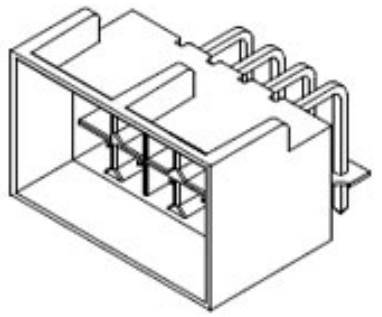
This document was generated on 05/24/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: 0444281401
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, 14 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 Literature Order No	USA-106
Product Name	Micro-Fit 3.0 BMI™

Physical

Breakaway	No
Circuits (Loaded)	14
Circuits (maximum)	14
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
Not Reviewed

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

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

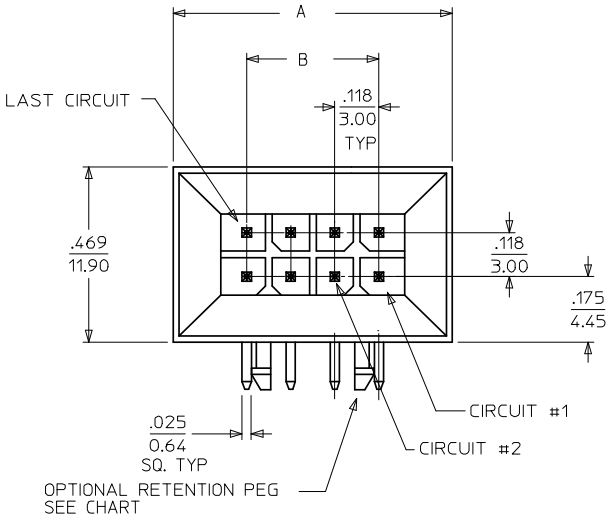
Solder Process Data

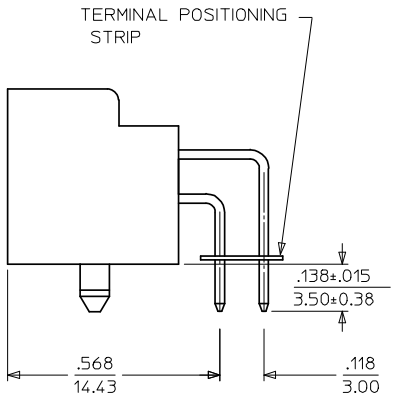
Duration at Max. Process Temperature (seconds)	5
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

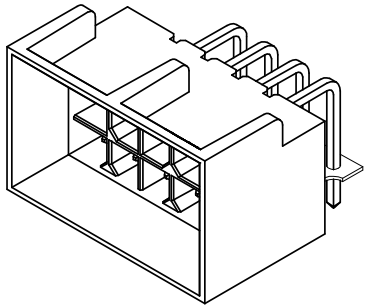
Material Info

Reference - Drawing Numbers

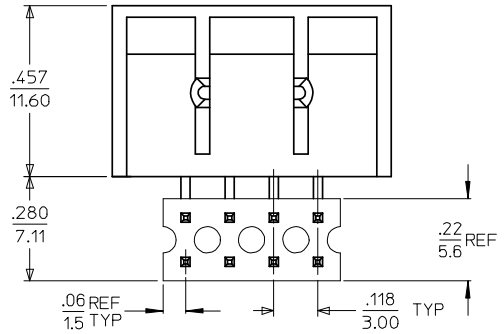
Packaging Specification	PK-44428-001
Product Specification	PS-44300-001, RPS-44300-001
Sales Drawing	SD-44428-001

