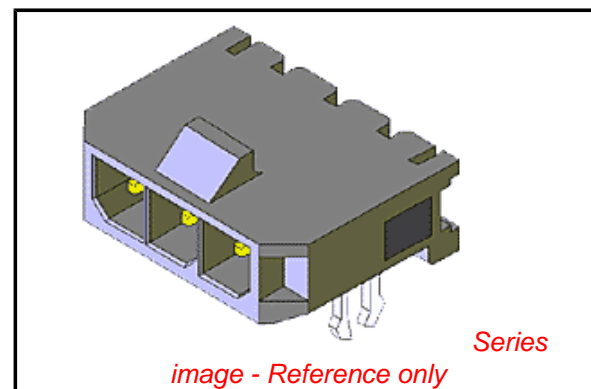


PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0436500809](#)
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, 8 Circuits, Tin (Sn) Plating, Glow Wire Compatible

Documents:

| | |
|---|--|
| 3D Model | Product Specification PS-43650 (PDF) |
| Packaging Specification (PDF) | RoHS Certificate of Compliance (PDF) |
| Drawing (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 436500809 . 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) | 8 |
| Circuits (maximum) | 8 |
| 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 |

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
 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](#)

| | |
|-------------------------------|-----------------|
| Stackable | No |
| 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

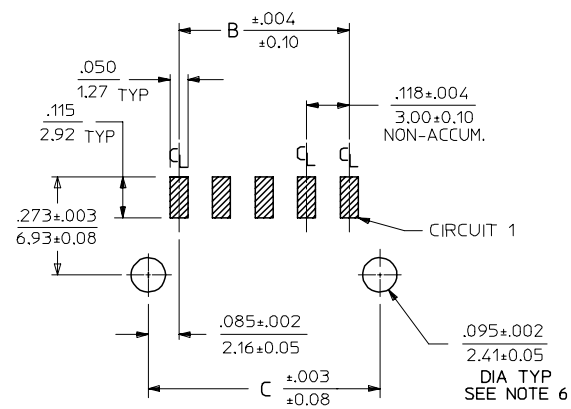
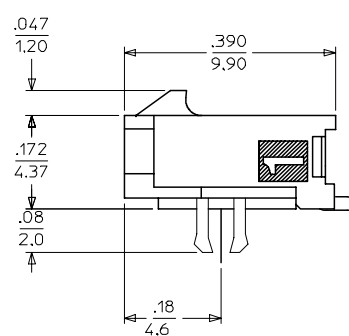
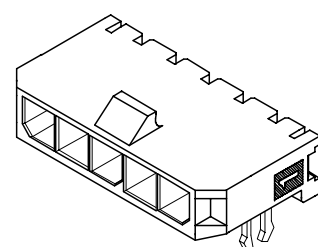
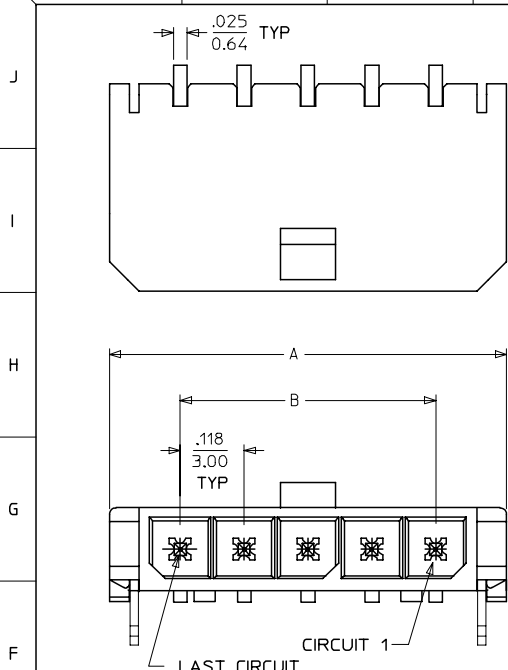
Reference - Drawing Numbers

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

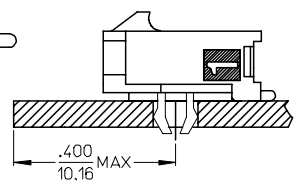
This document was generated on 05/24/2010

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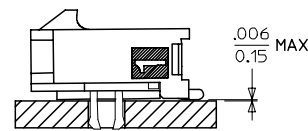
13 12 11 10 9 8 7 6 5 4 3 2 1



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



LOCATION DETAIL
SEE NOTE #8



COPLANARITY DETAIL
SEE NOTE #7

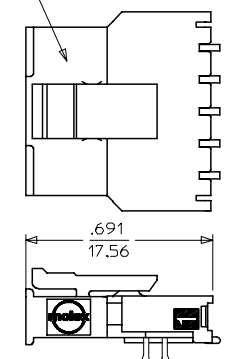
| CKTS | DIM A | DIM B | DIM C |
|------|----------------|----------------|----------------|
| 2 | .380 9.65 | .118 3.00 | .287 7.30 |
| 3 | .498 12.65 | .236 6.00 | .405 10.30 |
| 4 | .616 15.65 | .354 9.00 | .524 13.30 |
| 5 | .734 18.64 | .472 12.00 | .642 16.30 |
| 6 | .852 21.64 | .591 15.00 | .760 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: MK/PPER 2007/09/06 CHKD: SS/USEK 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