

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

**Part Number:** [0908140508](#)  
**Status:** **Active**  
**Overview:** [picoflex](#)  
**Description:** 1.27mm (.050") Pitch Picoflex® PF-50 Header, Vertical, Low Profile, Surface Mount, Tin, 8 Circuits, Glow Wire Compatible

**Documents:**

[3D Model](#) [Product Specification PS-99020-0011 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

UL E29179

**General**

Product Family PCB Headers  
 Series [90814](#)  
 Application Wire-to-Board  
 Application Tooling Part Link 690081070  
 Comments Low Profile SMT  
 Overview [picoflex](#)  
 Product Name Picoflex®

**Physical**

Breakaway No  
 Circuits (Loaded) 8  
 Color - Resin Natural  
 Durability (mating cycles max) 30  
 First Mate / Last Break No  
 Flammability 94V-0  
 Glow-Wire Compliant Yes  
 Guide to Mating Part No  
 Keying to Mating Part None  
 Lock to Mating Part Yes  
 Material - Metal Brass  
 Material - Plating Mating Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 1  
 Orientation Vertical  
 PCB Locator Yes  
 PCB Retention None  
 PCB Thickness Recommended (in) 0.062 In  
 PCB Thickness Recommended (mm) 1.60 mm  
 Packaging Type Tube  
 Pitch - Mating Interface (in) 0.050 In  
 Pitch - Mating Interface (mm) 1.27 mm  
 Pitch - Term. Interface (in) 0.050 In  
 Pitch - Term. Interface (mm) 1.27 mm  
 Plating min: Mating (µin) 120  
 Plating min: Mating (µm) 3  
 Plating min: Termination (µin) 120  
 Plating min: Termination (µm) 3  
 Polarized to Mating Part Yes  
 Polarized to PCB Yes  
 Shrouded No  
 Stackable No  
 Surface Mount Compatible (SMC) N/A



Series

image - Reference only

**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Not Reviewed**  
**Halogen-Free Status Not Reviewed**

**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**

[90814Series](#)

**Mates With**

[90327 IDT Connector](#)

**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 #                  |
|---|----------------------------|
| Extraction Tool (Plastic) for 90327 Connector, 4-26 Circuit | <a href="#">0690081070</a> |

Temperature Range - Operating -40°C to +105°C  
Termination Interface: Style Surface Mount

**Electrical**

Current - Maximum per Contact 2.4A  
Voltage - Maximum 250V

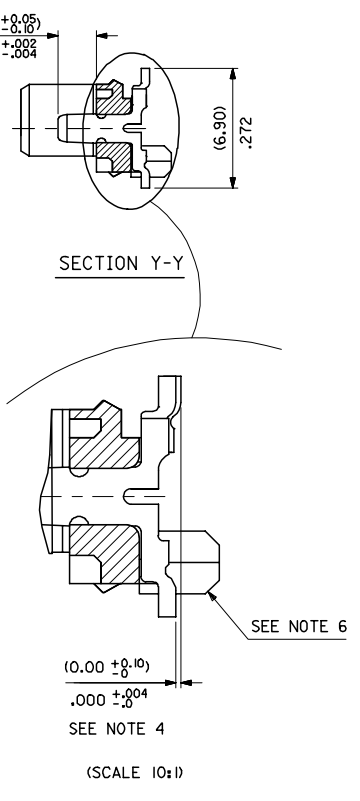
**Material Info**

**Reference - Drawing Numbers**

Packaging Specification SDA-90814-9001  
Product Specification PS-99020-0011  
Sales Drawing SDA-90814

This document was generated on 06/08/2010

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- NOTES:
- MATERIAL: HOUSING: NYLON 4/6 30% G.F., UL 94 V-0, NATURAL (BEIGE)  
TERMINAL- CARTRIDGE BRASS (0.28)/0.11 REF THICK
  - PLATING:  
TIN: TIN (3-5UM)/120uin-200uin OVER (1.27um)/51uin MIN NICKEL.  
GOLD: (0.76UM)/30UIN SELECTIVE GOLD AND (0.10-0.20UM)/4UIN-8UIN GOLD FLASH OVER (1.27UM)/50UIN NICKEL UNDERCOAT
  - MATES WITH MOLEX 90327 PART SERIES
  - ALL SMT TAILS TO LIE WITHIN A COPLANARITY BAND OF (0.0)/.0 - (0.10)/.004 REF. FROM EACH OTHER.
  - FOR TAPE & REEL PACKAGING DETAILS SEE SDA-90814-9001
  - PCB PEGS ARE OPTIONAL
  - PCB LAYOUT SHOWN ON SHEET 2

