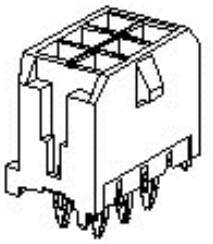
This document was generated on 05/24/2010

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

**Part Number:** 0449142002
**Status:** Active
**Overview:** microfit_30
**Description:** 3.00mm (.118") Pitch Micro-Fit 3.0 CPI™ Header, Dual Row, Vertical, Compliant Pin Interface, 20 Circuits, LCP, Glass-Filled, UL 94V-0, 0.38µm (15µ") Gold (Au) Selective Contact Plating, Tin/Lead (Sn/Pb) Plated Tails, Glow Wire Compatible



*Series image - Reference only*

**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 | 44914 |
| Application | Wire-to-Board |
| Application Tooling Part Link | 622008400 |
| Comments | Glow Wire Equivalent Part Number 449142002 . High Temperature, Square Pin |
| Overview | microfit_30 |
| Product Literature Order No | USA-106 |
| Product Name | Micro-Fit 3.0 CPI™ |

## Physical

| | |
|---|---|
| Breakaway | No |
| Circuits (Loaded) | 20 |
| Circuits (maximum) | 20 |
| Durability (mating cycles max) | 30 |
| Flammability | 94V-0 |
| Glow-Wire Compliant | Yes |
| Lock to Mating Part | Yes |
| Material - Metal | High Performance Alloy (HPA) |
| Material - Plating Mating | Gold |
| Material - Plating Termination | 90/10 Tin Lead |
| Number of Rows | 2 |
| Orientation | Vertical |
| PCB Locator | Yes |
| PCB Retention | Yes |
| Packaging Type | Tray |
| Pitch - Mating Interface (in) | 0.118 In |
| Pitch - Mating Interface (mm) | 3.00 mm |
| Plating min: Mating (µin) | 15.2 |
| Plating min: Mating (µm) | 0.38 |
| Plating min: Termination (µin) | 50 |
| Plating min: Termination (µm) | 1.25 |
| Polarized to Mating Part | Yes |
| Polarized to PCB | Yes |
| Shrouded | Fully |
| Stackable | No |
| Surface Mount Compatible (SMC) | No |
| Temperature Range - Operating | -40°C to +105°C |
| Termination Interface: Style | Through Hole - Compliant Pin |

**EU RoHS** | **China RoHS**
**RoHS Compliant by Exemption**
**REACH SVHC**
**Contains SVHC: No**
**Halogen-Free Status**
**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**
44914Series

**Mates With**
43025-2000 Receptacle

**Application Tooling** | **FAQ**

*Tooling specifications and manuals are found by selecting the products below. Crimp Height Specifications are then contained in the Application Tooling Specification document.*

**Global**

| Description | Product # |
|---|---|
| Micro-Fit™ Compliant Pin Insertion Flat Rock Tool | 0622008400 |

