

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

**Part Number:** [0436501212](#)  
**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, Tin (Sn) Plating, Glow Wire Compatible

**Documents:**

[3D Model](#) [Product Specification PS-43650 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

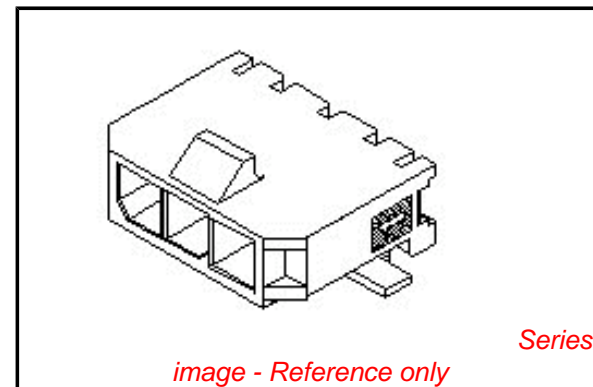
CSA LR19980  
TUV R72081037  
UL E29179

**General**

Product Family PCB Headers  
Series [43650](#)  
Application Wire-to-Board  
Comments Glow Wire Equivalent Part Number [436501212](#). High Temperature, Square Pin, Solder Type  
Overview [microfit\\_30](#)  
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 Tin  
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) 100  
Plating min: Mating (µm) 2.50  
Plating min: Termination (µin) 100  
Plating min: Termination (µm) 2.50  
Polarized to PCB Yes  
Shrouded Fully  
Stackable No  
Temperature Range - Operating -40°C to +105°C



**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](#)

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**

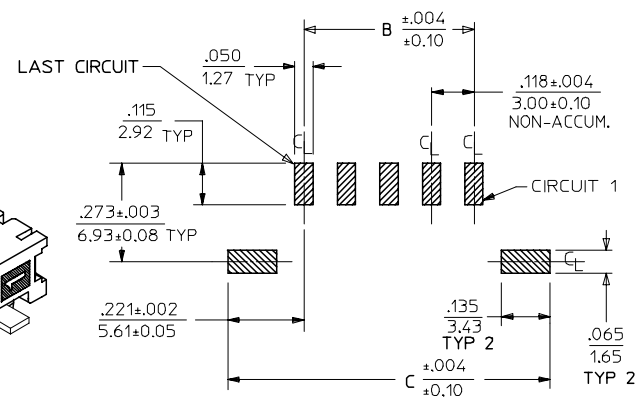
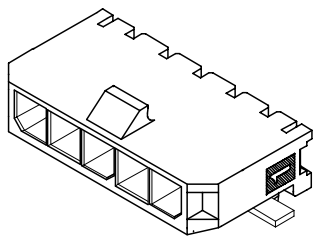
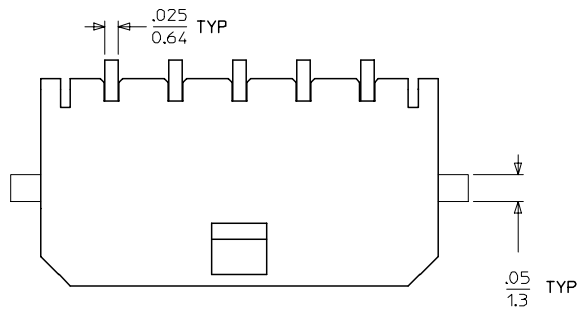
#### **Reference - Drawing Numbers**

Packaging Specification PK-70873-07\*\*  
Product Specification PS-43650  
Sales Drawing SD-43650-005

This document was generated on 05/24/2010

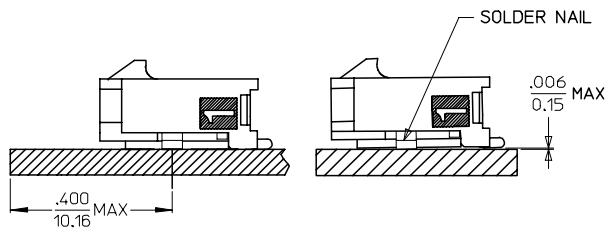
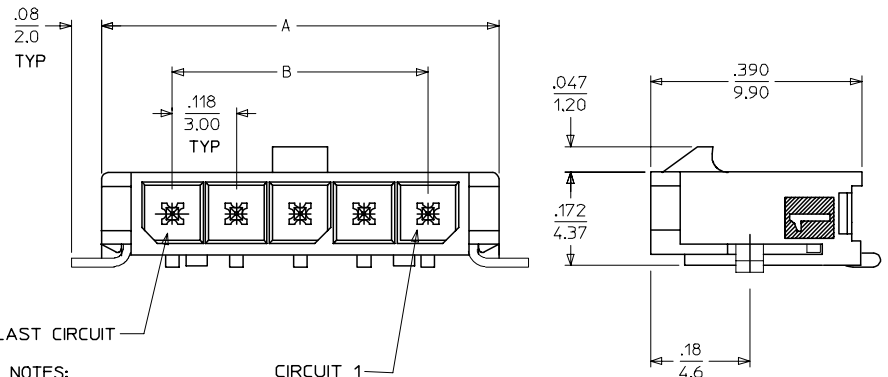
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13 12 11 10 9 8 7 6 5 4 3 2 1



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



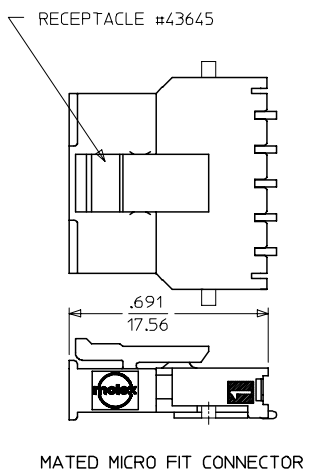
LOCATION DETAIL  
SEE NOTE #7

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.

CKTS	FINISH A	FINISH B	FINISH C
	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)		DIMENSION STYLE IN/MM		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± .014 1 PLACE ± 0.36 ± ---		DRAWN BY SAMIEC 2000/07/07 CHECKED BY MUELLER 2000/07/07 APPROVED BY EDGLEY 2000/07/07					TITLE MICRO FIT (3.0) SINGLE ROW / RIGHT ANGLE SMT / NAILS / REELS	
		ANGULAR ±1/2°		MATERIAL NO. SEE CHART						MOLEX INCORPORATED DOCUMENT NO. SD-43650-005
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE C						

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