

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

**Part Number:** **0436501213**

**Status:** **Active**

**Overview:** microfit\_30

**Description:** 3.00mm (.118") Pitch Micro-Fit 3.0™ Header, Surface Mount Compatible, Single Row, Right Angle, with Solder Tab, 12 Circuits, 0.38µm (15µ") Gold (Au) Selective Plating, Glow Wire Compatible

**Documents:**

[3D Model](#)

[Product Specification PS-43650 \(PDF\)](#)

[Drawing \(PDF\)](#)

[RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

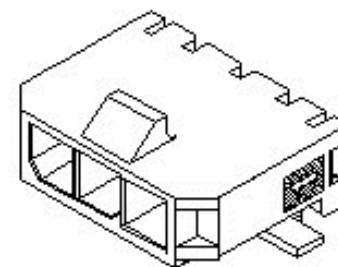
CSA	LR19980
TUV	R72081037
UL	E29179

**General**

Product Family	PCB Headers
Series	<u>43650</u>
Application	Wire-to-Board
Comments	Glow Wire Equivalent Part Number <u>436501213</u> . High Temperature, Square Pin, Solder Type
Overview	<u>microfit_30</u>
Product Literature Order No	USA-106
Product Name	Micro-Fit 3.0™

**Physical**

Breakaway	No
Circuits (Loaded)	12
Circuits (maximum)	12
Color - Resin	Black
Durability (mating cycles max)	30
Flammability	94V-0
Glow-Wire Compliant	Yes
Mated Height (in)	0.275 In
Mated Height (mm)	6.98 mm
Material - Metal	Brass
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	1
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	Embossed Tape on Reel
Pitch - Mating Interface (in)	0.118 In
Pitch - Mating Interface (mm)	3.00 mm
Plating min: Mating (µin)	15
Plating min: Mating (µm)	0.38
Plating min: Termination (µin)	100
Plating min: Termination (µm)	2.50
Polarized to PCB	Yes
Shrouded	Fully
Stackable	No



Series

image - Reference only

**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](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**

[43650Series](#)

**Mates With**

[43645 Micro-Fit 3.0™ Receptacle Housing](#)

Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Surface Mount

### **Electrical**

Current - Maximum per Contact	5A
Voltage - Maximum	250V

### **Solder Process Data**

Duration at Max. Process Temperature (seconds)	30
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	260

### **Material Info**

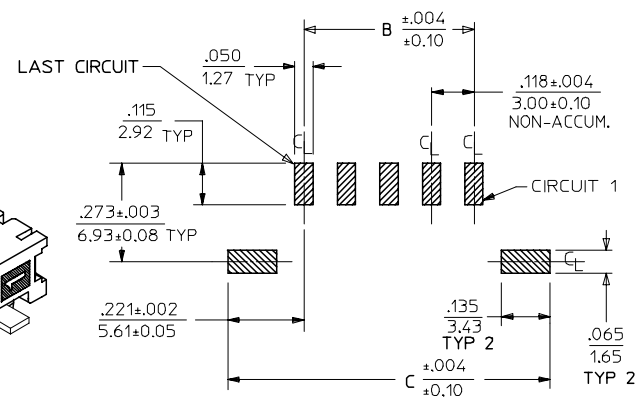
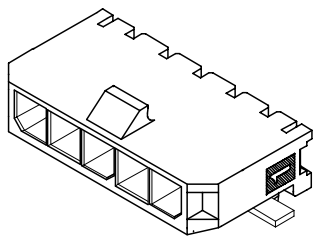
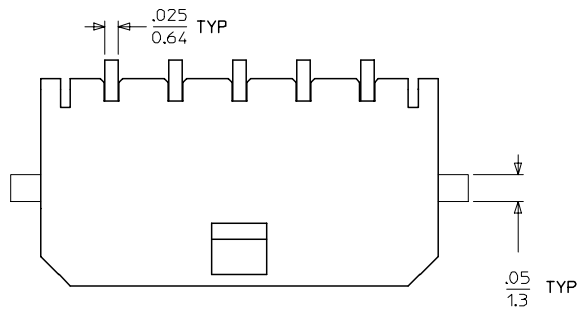
#### **Reference - Drawing Numbers**

Packaging Specification	PK-70873-07**
Product Specification	PS-43650
Sales Drawing	SD-43650-005
Test Summary	TS-43045-002

This document was generated on 05/24/2010

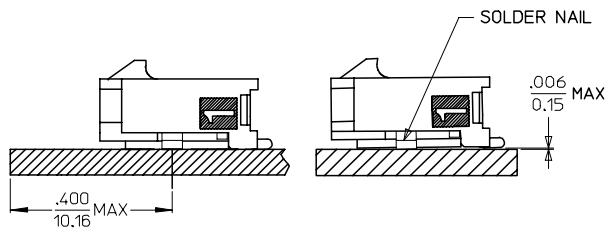
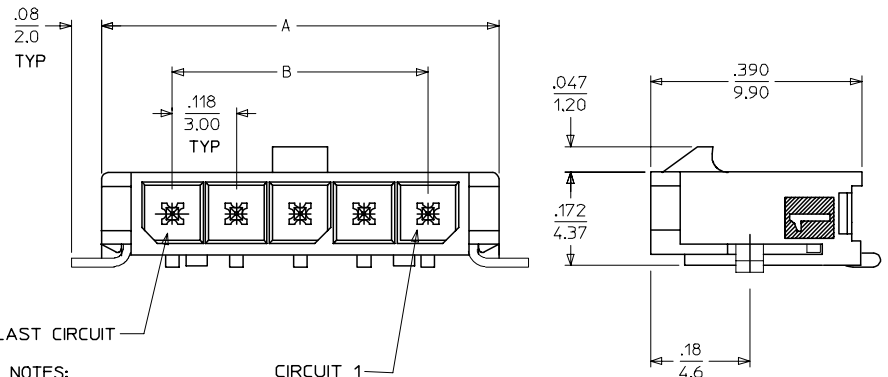
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13 12 11 10 9 8 7 6 5 4 3 2 1