90814 - \*\*

CIRCUIT SIZE

|   | PCB PEGS | TUBE PACKED | TAPE & REEL PACKED | POLARIZING PEG HEIGHT DIM. E |
|---|----------|-------------|--------------------|------------------------------|
| 0 | YES      | YES         | NO                 | (6.40)/ .252                 |
| 2 | YES      | NO          | YES                | (6.40)/ .252                 |
| 3 | NO       | YES         | NO                 | (6.40)/ .252                 |
| 5 | NO       | NO          | YES                | (6.40)/ .252                 |
| 6 | NO       | YES         | NO                 | (4.10)/ .161                 |
| 7 | NO       | NO          | YES                | (4.10)/ .161                 |
| 8 | YES      | YES         | NO                 | (4.10)/ .161                 |
| 9 | YES      | NO          | YES                | (4.10)/ .161                 |

0= (3-5UM)/120-200UIN TIN VERSION  
3= (0.76UM)/30UIN GOLD VERSION

| 90814-**-34 | 34             | (46.96)/1.849 | (41.91)/1.650 | (45.76)/1.802 | 10   | NO     |
|-------------|----------------|---------------|---------------|---------------|--|--------|
| 90814-**-26 | 26             | (36.80)/1.449 | (31.75)/1.250 | (35.60)/1.402 | 14   | YES    |
| 90814-**-24 | 24             | (34.26)/1.349 | (29.21)/1.150 | (33.06)/1.302 | 15   | YES    |
| 90814-**-22 | 22             | (31.72)/1.249 | (26.67)/1.050 | (30.52)/1.202 | 16   | YES    |
| 90814-**-20 | 20             | (29.18)/1.149 | (24.13)/ .950 | (27.98)/1.102 | 18   | YES    |
| 90814-**-18 | 18             | (26.64)/1.049 | (21.59)/ .850 | (25.44)/1.002 | 20   | YES    |
| 90814-**-16 | 16             | (24.10)/ .949 | (19.05)/ .750 | (22.90)/ .902 | 22   | YES    |
| 90814-**-14 | 14             | (21.56)/ .849 | (16.51)/ .650 | (20.36)/ .802 | 25   | YES    |
| 90814-**-12 | 12             | (19.02)/ .749 | (13.97)/ .550 | (17.82)/ .702 | 28   | YES    |
| 90814-**-10 | 10             | (16.48)/ .649 | (11.43)/ .450 | (15.28)/ .602 | 32   | YES    |
| 90814-**-08 | 8              | (13.94)/ .549 | (8.89)/ .350  | (12.74)/ .502 | 38   | YES    |
| 90814-**-06 | 6              | (11.40)/ .449 | (6.35)/ .250  | (10.20)/ .402 | 46   | YES    |
| 90814-**-04 | 4              | (8.86)/ .349  | (3.81)/ .150  | (7.66)/ .302  | 60   | YES    |
| PART NO.    | NUMBER OF CKTS | DIMN. A       | DIMN. B       | DIMN. C       | QUANTITY OF PARTS PER TUBE (-0**/-*3**/-*6** & -*8** VERSIONS) | TOOLED |

REDUCED CO-PL TOL  
EC NO: E2007-0304  
DRAWN: IDEENEHY 2006/11/07  
CHKD: DMORLARTY 2006/11/07  
APPR: IDEENEHY 2006/11/13

QUALITY SYMBOLS  
▽=0  
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

|          | mm     | INCH   |
|----------|--------|--------|
| 4 PLACES | ± ---  | ± ---  |
| 3 PLACES | ± ---  | ± .004 |
| 2 PLACES | ± 0.10 | ± ---  |
| 1 PLACE  | ± ---  | ± ---  |

ANGULAR ±1/2°

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE  
MM/IN

DRAWN BY DATE  
DMCNAMAR 2001/08/16

CHECKED BY DATE  
PCURT IN 2001/08/16

APPROVED BY DATE  
MWILHITE 2001/08/16

MATERIAL NO.  
DOCUMENT NO.

