

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

**Part Number:** [0908143020](#)  
**Status:** **Active**  
**Overview:** [picoflex](#)  
**Description:** 1.27mm (.050") Pitch Picoflex® PF-50 Header, Vertical, Low Profile, Surface Mount, 20 Circuits, Glow Wire Compatible

**Documents:**

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

**Agency Certification**

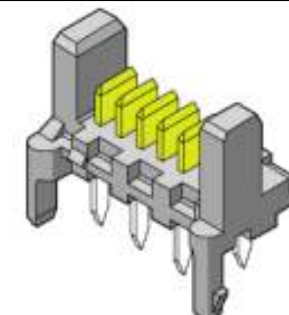
UL E29179

**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) 20  
 Color - Resin Natural  
 Durability (mating cycles max) 100  
 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 Gold  
 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 Tube  
 Pitch - Mating Interface (in) 0.050 In  
 Pitch - Mating Interface (mm) 1.27 mm  
 Plating min: Mating (µin) 30.4  
 Plating min: Mating (µm) 0.76  
 Plating min: Termination (µin) 4  
 Plating min: Termination (µm) 0.1  
 Polarized to Mating Part Yes  
 Polarized to PCB Yes  
 Shrouded No  
 Stackable No  
 Surface Mount Compatible (SMC) N/A  
 Temperature Range - Operating -40°C to +105°C  
 Termination Interface: Style Surface Mount



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>

**Electrical**

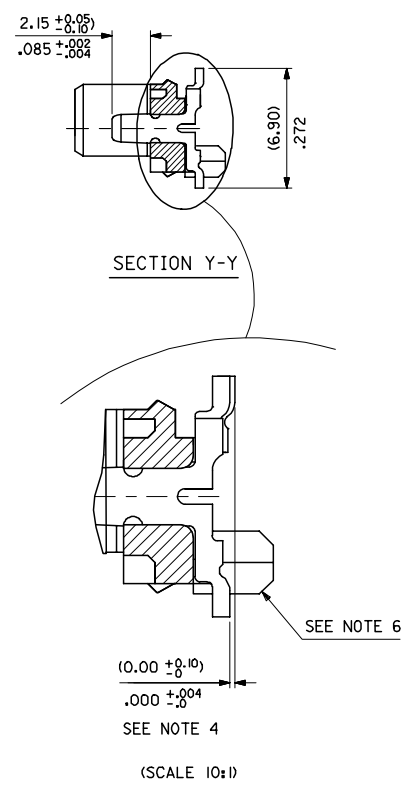
Current - Maximum per Contact	1.2A
Voltage - Maximum	250V

**Material Info****Reference - Drawing Numbers**

Packaging Specification	PK-90814-001
Product Specification	PS-99020-0011
Sales Drawing	SDA-90814

This document was generated on 05/26/2010

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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: IDEMNEY 2006/11/07  
CHKD: DMORLARTY 2006/11/07  
APPR: IDEMNEY 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

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 THICKNESS = (1.60 +/- 0.14) .063 +/- 0.006

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

90814-0034	34	(46.96)/1.849	(41.91)/1.650	(45.76)/1.802	(22.88)/.901
90814-0026	26	(36.80)/1.449	(31.75)/1.250	(35.60)/1.402	(17.80)/.701
90814-0024	24	(34.26)/1.349	(29.21)/1.150	(33.06)/1.302	(16.53)/.651
90814-0022	22	(31.72)/1.249	(26.67)/1.050	(30.52)/1.202	(15.26)/.601
90814-0020	20	(29.18)/1.149	(24.13)/.950	(27.98)/1.102	(13.99)/.551
90814-0018	18	(26.64)/1.049	(21.59)/.850	(25.44)/1.002	(12.72)/.501
90814-0016	16	(24.10)/.949	(19.05)/.750	(22.90)/.902	(11.45)/.451
90814-0014	14	(21.56)/.849	(16.51)/.650	(20.36)/.802	(10.18)/.401
90814-0012	12	(19.02)/.749	(13.97)/.550	(17.82)/.702	(8.91)/.351
90814-0010	10	(16.48)/.649	(11.43)/.450	(15.28)/.602	(7.64)/.301
90814-0008	8	(13.94)/.549	(8.89)/.350	(12.74)/.502	(6.37)/.251
90814-0006	6	(11.40)/.449	(6.35)/.250	(10.20)/.402	(5.10)/.201
90814-0004	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

<b>ADDED PART FOOTPRINT</b> EC NO: E2009-0235 DRAWN: BYRNES 2008/11/07 CHKD: 2008/11/10 APPR: WALLACE 2008/11/10	<b>QUALITY SYMBOLS</b> ▽=0 ▽=0	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b> <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES ±</td> <td>---</td> <td>---</td> </tr> <tr> <td>3 PLACES ±</td> <td>---</td> <td>---</td> </tr> <tr> <td>2 PLACES ±</td> <td>0.10</td> <td>---</td> </tr> <tr> <td>1 PLACE ±</td> <td>0.2</td> <td>---</td> </tr> <tr> <td colspan="3">ANGULAR ±1/2°</td> </tr> </tbody> </table>		mm	INCH	4 PLACES ±	---	---	3 PLACES ±	---	---	2 PLACES ±	0.10	---	1 PLACE ±	0.2	---	ANGULAR ±1/2°			<b>DIMENSION STYLE</b> MM ONLY	<b>SCALE</b> 5:1	<b>DESIGN UNITS</b> METRIC	<b>THIRD ANGLE PROJECTION</b>
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DRAWN BY: DMCNAMAR DATE: 2001/08/23 CHECKED BY: BMAGUIRE DATE: 2001/08/23 APPROVED BY: MWILHITE DATE: 2001/08/23	<b>TITLE</b> PICOFLEX SMT HEADER																							
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<b>MATERIAL NO.</b> SDA-90814	<b>DOCUMENT NO.</b> SDA-90814																							