

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

**Part Number:** [0436500509](#)  
**Status:** **Active**  
**Overview:** [microfit\\_30](#)  
**Description:** 3.00mm (.118") Pitch Micro-Fit 3.0™ Header, Surface Mount Compatible, Single Row, Right Angle, with PCB Press-fit Metal Retention Clip, 5 Circuits, Tin (Sn) Plating, Glow Wire Compatible

**Documents:**

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

**Agency Certification**

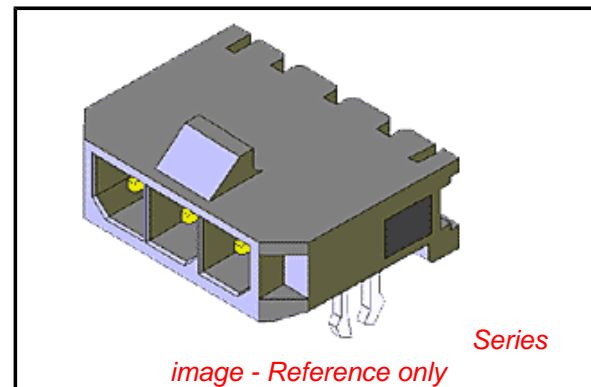
CSA	LR19980
TUV	R72081037
UL	E29179

**General**

Product Family	PCB Headers
Series	<a href="#">43650</a>
Application	Wire-to-Board
Comments	High Temperature Square Pin Solder Type
Overview	<a href="#">microfit_30</a>
Product Literature Order No	USA-106
Product Name	Micro-Fit 3.0™

**Physical**

Breakaway	No
Circuits (Loaded)	5
Circuits (maximum)	5
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**

**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**

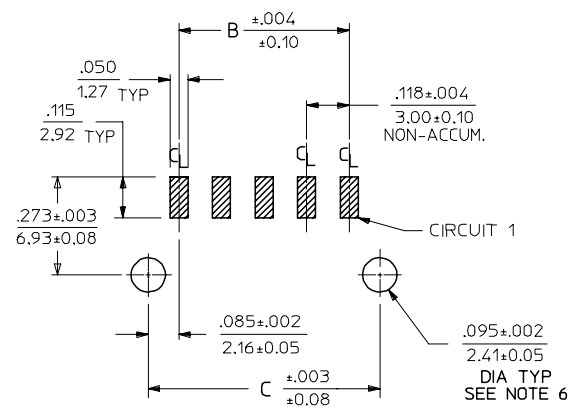
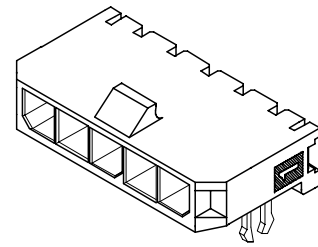
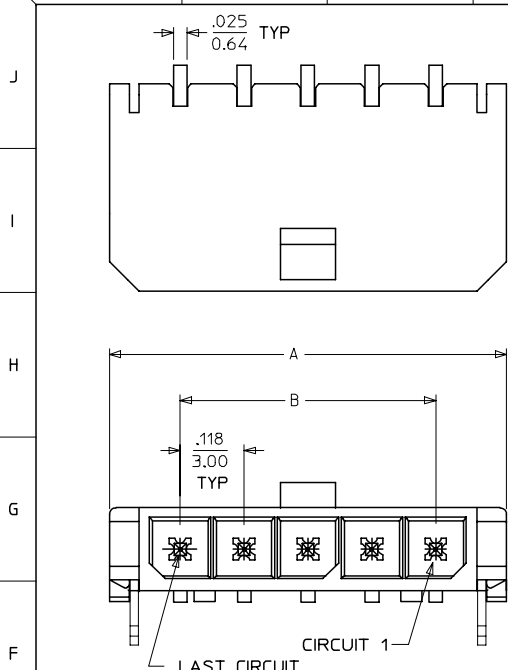
**Reference - Drawing Numbers**

Packaging Specification PK-70873-07\*\*  
Product Specification PS-43650  
Sales Drawing SD-43650-004

