

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

**Part Number:** **0430451016**

**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, 10 Circuits, 0.38µm (15µ") Gold (Au) Selective Plating, Glow Wire Compatible

**Documents:**

[3D Model](#)

[Drawing \(PDF\)](#)

[Product Specification PS-43045 \(PDF\)](#)

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

**Agency Certification**

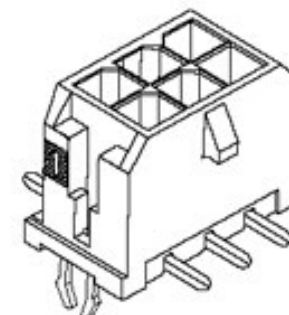
|     |           |
|-----|-----------|
| CSA | LR19980   |
| TUV | R72081037 |
| UL  | E29179    |

**General**

|                             |   |
|-----------------------------|---|
| Product Family              | PCB Headers   |
| Series                      | <u>43045</u>  |
| Application                 | Wire-to-Board   |
| Comments                    | Glow Wire Equivalent Part Number <u>430451016</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)              | 10                             |
| Circuits (maximum)             | 10                             |
| 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                             |



*image - Reference only*

*Series*

**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                       |

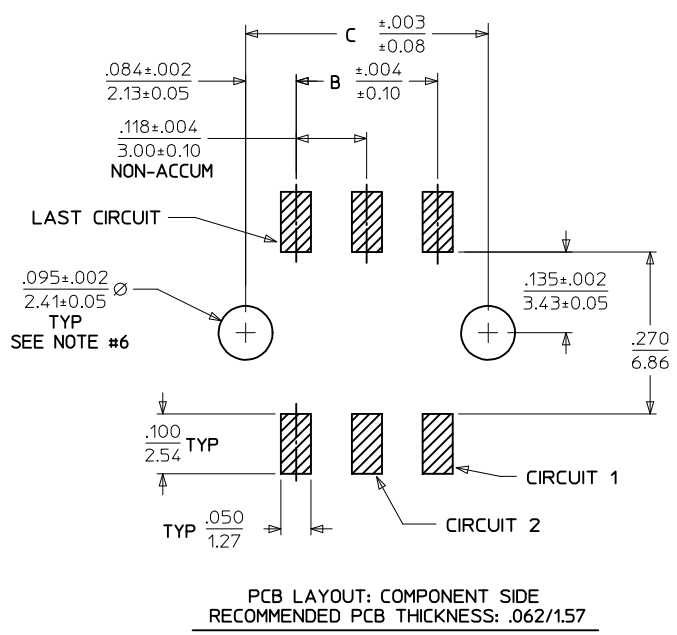
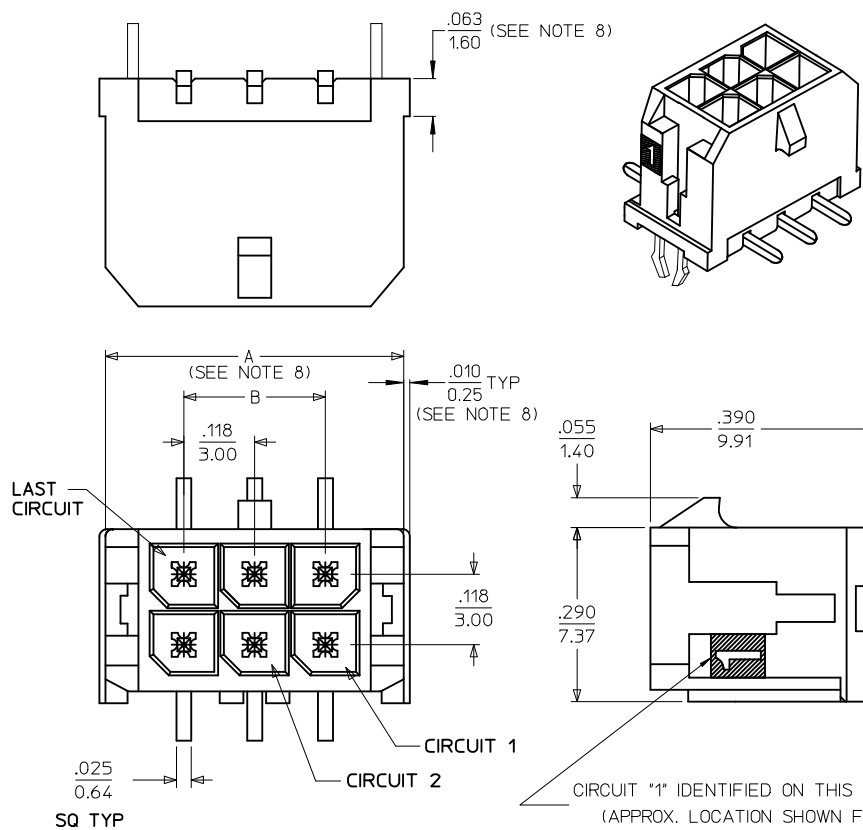
### **Material Info**

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

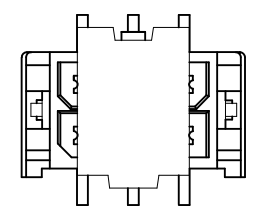
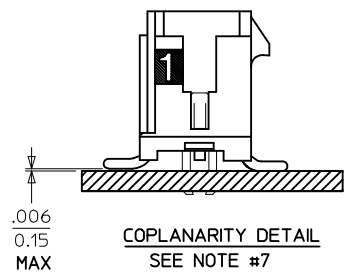
|                           |  |
|---------------------------|--|
| Application Specification | AS-43555-001                           |
| Packaging Specification   | PK-70873-05**                          |
| Product Specification     | PS-43045, RPS-43045-003, RPS-43045-004 |
| Sales Drawing             | 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<br>6.65   | NA             | .169<br>4.30   |
| 04   | .380<br>9.65   | .118<br>3.00   | .287<br>7.30   |
| 06   | .498<br>12.65  | .236<br>6.00   | .405<br>10.30  |
| 08   | .616<br>15.65  | .354<br>9.00   | .524<br>13.30  |
| 10   | .734<br>18.65  | .472<br>12.00  | .642<br>16.30  |
| 12   | .852<br>21.65  | .591<br>15.00  | .760<br>19.30  |
| 14   | .970<br>24.65  | .709<br>18.00  | .878<br>22.30  |
| 16   | 1.088<br>27.65 | .827<br>21.00  | .996<br>25.30  |
| 18   | 1.206<br>30.65 | .945<br>24.00  | 1.114<br>28.30 |
| 20   | 1.325<br>33.65 | 1.063<br>27.00 | 1.232<br>31.30 |
| 22   | 1.443<br>36.65 | 1.181<br>30.00 | 1.350<br>34.30 |
| 24   | 1.561<br>39.65 | 1.299<br>33.00 | 1.469<br>37.30 |



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