Material - Metal Phosphor Bronze  
Material - Plating Mating Tin  
Material - Plating Termination Tin  
Number of Rows 2  
Orientation Right Angle  
PCB Locator Yes  
PCB Retention Yes  
PCB Thickness 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) 40.8  
Plating min: Mating (µm) 1.02  
Plating min: Termination (µin) 40.8  
Plating min: Termination (µm) 1.02  
Polarized to PCB Yes  
Surface Mount Compatible (SMC) No  
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



*image - Reference only*

**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**

[44764Series](#)

**Mates With**

[44428](#) , [44300](#) , [44432](#)

Process Temperature max. C

260

**Material Info**

**Reference - Drawing Numbers**

Packaging Specification

PK-44764-001

Product Specification

PS-44300-001, RPS-44300-001

Sales Drawing

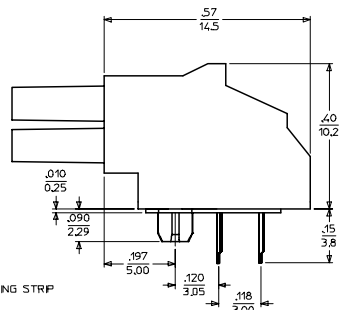
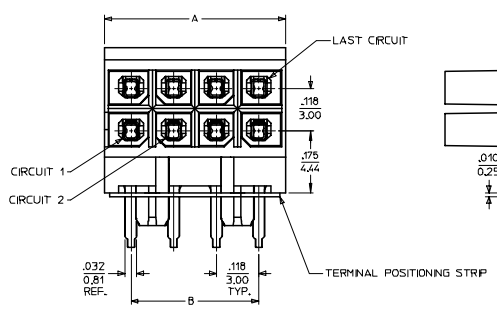
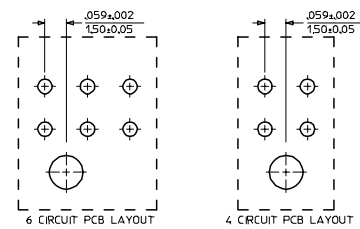
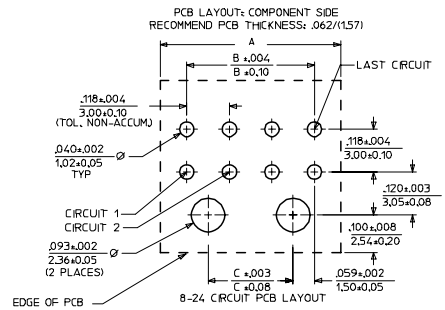
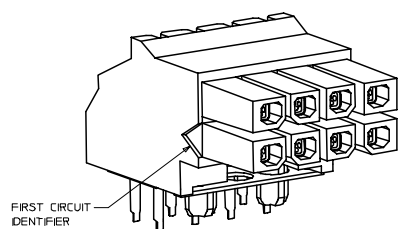
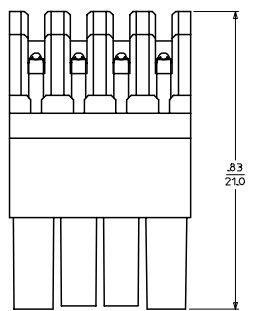
SD-44764-001, SD-44764-003

This document was generated on 05/21/2010

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	13	12	11	10	9	8	7	6	5	4	3	2
	MATERIAL NUMBER	NUMBER OF POSITIONS	PLATING OPTION	NUMBER OF POSITIONS	DIM. 'A'	DIM. 'B'	DIM. 'C'					
J	44764-0401	04	A	24	1445/(36.70)	1299/(33.00)	1181/(30.00)					
	44764-0402	04	B	22	1327/(33.70)	1181/(30.00)	1063/(27.00)					
	44764-0403	04	C	20	1209/(30.70)	1063/(27.00)	945/(24.00)					
	44764-0601	06	A	18	1091/(27.70)	945/(24.00)	827/(21.00)					
	44764-0602	06	B	16	.972/(24.70)	827/(21.00)	709/(18.00)					
	44764-0603	06	C	14	.854/(21.70)	709/(18.00)	591/(15.00)					
I	44764-0801	08	A	12	.736/(18.70)	591/(15.00)	472/(12.00)					
	44764-0802	08	B	10	.618/(15.70)	472/(12.00)	354/(9.00)					
	44764-0803	08	C	8	.500/(12.70)	354/(9.00)	236/(6.00)					
	44764-1001	10	A	6	.382/(9.70)	236/(6.00)						
	44764-1002	10	B	4	.264/(6.70)	118/(3.00)						
	44764-1003	10	C									
	44764-1201	12	A									
	44764-1202	12	B									
	44764-1203	12	C									
H	44764-1401	14	A									
	44764-1402	14	B									
	44764-1403	14	C									
	44764-1601	16	A									
	44764-1602	16	B									
	44764-1603	16	C									
	44764-1801	18	A									
	44764-1802	18	B									
	44764-1803	18	C									
G	44764-2001	20	A									
	44764-2002	20	B									
	44764-2003	20	C									
	44764-2201	22	A									
	44764-2202	22	B									
	44764-2203	22	C									
	44764-2401	24	A									
F	44764-2402	24	B									
	44764-2403	24	C									