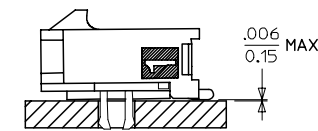
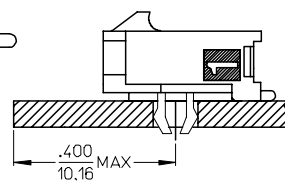
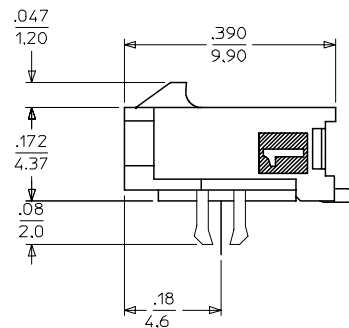
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13 12 11 10 9 8 7 6 5 4 3 2 1



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



LOCATION DETAIL  
SEE NOTE #8

COPLANARITY DETAIL  
SEE NOTE #7

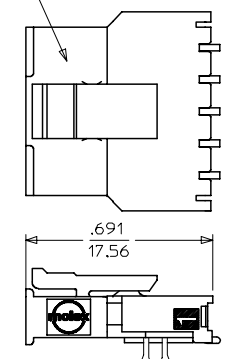
CKTS	DIM A	DIM B	DIM C
2	.380 9.65	.118 3.00	.287 7.30
3	.498 12.65	.236 6.00	.405 10.30
4	.616 15.65	.354 9.00	.524 13.30
5	.734 18.64	.472 12.00	.642 16.30
6	.852 21.64	.591 15.00	.760 19.30
7	.970 24.64	.709 18.00	.878 22.30
8	1.088 27.64	.827 21.00	.996 25.30
9	1.206 30.63	.945 24.00	1.114 28.30
10	1.325 33.66	1.063 27.00	1.232 31.30
11	1.443 36.65	1.181 30.00	1.350 34.30
12	1.561 39.65	1.299 33.00	1.469 37.30

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: RECEPTACLE NUMBER 43645
- TO MINIMIZE INSERTION FORCE ON MOUNTING CLIPS DURING ROBOTIC PLACEMENT, HOLE DIAMETER SPECIFICATIONS MUST BE INCREASED MAKING THEM MORE COMPATIBLE WITH PICK AND PLACE EQUIPMENT. HOLE DIAMETERS SHOULD BE INCREASED TO APPROXIMATELY .100±.002/(2.54±0.05) AND EVALUATED PER PLACEMENT EQUIPMENT.
- THE COPLANARITY DIMENSION IS ESTABLISHED BY PLACING THE ASSEMBLY ON A FLAT SURFACE. THE DISTANCE FROM THAT SURFACE TO THE BOTTOM OF ANY ANY TERMINAL 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	43650-0209	43650-0210	43650-0211
03	43650-0309	43650-0310	43650-0311
04	43650-0409	43650-0410	43650-0411
05	43650-0509	43650-0510	43650-0511
06	43650-0609	43650-0610	43650-0611
07	43650-0709	43650-0710	43650-0711
08	43650-0809	43650-0810	43650-0811
09	43650-0909	43650-0910	43650-0911
10	43650-1009	43650-1010	43650-1011
11	43650-1109	43650-1110	43650-1111
12	43650-1209	43650-1210	43650-1211

RECEPTACLE #43645



MATED MICRO FIT CONNECTORS

ADD NOTES 8 AND 9 EC NO: UCP2008-0037 DRAWN: KIPER 2007/09/06 CHKD: SSOUSEK 2007/09/11 APPR: FSM TH 2007/09/12	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± .014 1 PLACE ± 0.36 ± --- ANGULAR ±1/2°	DIMENSION STYLE IN/MM DRAWN BY: SAMIEC DATE: 2000/07/07 CHECKED BY: MUELLER DATE: 2000/07/07 APPROVED BY: EDGLEY DATE: 2000/07/07 MATERIAL NO. DOCUMENT NO.	SCALE --- DESIGN UNITS METRIC THIRD ANGLE PROJECTION	MICRO FIT (3.0) SINGLE ROW / RIGHT ANGLE SMT / CLIPS / REEL MOLEX INCORPORATED SD-43650-004	SHEET NO. 1 OF 1
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART	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