

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

**Part Number:** [0908143016](#)  
**Status:** **Active**  
**Overview:** [picoflex](#)  
**Description:** 1.27mm (.050") Pitch Picoflex® PF-50 Header, Vertical, Low Profile, Surface Mount, 16 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) 16  
 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**

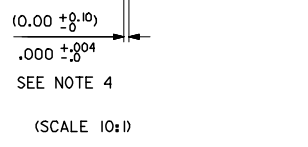
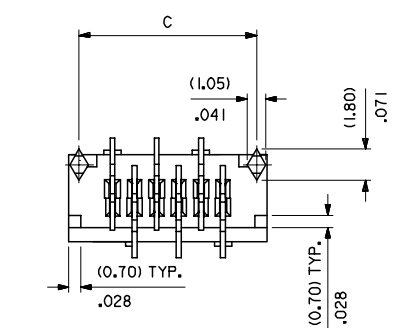
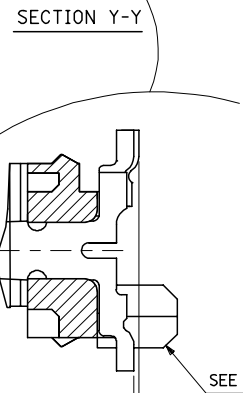
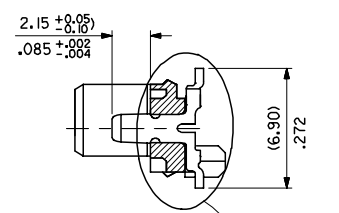
Current - Maximum per Contact	1.2A
Voltage - Maximum	250V

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

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

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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 DRWN: IDEENEHY 2006/11/07 CHKD: DMORLARTY 2006/11/07 APPR: IDEENEHY 2006/11/13	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
		4 PLACES ± --- ± ---	3 PLACES ± --- ± .004	DRAWN BY DMCNAMAR	DATE 2001/08/16	TITLE PICOFLEX SMT HEADER					
		2 PLACES ± 0.10 ± ---	1 PLACE ± --- ± ---	CHECKED BY PCURT IN	DATE 2001/08/16	MOLEX INCORPORATED					
		ANGULAR ±1/2°		APPROVED BY MWILHITE	DATE 2001/08/16	MATERIAL NO. SDA-90814		DOCUMENT NO.		SHEET NO. 1 OF 2	
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							



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>		<b>DIMENSION STYLE</b> MM ONLY	<b>SCALE</b> 5:1	<b>DESIGN UNITS</b> METRIC	<b>THIRD ANGLE PROJECTION</b>
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.10 ± --- 1 PLACE ± 0.2 ± --- ANGULAR ± 1/2°	mm    INCH	DRAWN BY: DMCNAMAR DATE: 2001/08/23 CHECKED BY: BMAGUIRE DATE: 2001/08/23 APPROVED BY: MWILHITE DATE: 2001/08/23 MATERIAL NO.	TITLE: PICOFLEX SMT HEADER	<b>MOLEX INCORPORATED</b> SDA-90814 SHEET NO. 2 OF 2	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					