NUMBER OF POSITIONS	DIM. 'A'	DIM. 'B'	DIM. 'C'
24	1445/(36.70)	1299/(33.00)	1181/(30.00)
22	1327/(33.70)	1181/(30.00)	1063/(27.00)
20	1209/(30.70)	1063/(27.00)	945/(24.00)
18	1091/(27.70)	945/(24.00)	827/(21.00)
16	.972/(24.70)	827/(21.00)	709/(18.00)
14	.854/(21.70)	709/(18.00)	591/(15.00)
12	.736/(18.70)	591/(15.00)	472/(12.00)
10	.618/(15.70)	472/(12.00)	354/(9.00)
8	.500/(12.70)	354/(9.00)	236/(6.00)
6	.382/(9.70)	236/(6.00)	
4	.264/(6.70)	118/(3.00)	

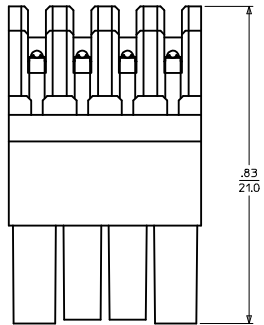


- NOTES:
- MATERIAL: HOUSINGS HIGH TEMP NYLON, GLASS FILLED, UL, 94V-0, COLOR BLACK  
TERMINAL: PHOSPHOR BRONZE ALLOY  
POSITIONING STRIP: MYLAR, COLOR NATURAL
  - FINISH:  
(A) - HOT TIN DIP: .000040/0.00102 MIN.  
(B) - SELECTIVE GOLD IN THE CONTACT AREA: .000015/0.00039 MIN, SELECTIVE TIN IN THE PC TAIL AREA: .000100/0.00254 MIN, BOTH OVER .000050/0.00127 MIN, NICKEL.  
(C) - SELECTIVE GOLD IN THE CONTACT AREA: .000030/0.00076 MIN, SELECTIVE TIN IN THE PC TAIL AREA: .000100/0.00254 MIN, 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 SPECIFICATIONS: PS-44300-001
  - PACKAGING SPECIFICATIONS: PER MOLEX DRAWING PK-44764-001
  - MATES WITH HEADER ASSEMBLY 44428, 44432, AND 44300
  - MOLEX RECOMMENDS THE USE OF MICRO-FIT TEST PLUG (SERIES 44242) WHENEVER CONTINUITY TESTING IS PERFORMED. TEST PLUGS MUST NOT BE USED TO MAKE OR BREAK UNDER LOAD. MOLEX DOES NOT RECOMMEND USING STANDARD MATING COMPONENTS (SERIES 44428, 44432, OR 44300) FOR TESTING PURPOSES.

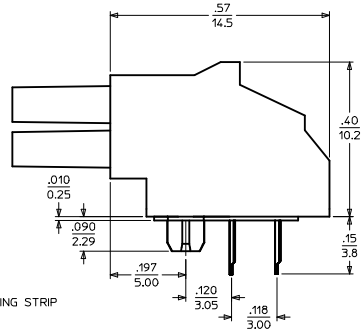
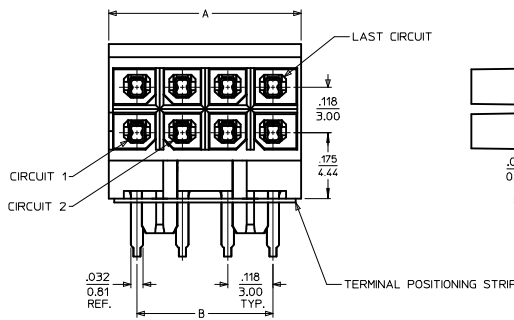
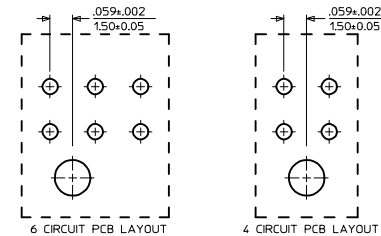
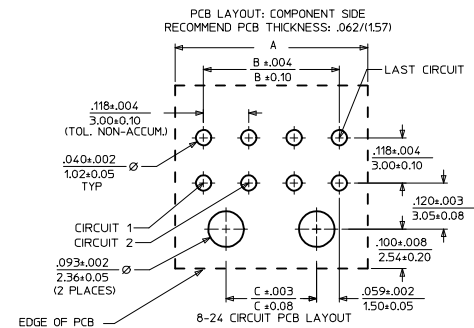
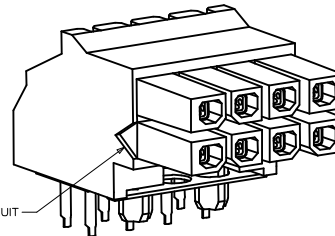
ADD MATING DIMENSION EC NO: UCP2005-2881 DRWN: JLOWE 2005/07/07 CHKD: SSOUSEK 2005/07/13 APPR: FSMITH 2005/07/15	QUALITY SYMBOLS -0 -0	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY	
		mm	INCH	---	INCH		TITLE	
		4 PLACES ± --- ± ---	3 PLACES ± --- ± .010	2 PLACES ± 0.25 ± .014	1 PLACE ± 0.35 ± ---		DIMENSION STYLE	IN/MM
D1	DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY EDGLEY	DATE 2000/07/13	molex MOLEX INCORPORATED		SHEET NO. 1 OF 1

