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**Part Number:** [0430452025](#)  
**Status:** **Active**  
**Overview:** [microfit\\_30](#)  
**Description:** 3.00mm (.118") Pitch Micro-Fit 3.0™ Header, Surface Mount Compatible, Dual Row, Vertical, with Press-fit Metal Retention Clip, 20 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                    | High Temperature Square Pin Offset Through Hole Mounting 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)              | 20                             |
| Circuits (maximum)             | 20                             |
| 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      | Gold                           |
| 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                 | Tray                           |
| 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                             |

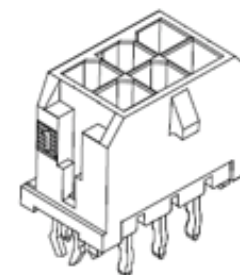


image - Reference only

Series

**EU RoHS**

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

**China RoHS**



**Halogen-Free**

**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) | Yes                       |
| Temperature Range - Operating  | -40°C to +105°C           |
| Termination Interface: Style   | Through Hole - Kinked Pin |

### **Electrical**

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

### **Solder Process Data**

|  |                              |
|--|------------------------------|
| Duration at Max. Process Temperature (seconds) | 30                           |
| Lead-free Process Capability                   | SMC & Wave Capable (TH only) |
| Max. Cycles at Max. Process Temperature        | 3                            |
| Process Temperature max. C                     | 260                          |

### **Material Info**

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

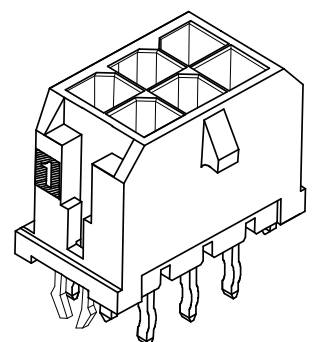
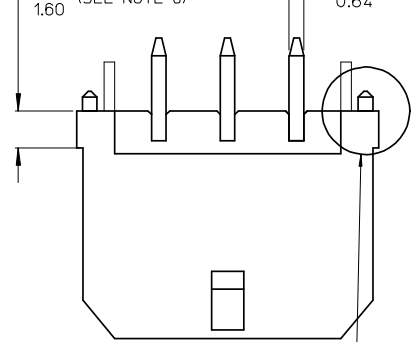
|                         |  |
|-------------------------|--|
| Packaging Specification | PK-70873-0314                          |
| Product Specification   | PS-43045, RPS-43045-003, RPS-43045-004 |
| Sales Drawing           | SD-43045-009                           |
| Test Summary            | TS-43045-001, TS-43045-002             |

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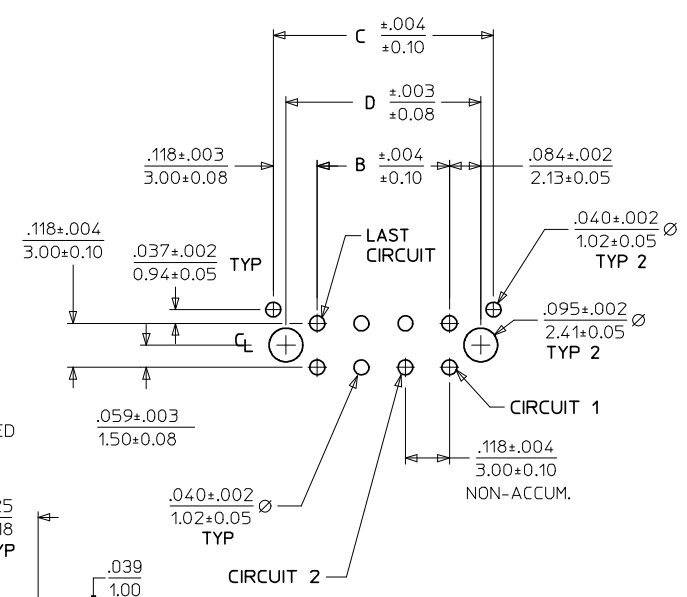
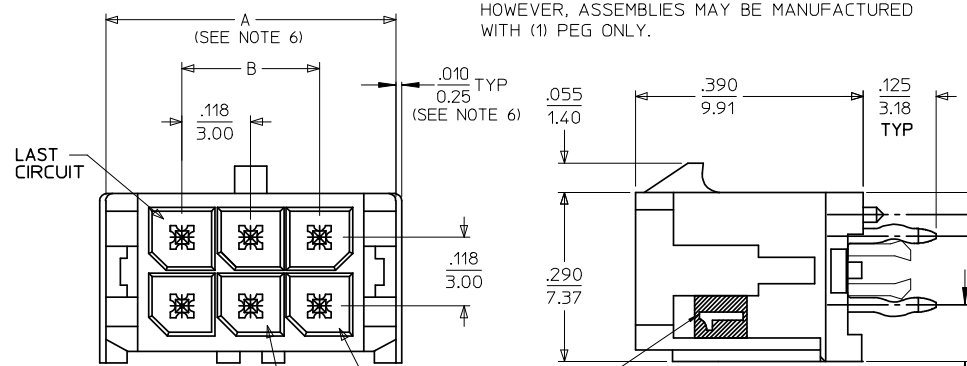
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.063  
1.60 (SEE NOTE 6)

.025  
0.64 SQ TYP



NOTE : (2) POLARIZATION PEGS ARE SHOWN.  
HOWEVER, ASSEMBLIES MAY BE MANUFACTURED  
WITH (1) PEG ONLY.