## Electrical

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

## Solder Process Data

| | |
|---|---|
| Replacement RoHS Compliant Part Number | 0449147002 |

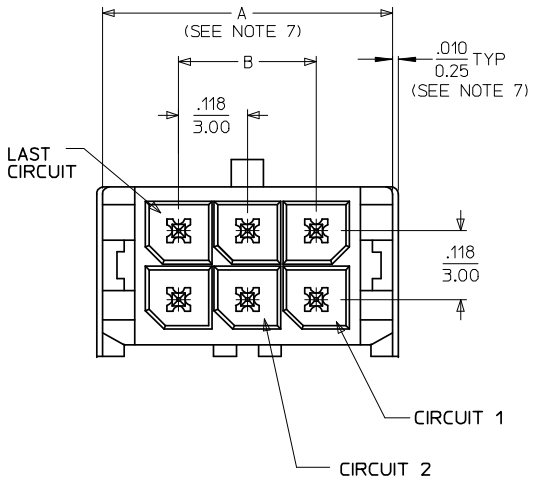
## Material Info

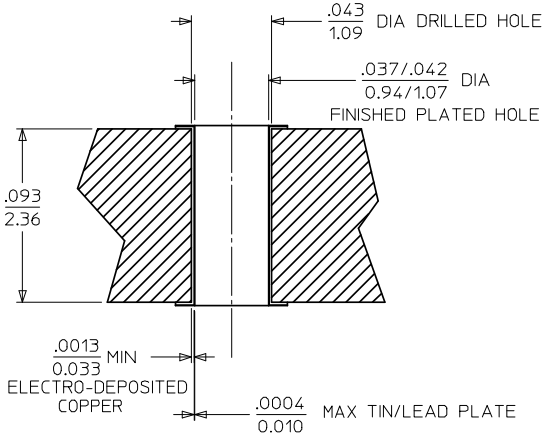
## Reference - Drawing Numbers

| | |
|---|---|
| Packaging Specification | PK-70873-0314 |
| Product Specification | PS-43045, RPS-43045-003, RPS-43045-004 |
| Sales Drawing | SD-44914-001 |

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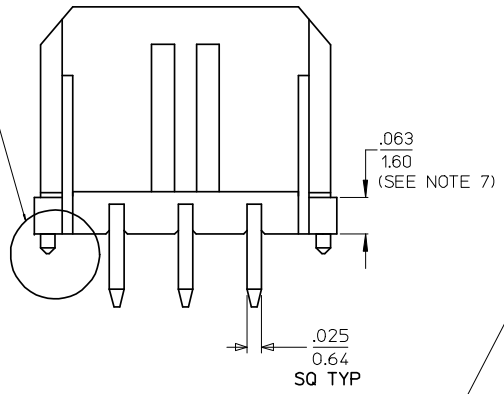

SECTION Z-Z

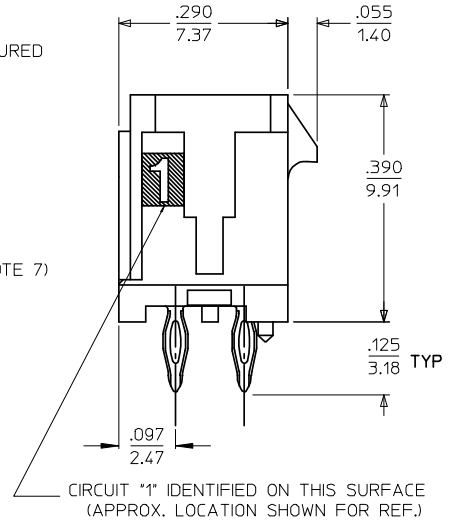
SCALE : 20/1

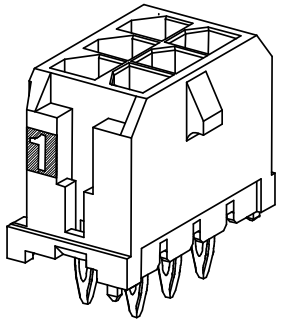
| CKTS | FINISH: A MATERIAL NO: | FINISH: B MATERIAL NO: | FINISH: C MATERIAL NO: |
|---|---|---|---|
| 02 | 44914-0201 | 44914-0202 | 44914-0203 |
| 04 | 44914-0401 | 44914-0402 | 44914-0403 |
| 06 | 44914-0601 | 44914-0602 | 44914-0603 |
| 08 | 44914-0801 | 44914-0802 | 44914-0803 |
| 10 | 44914-1001 | 44914-1002 | 44914-1003 |
| 12 | 44914-1201 | 44914-1202 | 44914-1203 |
| 14 | 44914-1401 | 44914-1402 | 44914-1403 |
| 16 | 44914-1601 | 44914-1602 | 44914-1603 |
| 18 | 44914-1801 | 44914-1802 | 44914-1803 |
| 20 | 44914-2001 | 44914-2002 | 44914-2003 |
| 22 | 44914-2201 | 44914-2202 | 44914-2203 |
| 24 | 44914-2401 | 44914-2402 | 44914-2403 |

