

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

**Part Number:** [0908140916](#)  
**Status:** **Active**  
**Overview:** [picoflex](#)  
**Description:** 1.27mm (.050") Pitch Picoflex® PF-50 SMT Header, Vertical, Low Profile, Surface Mount, Tin, 16 Circuits, Glow Wire Compatible

**Documents:**

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

**Agency Certification**

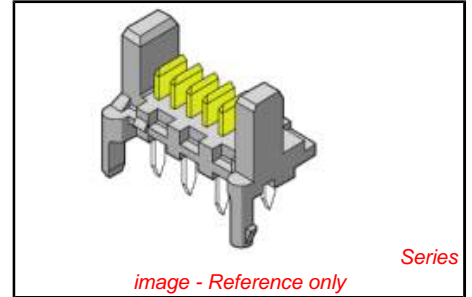
UL E29179

**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 Black, 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 Yes  
 PCB Thickness Recommended (in) 0.063 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 Open Ends  
 Stackable No  
 Surface Mount Compatible (SMC) Yes



<p><b>EU RoHS</b>  <b>ELV and RoHS</b>  <b>Compliant</b>  <b>REACH SVHC</b>  <b>Contains SVHC: No</b>  <b>Halogen-Free</b>  <b>Status</b>  <b>Not Halogen-Free</b></p>	<p><b>China RoHS</b></p>
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**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 AC/DC

**Solder Process Data**

Duration at Max. Process Temperature (seconds) 3  
Lead-free Process Capability Reflow Capable (SMT only)  
Max. Cycles at Max. Process Temperature 1  
Process Temperature max. C 260

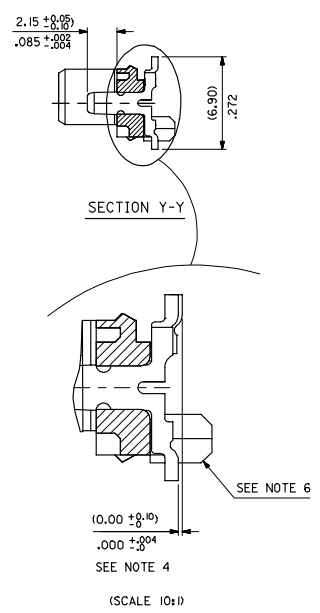
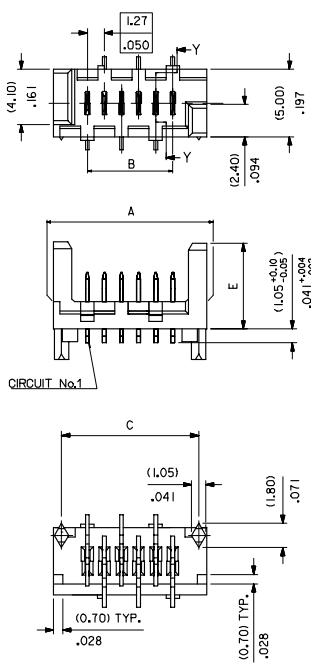
**Material Info**

**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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90814 - \*\*

CIRCUIT SIZE

	PCB PEGS	TUBE PACKED	TAPE & REEL PACKED	POLARIZING PEG HEIGHT DIMN. 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

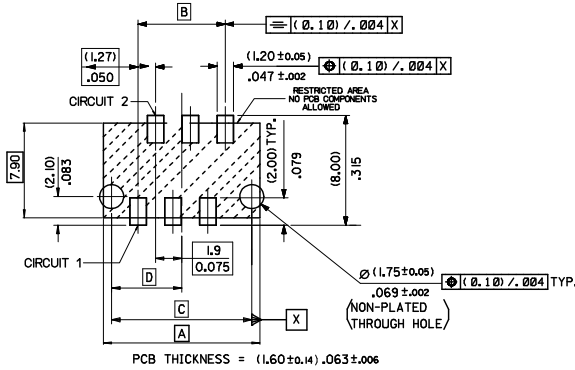
0= (3-5UM)/I20-200UIN TIN VERSION  
3= (0.76UM)/30UIN GOLD VERSION

90814-**-34	34	(46.96)/.1849	(41.91)/.1650	(45.76)/.1802	10	NO
90814-**-26	26	(36.80)/.1449	(31.75)/.1250	(35.60)/.1402	14	YES
90814-**-24	24	(34.26)/.1349	(29.21)/.1150	(33.06)/.1302	15	YES
90814-**-22	22	(31.72)/.1249	(26.67)/.1050	(30.52)/.1202	16	YES
90814-**-20	20	(29.18)/.1149	(24.13)/.0950	(27.98)/.1102	18	YES
90814-**-18	18	(26.64)/.1049	(21.59)/.0850	(25.44)/.1002	20	YES
90814-**-16	16	(24.10)/.949	(19.05)/.0750	(22.90)/.0902	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

