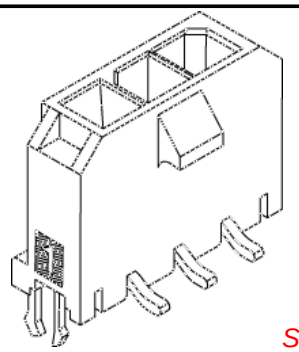
This document was generated on 05/24/2010

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

**Part Number:** 0436500421
**Status:** Active
**Overview:** microfit_30
**Description:** 3.00mm (.118") Pitch Micro-Fit 3.0™ Header, Surface Mount Compatible, Single Row, Vertical, with Press-fit Metal Retention Clip, 4 Circuits, Tin (Sn) Plating, Glow Wire Compatible



*Series image - Reference only*

**Documents:**

- 3D Model
- Drawing (PDF)
- Product Specification PS-43650 (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 436500421. 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) | 4 |
| Circuits (maximum) | 4 |
| 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 | 1 |
| 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) | 100, 35 |
| Plating min: Mating (µm) | 0.88, 2.5 |
| Plating min: Termination (µin) | 100, 35 |
| Plating min: Termination (µm) | 0.88, 2.5 |
| 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
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

| | |
|---|---|
| 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 |

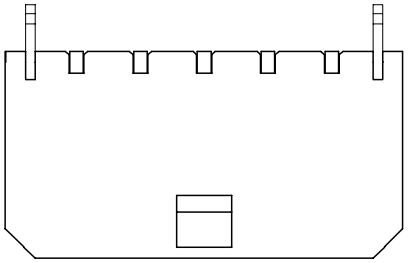
## Material Info

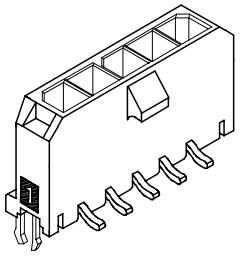
## Reference - Drawing Numbers

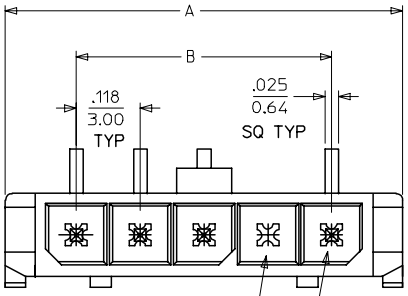
| | |
|---|---|
| Packaging Specification | PK-70873-07** |
| Product Specification | PS-43650 |
| Sales Drawing | SD-43650-008 |

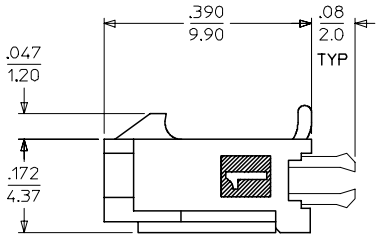
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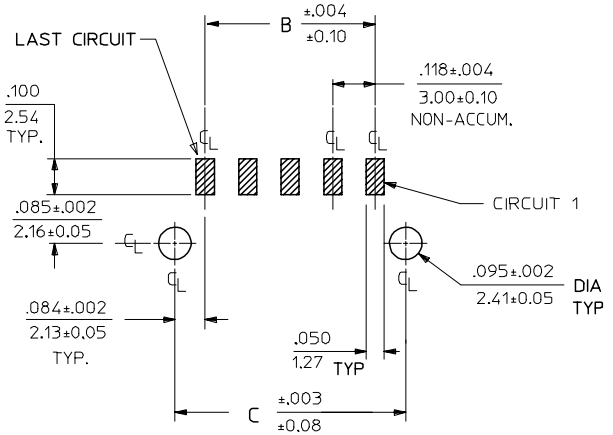
**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**



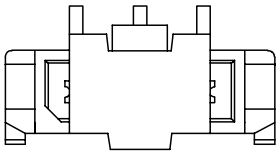




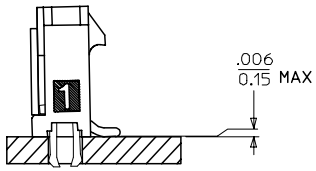




PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: .062/1.57



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

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

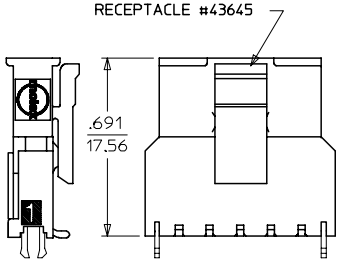



COPLANARITY DETAIL
SEE NOTE #7

NOTES:

1. HOUSING MATERIAL: LIQUID CRYSTAL POLYMER, GLASS FILLED, UL94V-0, COLOR: BLACK
   TERMINAL MATERIAL: BRASS ALLOY
2. 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.
3. PRODUCT SPECIFICATION: PS-43650
4. TAPE AND REEL PACKAGED: SEE MOLEX DRAWING PK-70873-07**
5. MATES WITH MICRO FIT (3.0) RECEPTACLE SERIES 43645
6. 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.
7. 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
8. 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.

| | FINISH A | | FINISH B | | FINISH C | |
|---|---|---|---|---|---|---|
| CKTS | MATERIAL NO: | VOID CKT | MATERIAL NO: | VOID CKT | MATERIAL NO: | VOID CKT |
| 02 | 43650-0221 | | 43650-0222 | | 43650-0223 | |
| 03 | 43650-0321 | | 43650-0322 | | 43650-0323 | |
| 04 | 43650-0421 | | 43650-0422 | | 43650-0423 | |
| 05 | 43650-0521 | | 43650-0522 | | 43650-0523 | |
| 06 | 43650-0621 | | 43650-0622 | | 43650-0623 | |
| 07 | 43650-0721 | | 43650-0722 | | 43650-0723 | |
| 08 | 43650-0821 | | 43650-0822 | | 43650-0823 | |
| 09 | 43650-0921 | | 43650-0922 | | 43650-0923 | |
| 10 | 43650-1021 | | 43650-1022 | | 43650-1023 | |
| 11 | 43650-1121 | | 43650-1122 | | 43650-1123 | |
| 12 | 43650-1221 | | 43650-1222 | | 43650-1223 | |
| 03 | 43650-0332 | 02 | | | | |




MATED MICRO FIT CONNECTORS

| REV | DESCRIPTION | DRWN | CHKD | APPR | DATE |
|---|---|---|---|---|---|
| 8 | .691 DIM, ADD NOTE 8<br>EC NO: UCP2008-0037 | MKIPPER | SSOUSEK | FSMITH | 2007/09/06<br>2007/09/11<br>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° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: ---
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

| | | |
|---|---|---|
| DRAWN BY | SAMIEC | DATE 2000/07/07 |
| CHECKED BY | MUELLER | DATE 2000/07/07 |
| APPROVED BY | EDGLEY | DATE 2000/07/07 |

TITLE: MICRO FIT (3.0)
SINGLE ROW / VERTICAL
SMT / CLIPS / TRAYS

MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-43650-008
SHEET NO.: 1 OF 1
SIZE: C

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