

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

**Part Number:** [0430451416](#)  
**Status:** **Active**  
**Overview:** [microfit\\_30](#)  
**Description:** 3.00mm (.118") Pitch Micro-Fit 3.0™ Header, Surface Mount, Dual Row, Vertical, with Press-fit Metal Retention Clip, 14 Circuits, 0.38µm (15µ") Gold (Au) Selective Plating, Glow Wire Compatible

**Documents:**

[3D Model](#) [Product Specification PS-43045 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

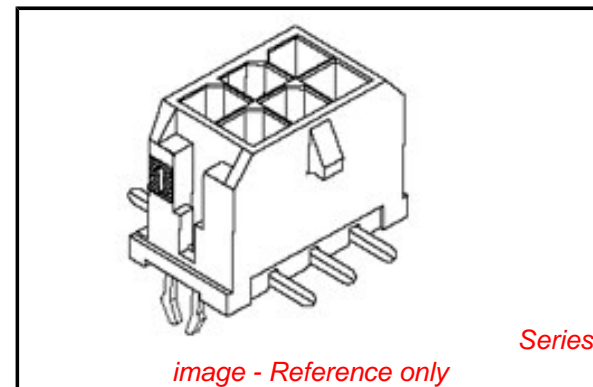
CSA	LR19980
TUV	R72081037
UL	E29179

**General**

Product Family	PCB Headers
Series	<a href="#">43045</a>
Application	Wire-to-Board
Comments	Glow Wire Equivalent Part Number <a href="#">430451416</a> . 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)	14
Circuits (maximum)	14
Color - Resin	Black
Durability (mating cycles max)	30
Flammability	94V-0
Glow-Wire Compliant	Yes
Mated Height (in)	0.680 In
Mated Height (mm)	17.27 mm
Material - Metal	Brass
Material - Plating Mating	Tin
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Vertical
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)	35
Plating min: Mating (µm)	0.88
Plating min: Termination (µin)	35
Plating min: Termination (µm)	0.88
Polarized to PCB	Yes
Shrouded	Fully
Stackable	No



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**Halogen-Free Status**  
**Halogen-Free**

**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**

[43045Series](#)

**Mates With**

[43025](#)

Surface Mount Compatible (SMC)	N/A
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