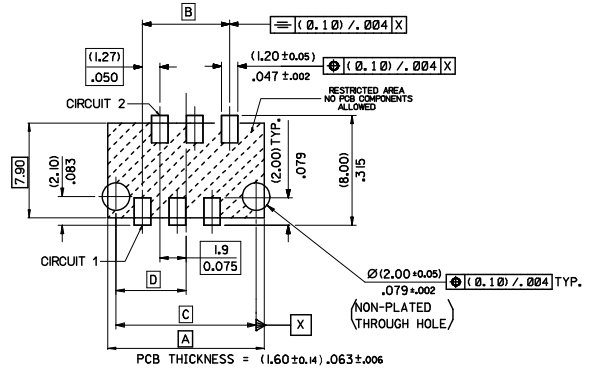
PART NO.	NUMBER OF CKTS	DIMN. A	DIMN. B	DIMN. C	QUANTITY OF PARTS PER TUBE (-0**/-+3**/-+6** & -8** VERSIONS)	TOOLED
90814-**-34	34	(46.96)/.1849	(41.91)/.1650	(45.76)/.1802	10	NO
90814-**-26	26	(36.80)/.1449	(31.75)/.1250	(35.60)/.1402	14	YES
90814-**-24	24	(34.26)/.1349	(29.21)/.1150	(33.06)/.1302	15	YES
90814-**-22	22	(31.72)/.1249	(26.67)/.1050	(30.52)/.1202	16	YES
90814-**-20	20	(29.18)/.1149	(24.13)/.0950	(27.98)/.1102	18	YES
90814-**-18	18	(26.64)/.1049	(21.59)/.0850	(25.44)/.1002	20	YES
90814-**-16	16	(24.10)/.949	(19.05)/.0750	(22.90)/.0902	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

- NOTES:
- MATERIAL: HOUSING: NYLON 4/6 30% G.F., UL 94 V-0, NATURAL (BEIGE) TERMINAL- CARTRIDGE BRASS (0.28)/.011 REF THICK
  - PLATING: TIN: TIN (3-5UM)/I20uin-200uin OVER (1.27um)/5uin 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 (0.01)/.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

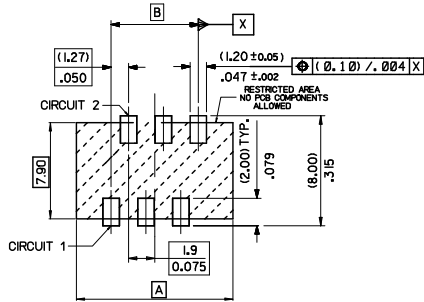
REDUCED CO-PL TOL EC NO: E2007-0304 DRW: JENNIFER 2006/11/07 CHK: MORTIARY 2006/11/07 APPR: JENNIFER 2006/11/13 REV:	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	$\nabla=0$ $\nabla=0$	mm INCH 4 PLACES ±--- ±--- 3 PLACES ±--- ±.004 2 PLACES ±.010 ±--- 1 PLACE ±--- ±--- ANGULAR ±1/2°	MM/IN 5:1	METRIC	DRAWN BY: DMCNAMAR CHECKED BY: DATE: 2001/08/16 APPROVED BY: DATE: 2001/08/16 DATE: 2001/08/16	PICO FLEX SMT HEADER	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE CHART	SDA-90814	MOLEX INCORPORATED			
	MATERIAL NO. DOCUMENT NO. 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±.006

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

PART NO.	NUMBER OF CKTS	DIMN. A	DIMN. B	DIMN. C	DIMN. D
90814-34	34	(46.96)/L849	(41.91)/L650	(45.76)/L802	(22.88)/.901
90814-26	26	(36.80)/L449	(31.75)/L250	(35.60)/L402	(17.80)/.701
90814-24	24	(34.26)/L349	(29.21)/L150	(33.06)/L302	(16.53)/.651
90814-22	22	(31.72)/L249	(26.67)/L050	(30.52)/L202	(15.26)/.601
90814-20	20	(29.18)/L149	(24.13)/.950	(27.98)/L102	(13.99)/.551
90814-18	18	(26.64)/L049	(21.59)/.850	(25.44)/L002	(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

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