SCALE 5:1  
DESIGN UNITS METRIC  
THIRD ANGLE PROJECTION

PICOFLEX SMT HEADER

MOLEX INCORPORATED

SDA-90814

SHEET NO. 1 OF 2

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION



PCB LAYOUT FOR TRANSITION FIT WITH PCB PEGS  
 HEADER VERSIONS 90814-0\*\*/-\*2\*\*/-\*8\*\*/-\*9\*\*,  
 VIEWED FROM COMPONENT SIDE



PCB LAYOUT FOR CLEARANCE FIT WITH PCB PEGS  
 HEADER VERSIONS 90814-0\*\*/-\*2\*\*/-\*8\*\*/-\*9\*\*,  
 VIEWED FROM COMPONENT SIDE



PCB LAYOUT FOR HEADERS WITHOUT PCB PEGS  
 HEADER VERSIONS 90814-3\*\*/-\*5\*\*/-\*6\*\*/-\*7\*\*,  
 VIEWED FROM COMPONENT SIDE

| 90814-***34 | 34             | (46.96)/1.849 | (41.91)/1.650 | (45.76)/1.802 | (22.88)/.901 |
|-------------|----------------|---------------|---------------|---------------|--------------|
| 90814-***26 | 26             | (36.80)/1.449 | (31.75)/1.250 | (35.60)/1.402 | (17.80)/.701 |
| 90814-***24 | 24             | (34.26)/1.349 | (29.21)/1.150 | (33.06)/1.302 | (16.53)/.651 |
| 90814-***22 | 22             | (31.72)/1.249 | (26.67)/1.050 | (30.52)/1.202 | (15.26)/.601 |
| 90814-***20 | 20             | (29.18)/1.149 | (24.13)/.950  | (27.98)/1.102 | (13.99)/.551 |
| 90814-***18 | 18             | (26.64)/1.049 | (21.59)/.850  | (25.44)/1.002 | (12.72)/.501 |
| 90814-***16 | 16             | (24.10)/.949  | (19.05)/.750  | (22.90)/.902  | (11.45)/.451 |
| 90814-***14 | 14             | (21.56)/.849  | (16.51)/.650  | (20.36)/.802  | (10.18)/.401 |
| 90814-***12 | 12             | (19.02)/.749  | (13.97)/.550  | (17.82)/.702  | (8.91)/.351  |
| 90814-***10 | 10             | (16.48)/.649  | (11.43)/.450  | (15.28)/.602  | (7.64)/.301  |
| 90814-***08 | 8              | (13.94)/.549  | (8.89)/.350   | (12.74)/.502  | (6.37)/.251  |
| 90814-***06 | 6              | (11.40)/.449  | (6.35)/.250   | (10.20)/.402  | (5.10)/.201  |
| 90814-***04 | 4              | (8.86)/.349   | (3.81)/.150   | (7.66)/.302   | (3.83)/.151  |
| PART NO.    | NUMBER OF CKTS | DIMN. A       | DIMN. B       | DIMN. C       | DIMN. D      |

|   |  |                                       |   |  |                              |                        |
|---|--|---------------------------------------|---|--|------------------------------|------------------------|
| ADDED PART FOOTPRINT<br>EC NO: E2009-0235<br>DRAWN:BYRNES 2008/11/07<br>CHKD: 2008/11/10<br>APPR: WALLACE 2008/11/10          | QUALITY SYMBOLS<br>▽=0<br>▽=0  | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE<br>MM ONLY  | SCALE<br>5:1   | DESIGN UNITS<br>METRIC       | THIRD ANGLE PROJECTION |
|   | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.10 ± ---<br>1 PLACE ± 0.2 ± ---<br>ANGULAR ± 1/2° | mm INCH                               | DRAWN BY<br>DMCNAMAR<br>CHECKED BY<br>BMAGUIRE<br>APPROVED BY<br>MWILHITE | DATE<br>2001/08/23<br>DATE<br>2001/08/23<br>DATE<br>2001/08/23 | TITLE<br>PICOFLEX SMT HEADER | MOLEX INCORPORATED     |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS  | SIZE<br>A 2  | MATERIAL NO.                          | SEE CHART   | DOCUMENT NO.   | SDA-90814                    | SHEET NO.<br>2 OF 2    |
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