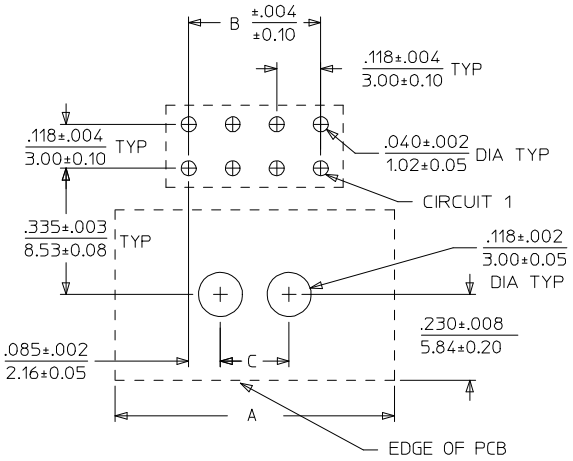






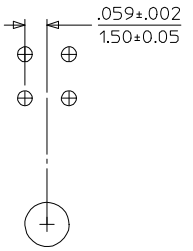
CIRCUIT SIZE	A	B	C
04	.512 / 13.00	.118 / 3.00	NA
06	.630 / 16.00	.236 / 6.00	NA
08	.748 / 19.00	.354 / 9.00	.184 / 4.68
10	.866 / 22.00	.472 / 12.00	.302 / 7.68
12	.984 / 25.00	.590 / 15.00	.420 / 10.68
14	1.102 / 28.00	.709 / 18.00	.539 / 13.68
16	1.220 / 31.00	.827 / 21.00	.657 / 16.68
18	1.338 / 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





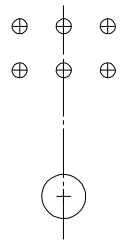
PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS .062/1.57

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

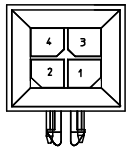
SIZE C

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

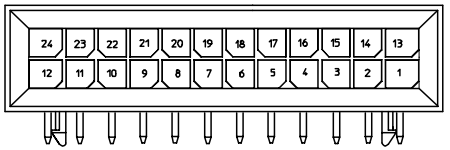
MATERIAL NUMBER	NUMBER OF CIRCUITS	FINISH OPTION	RETENTION PEG OPTION
44428-0401	04	A	YES
44428-0402	04	B	YES
44428-0403	04	C	YES
44428-0404	04	A	NO
44428-0405	04	B	NO
44428-0406	04	C	NO
44428-0601	06	A	YES
44428-0602	06	B	YES
44428-0603	06	C	YES
44428-0604	06	A	NO
44428-0605	06	B	NO
44428-0606	06	C	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

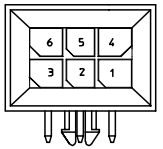
POLARIZATION LAYOUT
4-24 CIRCUITS



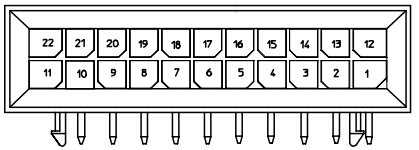
4 CIRCUIT



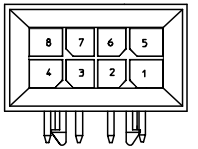
24 CIRCUIT



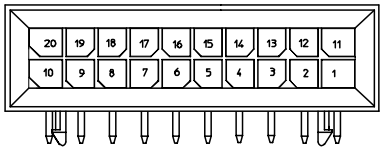
6 CIRCUIT



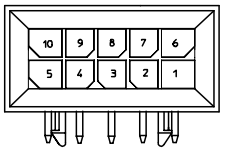
22 CIRCUIT



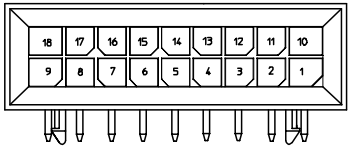
8 CIRCUIT



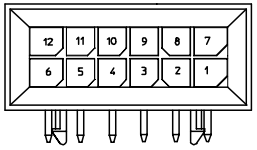
20 CIRCUIT



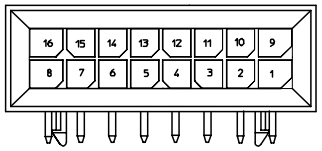
10 CIRCUIT



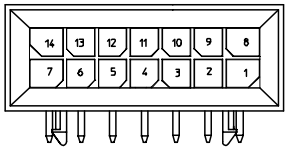
18 CIRCUIT



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

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