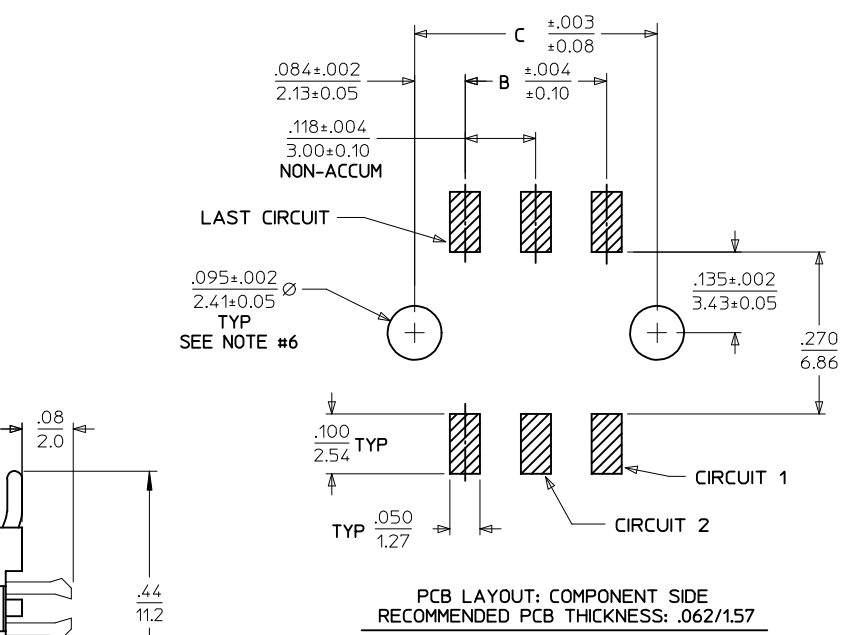
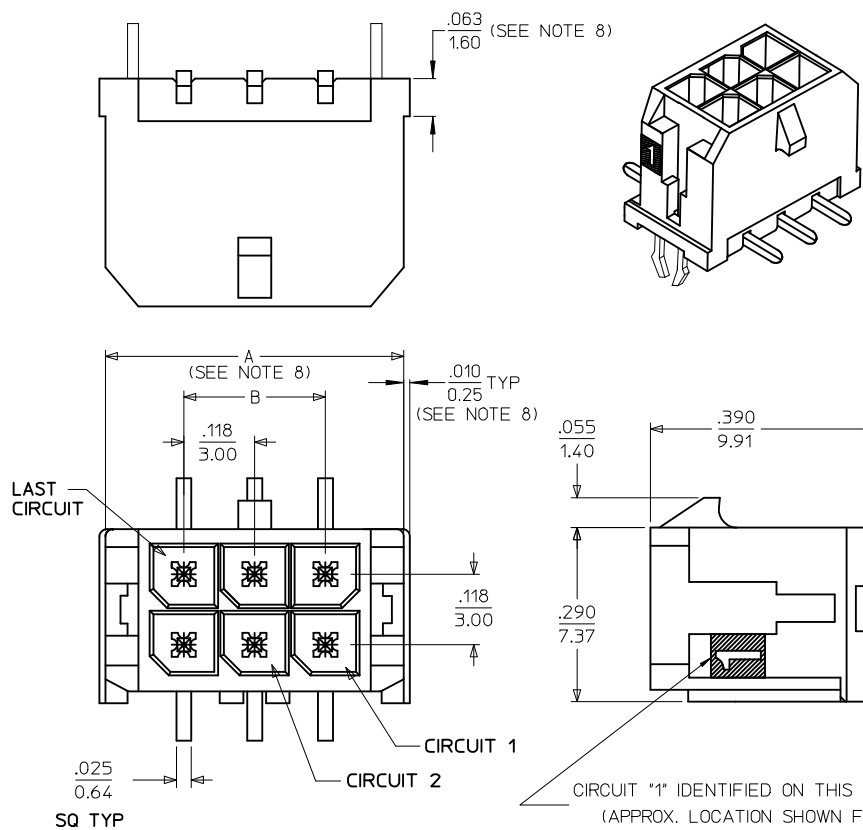
### **Material Info**

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

Application Specification	AS-43555-001
Packaging Specification	PK-70873-05**
Product Specification	PS-43045, RPS-43045-003, RPS-43045-004
Sales Drawing	SD-43045-006
Test Summary	TS-43045-001, TS-43045-002

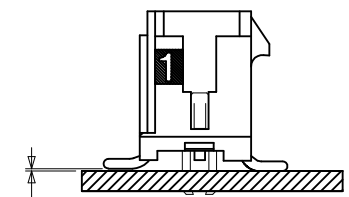
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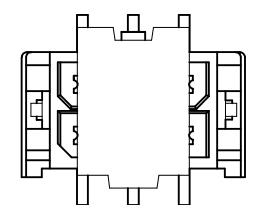


CKTS	A (SEE NOTE 8)		
	A	B	C
02	.262 6.65	NA	.169 4.30
04	.380 9.65	.118 3.00	.287 7.30
06	.498 12.65	.236 6.00	.405 10.30
08	.616 15.65	.354 9.00	.524 13.30
10	.734 18.65	.472 12.00	.642 16.30
12	.852 21.65	.591 15.00	.760 19.30
14	.970 24.65	.709 18.00	.878 22.30
16	1.088 27.65	.827 21.00	.996 25.30
18	1.206 30.65	.945 24.00	1.114 28.30
20	1.325 33.65	1.063 27.00	1.232 31.30
22	1.443 36.65	1.181 30.00	1.350 34.30
24	1.561 39.65	1.299 33.00	1.469 37.30