MATERIAL NUMBER	NUMBER OF POSITIONS	PLATING OPTION
	04	A
	04	B
	04	C
	06	A
	06	B
	06	C
	08	A
	08	B
	08	C
	10	A
44764-1022	10	B
	10	C
	12	A
	12	B
	12	C
	14	A
	14	B
	14	C
	16	A
	16	B
	16	C
	18	A
	18	B
	18	C
	20	A
	20	B
	20	C
	22	A
	22	B
	22	C
	24	A
	24	B
	24	C

NUMBER OF POSITIONS	DIM. "A"	DIM. "B"	DIM. "C"
24	1.445/(36.70)	1.299/(33.00)	1.181/(30.00)
22	1.327/(33.70)	1.181/(30.00)	1.063/(27.00)
20	1.209/(30.70)	1.063/(27.00)	.945/(24.00)
18	1.091/(27.70)	.945/(24.00)	.827/(21.00)
16	.972/(24.70)	.827/(21.00)	.709/(18.00)
14	.854/(21.70)	.709/(18.00)	.591/(15.00)
12	.736/(18.70)	.591/(15.00)	.472/(12.00)
10	.618/(15.70)	.472/(12.00)	.354/(9.00)
8	.500/(12.70)	.354/(9.00)	.236/(6.00)
6	.382/(9.70)	.236/(6.00)	
4	.264/(6.70)	.118/(3.00)	



FIRST CIRCUIT IDENTIFIER



- NOTES:
- MATERIAL:  
HOUSING: HIGH TEMP NYLON, GLASS FILLED, U.L. 94V-0, COLOR BLACK  
TERMINAL: PHOSPHOR BRONZE ALLOY  
POSITIONING STRIP: NYLAR, COLOR NATURAL
  - FINISH:  
(A) = HOT TIN DIP: .00040/0.00102 MIN.  
(B) = SELECTIVE GOLD IN THE CONTACT AREA: .000015/0.00039 MIN., SELECTIVE TIN IN THE PC TAIL AREA: .000100/0.00254 MIN., BOTH OVER .000050/0.00127 MIN. NICKEL.  
(C) = SELECTIVE GOLD IN THE CONTACT AREA: .000030/0.00076 MIN., SELECTIVE TIN IN THE PC TAIL AREA: .000100/0.00254 MIN., BOTH OVER .000050/0.00127 MIN. NICKEL.
  - PRODUCT SPECIFICATIONS: PS-44300-001
  - PACKAGING SPECIFICATION: TUBE PACKED PER PK-44764-002
  - MATES WITH HEADER ASSEMBLY 44428, 44432, AND 44300
  - MOLEX RECOMMENDS THE USE OF MICRO-FIT TEST PLUG (SERIES 44242) WHENEVER CONTINUITY TESTING IS PERFORMED. TEST PLUGS MUST NOT BE USED TO MAKE OR BREAK UNDER LOAD. MOLEX DOES NOT RECOMMEND USING STANDARD MATING COMPONENTS (SERIES 44428, 44432, OR 44300) FOR TESTING PURPOSES.

INITIAL RELEASE EC NO: UCP2009-0615 DRWN:GAVERRILL 2008/09/15 CHKD:SSOUSEK 2008/09/16 APPR:FSMITH 2008/09/16	QUALITY SYMBOLS ▽ - 0 ▽ - 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY
			---	INCH		
REV	DESCRIPTION	mm	INCH	DIMENSION STYLE	TITLE	SHEET NO.
				IN/MM		
A		4 PLACES ± --- ± ---		DRAWN BY	DATE	1 OF 1
		3 PLACES ± --- ± .010		GAVERRILL	2008/09/11	
		2 PLACES ± 0.25 ± .014		CHECKED BY	DATE	MOLEX MOLEX INCORPORATED
		1 PLACE ± 0.35 ± ---		SSOUSEK	2008/09/11	
		ANGULAR ± 1/2°		APPROVED BY	DATE	SEE CHART SD-44764-003
		DRAFT WHERE APPLICABLE		FSMITH	2008/09/15	
		MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		