CKTS	A	B	C
2	.380 9.65	.118 3.00	.559 14.20
3	.498 12.65	.236 6.00	.677 17.20
4	.616 15.65	.354 9.00	.795 20.20
5	.734 18.64	.472 12.00	.913 23.20
6	.852 21.64	.591 15.00	1.031 26.20
7	.970 24.64	.709 18.00	1.150 29.20
8	1.088 27.64	.827 21.00	1.268 32.20
9	1.206 30.63	.945 24.00	1.386 35.20
10	1.325 33.66	1.063 27.00	1.504 38.20
11	1.443 36.65	1.181 30.00	1.622 41.20
12	1.561 39.65	1.299 33.00	1.740 44.20

PCB LAYOUT: COMPONENT SIDE



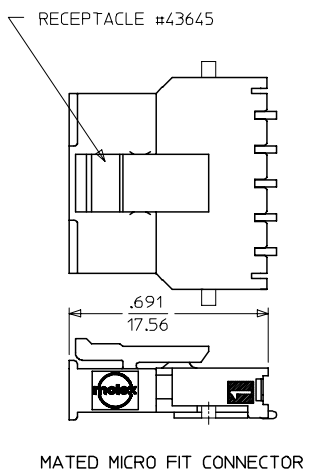
LOCATION DETAIL SEE NOTE #7  
COPLANARITY DETAIL SEE NOTE #6

- NOTES:**
- HOUSING MATERIAL: LIQUID CRYSTAL POLYMER, GLASS FILLED, UL94V-0, COLOR: BLACK  
TERMINAL MATERIAL: BRASS ALLOY
  - FINISH: A = .000100/(0.00254) MIN. BRIGHT TIN OVER .000050/(0.00127) MIN. NICKEL  
B = .000015/(0.00038) MIN. SELECT GOLD IN CONTACT AREA .000100/(0.00254) MIN. SELECT MATTE TIN ON SOLDER TAILS BOTH OVER .000050/(0.00127) NICKEL OVERALL  
C = .000030/(0.00076) MIN. SELECT GOLD IN CONTACT AREA .000100/(0.00254) MIN. SELECT MATTE TIN ON SOLDER TAILS BOTH OVER .000050/(0.00127) NICKEL OVERALL

\* 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-43650
- TAPE AND REEL PACKAGED : SEE MOLEX DRAWING PK-70873-07\*\*
- MATES WITH MICRO FIT (3.0) RECEPTACLE SERIES 43645
- THE COPLANARITY DIMENSION IS ESTABLISHED BY PLACING THE ASSEMBLY ON A FLAT SURFACE. THE DISTANCE FROM THAT SURFACE TO THE BOTTOM OF ANY TERMINAL OR NAIL MUST NOT EXCEED .006/0.15
- TO AVOID INTERFERENCE BETWEEN RECEPTACLE AND PCB, HEADER MUST BE PLACED WITHIN .400/(10.16) MAX. FROM EDGE OF PCB, AS SHOWN IN LOCATION DETAIL.
- A HIGHER TEMPERATURE GRADE MATERIAL (260C MAX. REFLOW TEMPERATURE) IS BEING PHASED-IN BEGINNING AUGUST 2007. PARTS WILL BE TEMPORARILY IDENTIFIED WITH A BLUE DOT ON THE PRIMARY SHIPPING CARTON LABEL UNTIL ALL CIRCUIT SIZES ARE CONVERTED. AT WHICH TIME A FULL-CONVERSION DATE WILL BE IDENTIFIED IN PS-43650.

	FINISH A	FINISH B	FINISH C
CKTS	MATERIAL NO:	MATERIAL NO:	MATERIAL NO:
02	43650-0212	43650-0213	43650-0214
03	43650-0312	43650-0313	43650-0314
04	43650-0412	43650-0413	43650-0414
05	43650-0512	43650-0513	43650-0514
06	43650-0612	43650-0613	43650-0614
07	43650-0712	43650-0713	43650-0714
08	43650-0812	43650-0813	43650-0814
09	43650-0912	43650-0913	43650-0914
10	43650-1012	43650-1013	43650-1014
11	43650-1112	43650-1113	43650-1114
12	43650-1212	43650-1213	43650-1214



MATED MICRO FIT CONNECTOR

<b>ADD NOTES 7 AND 8</b> EC NO: UCP2008-0037 DRAWN: HK/PPER 2007/09/06 CHKD: SSOUSEK 2007/09/11 APPR: FSM/TH 2007/09/12	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH		DIMENSION STYLE IN/MM		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION			
		4 PLACES ± --- ± ---	3 PLACES ± --- ± .010	2 PLACES ± 0.25 ± .014	1 PLACE ± 0.36 ± ---	DRAWN BY	DATE	TITLE	MICRO FIT (3.0) SINGLE ROW / RIGHT ANGLE SMT / NAILS / REELS		
		ANGULAR ±1/2°				CHECKED BY	DATE	MOLEX INCORPORATED			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				APPROVED BY	DATE	SD-43650-005			
				MATERIAL NO. SEE CHART		DOCUMENT NO. SD-43650-005		SHEET NO. 1 OF 1			
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											

12 11 10 9 8 7 6 5 4 3 2 1