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



COPLANARITY DETAIL  
SEE NOTE #7



SHOWN WITH DISPOSABLE CAP  
(FOR REMOVAL FROM TAPE & REEL PACKAGING)  
SEE NOTE #4

**NOTES:**

- HOUSING MATERIAL: GLASS FILLED LIQUID CRYSTAL POLYMER, UL94V-0, COLOR: BLACK  
TERMINAL MATERIAL: BRASS ALLOY
- FINISH: A = .000100/(0.00254) MIN. TIN OVER  
.000050/(0.00127) MIN. NICKEL PLATE.  
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) MIN. NICKEL PLATE.  
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) MIN. NICKEL PLATE.
- \* 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-43045
- TAPE AND REEL PACK : SEE MOLEX DRAWING PK-70873-05\*\*
- MATES WITH MICRO FIT (3.0) RECEPTACLE SERIES 43025
- TO MINIMIZE INSERTION FORCE OF MOUNTING CLIPS DURING ROBOTIC PLACEMENT THE HOLE DIAMETER SHOULD BE INCREASED TO .108±.002 / 2.74±0.05 AND THEN 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 TERMINAL MUST NOT EXCEED .006/0.15
- .010/0.25 OFFSETS ARE PRESENT ON ALL PARTS MANUFACTURED AFTER 11/1/2007, AND ON PARTS PRIOR TO 11/1/2007 THAT CONTAIN A GREEN DOT ON THE PRIMARY SHIPPING CARTON LABEL.
- THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

CKTS	FINISH A	FINISH B	FINISH C
	MATERIAL NO:	MATERIAL NO:	MATERIAL NO:
02	43045-0215	43045-0216	43045-0217
04	43045-0415	43045-0416	43045-0417
06	43045-0615	43045-0616	43045-0617
08	43045-0815	43045-0816	43045-0817
10	43045-1015	43045-1016	43045-1017
12	43045-1215	43045-1216	43045-1217
14	43045-1415	43045-1416	43045-1417
16	43045-1615	43045-1616	43045-1617
18	43045-1815	43045-1816	43045-1817
20	43045-2015	43045-2016	43045-2017
22	43045-2215	43045-2216	43045-2217
24	43045-2415	43045-2416	43045-2417

ADD: .44/11.2 DIM EC NO: UCP2009-1183 DRWNSOUSEK 2008/11/106 CHKDKM/KPPER 2008/11/111 APPR:FSM/LTH 2008/11/111 REV: F2	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± .005</td> <td>± .0002</td> </tr> <tr> <td>3 PLACES</td> <td>± .010</td> <td>± .0004</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>± .010</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.36</td> <td>± .014</td> </tr> </table> ANGULAR ±1/2°		mm	INCH	4 PLACES	± .005	± .0002	3 PLACES	± .010	± .0004	2 PLACES	± 0.25	± .010	1 PLACE	± 0.36	± .014	DIMENSION STYLE IN/MM DRAWN BY: SAMIEC DATE: 2000/03/15 CHECKED BY: MUELLER DATE: 2000/03/15 APPROVED BY: EDGLEY DATE: 2000/03/15	SCALE: 1:1 DESIGN UNITS: METRIC THIRD ANGLE PROJECTION	TITLE: MICRO FIT (3.0) DUAL ROW VERTICAL SMT HEADER W/CLIPS ASS'Y MOLEX MOLEX INCORPORATED
		mm	INCH																	
	4 PLACES	± .005	± .0002																	
3 PLACES	± .010	± .0004																		
2 PLACES	± 0.25	± .010																		
1 PLACE	± 0.36	± .014																		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE CHART SIZE: C	DOCUMENT NO. SD-43045-006 SHEET NO. 1 OF 1	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																