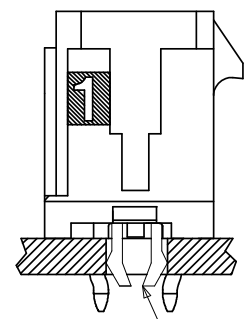
PCB LAYOUT: COMPONENT SIDE  
RECOMMEND PCB THICKNESS: .062/1.57

| CKTS | A            | B     | C     | D     |
|------|--------------|-------|-------|-------|
|      | (SEE NOTE 6) |       |       |       |
| 02   | .262         |       | .236  | .169  |
|      | 6.65         | NA    | 6.00  | 4.30  |
| 04   | .380         | .118  | .354  | .287  |
|      | 9.65         | 3.00  | 9.00  | 7.30  |
| 06   | .498         | .236  | .472  | .405  |
|      | 12.65        | 6.00  | 12.00 | 10.30 |
| 08   | .616         | .354  | .591  | .524  |
|      | 15.65        | 9.00  | 15.00 | 13.30 |
| 10   | .734         | .472  | .709  | .642  |
|      | 18.65        | 12.00 | 18.00 | 16.30 |
| 12   | .852         | .591  | .827  | .760  |
|      | 21.65        | 15.00 | 21.00 | 19.30 |
| 14   | .970         | .709  | .945  | .878  |
|      | 24.65        | 18.00 | 24.00 | 22.30 |
| 16   | 1.088        | .827  | 1.063 | .996  |
|      | 27.65        | 21.00 | 27.00 | 25.30 |
| 18   | 1.206        | .945  | 1.181 | 1.114 |
|      | 30.65        | 24.00 | 30.00 | 28.30 |
| 20   | 1.325        | 1.063 | 1.299 | 1.232 |
|      | 33.65        | 27.00 | 33.00 | 31.30 |
| 22   | 1.443        | 1.181 | 1.417 | 1.350 |
|      | 36.65        | 30.00 | 36.00 | 34.30 |
| 24   | 1.561        | 1.299 | 1.535 | 1.469 |
|      | 39.65        | 33.00 | 39.00 | 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
- TRAY PACKAGED: SEE MOLEX DRAWING PK-70873-0314
- MATES WITH MICRO FIT (3.0) RECEPTACLE SERIES 43025
- .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.

|      | FINISH A     | FINISH B     | FINISH C     |
|------|--------------|--------------|--------------|
| CKTS | MATERIAL NO: | MATERIAL NO: | MATERIAL NO: |
| 02   | 43045-0224   | 43045-0225   | 43045-0226   |
| 04   | 43045-0424   | 43045-0425   | 43045-0426   |
| 06   | 43045-0624   | 43045-0625   | 43045-0626   |
| 08   | 43045-0824   | 43045-0825   | 43045-0826   |
| 10   | 43045-1024   | 43045-1025   | 43045-1026   |
| 12   | 43045-1224   | 43045-1225   | 43045-1226   |
| 14   | 43045-1424   | 43045-1425   | 43045-1426   |
| 16   | 43045-1624   | 43045-1625   | 43045-1626   |
| 18   | 43045-1824   | 43045-1825   | 43045-1826   |
| 20   | 43045-2024   | 43045-2025   | 43045-2026   |
| 22   | 43045-2224   | 43045-2225   | 43045-2226   |
| 24   | 43045-2424   | 43045-2425   | 43045-2426   |



PRESS FIT RETENTION CLIP

|   |                               |  |                          |   |   |   |
|---|-------------------------------|--|--------------------------|---|---|---|
| ADD DIMENSIONS<br>EC NO: UCP2008-0324<br>DRAWN: KKI/PPER 2007/12/19<br>CHKD: SSOUSEK 2007/12/20<br>APPR: FSM/ILH 2007/12/21   | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)  | DIMENSION STYLE<br>IN/MM | SCALE<br>---                              | DESIGN UNITS<br>METRIC                      | THIRD ANGLE PROJECTION  |
|   |                               | 4 PLACES ±---<br>3 PLACES ±---<br>2 PLACES ±0.25<br>1 PLACE ±0.36<br>ANGULAR ±1/2° | mm INCH                  | DRAWN BY<br>SAMI/EC<br>DATE<br>2000/03/15 | CHECKED BY<br>MUELLER<br>DATE<br>2000/03/15 | TITLE<br>MICRO-FIT (3.0)<br>DUAL ROW VERTICAL THRU<br>HOLE HEADER W/CLIPS |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS  | SEE CHART                     | DOCUMENT NO.<br>SD-43045-009   |                          | SHEET NO.<br>1 OF 1                       |   |   |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                               |  |                          |   |   |   |