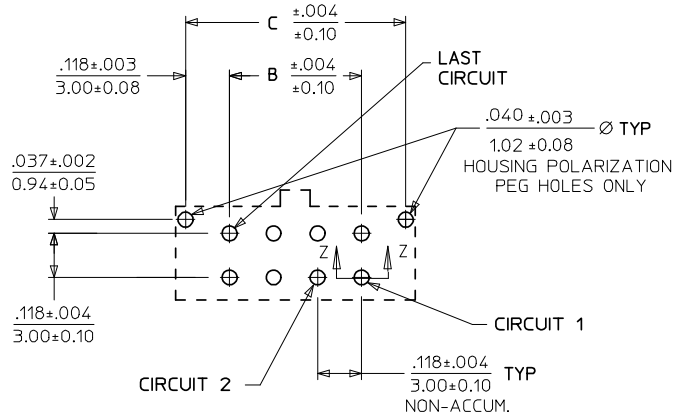
| CKTS | A (SEE NOTE 7) | B | C |
|---|---|---|---|
| 02 | .262 / 6.65 | NA | .236 / 6.00 |
| 04 | .380 / 9.65 | .118 / 3.00 | .354 / 9.00 |
| 06 | .498 / 12.65 | .236 / 6.00 | .472 / 12.00 |
| 08 | .616 / 15.65 | .354 / 9.00 | .591 / 15.00 |
| 10 | .734 / 18.65 | .472 / 12.00 | .709 / 18.00 |
| 12 | .852 / 21.65 | .591 / 15.00 | .827 / 21.00 |
| 14 | .970 / 24.65 | .709 / 18.00 | .945 / 24.00 |
| 16 | 1.088 / 27.65 | .827 / 21.00 | 1.063 / 27.00 |
| 18 | 1.206 / 30.65 | .945 / 24.00 | 1.181 / 30.00 |
| 20 | 1.325 / 33.65 | 1.063 / 27.00 | 1.299 / 33.00 |
| 22 | 1.443 / 36.65 | 1.181 / 30.00 | 1.417 / 36.00 |
| 24 | 1.561 / 39.65 | 1.299 / 33.00 | 1.535 / 39.00 |

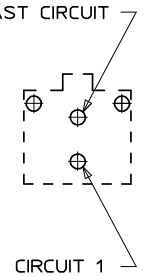
NOTE : (2) POLARIZATION PEGS ARE SHOWN.
HOWEVER, ASSEMBLIES MAY BE MANUFACTURED
WITH (1) PEG ONLY.






PCB LAYOUT: COMPONENT SIDE
RECOMMEND PCB THICKNESS: .093/2.36

PCB LAYOUT: 2 CKT HEADER

NOTES:

1. HOUSING MATERIAL: GLASS FILLED LIQUID CRYSTAL POLYMER, UL94V-0, COLOR: BLACK
   TERMINAL MATERIAL: MODIFIED TIN/BRASS ALLOY
2. FINISH: A = .000200/(0.0051) MIN. TIN OVER .000050/(0.0013) MIN. NICKEL PLATE.
   B = .000015/(0.00038) MINIMUM GOLD IN SELECTIVE AREA;
   .000060/(0.00152) MINIMUM TIN/LEAD (90/10) ON PCB TAILS,
   BOTH OVER .000050/(0.00127) MINIMUM NICKEL PLATE.
   C = .000030/(0.00076) MINIMUM GOLD IN SELECTIVE AREA;
   .000060/(0.00152) MINIMUM TIN/LEAD (90/10) ON PCB TAILS,
   BOTH OVER .000050/(0.00127) MINIMUM NICKEL PLATE.
3. PRODUCT SPECIFICATION: PS-43045
4. TRAY PACKAGED: SEE MOLEX DRAWING PK-70873-0314
5. MATES WITH MICRO FIT (3.0) RECEPTACLE SERIES 43025
6. HEADER INSTALLATION REQUIRES A MINIMUM FORCE OF 24LBS/(107 N)
   PER CIRCUIT DISTRIBUTED EQUALLY ACROSS THE ENTIRE HOUSING SURFACE.
7. .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.
8. THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION
   PS-45499-002.

| REV | DESCRIPTION | |
|---|---|---|
| H2 | ADD .097 DIM, NOTE 8 | 2007/12/21 |
| | EC NO: UCP2008-0324 | 2007/12/20 |
| | DRWN:MKIPPER | 2007/12/19 |
| | CH'KD:SSOUSEK | |
| | APPR:FSMITH | |

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 | BURLESON | DATE 2001/08/30 |
| CHECKED BY | MUELLER | DATE 2001/08/30 |
| APPROVED BY | MARGULIS | DATE 2001/08/30 |

TITLE: MICRO FIT HEADER
VERTICAL COMPLIANT PIN
TRAY PACKED

MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-44914-001
SHEET NO.: 1 OF 1
SIZE: C

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