

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

**Part Number:** [0908143816](#)  
**Status:** **Active**  
**Overview:** [Picoflex®](#)  
**Description:** 1.27mm (.050") Pitch Picoflex® PF-50 SMT Header, Vertical, Low Profile, Surface Mount, Gold, 16 Circuits, Glow Wire Compatible

**Documents:**

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

**Agency Certification**

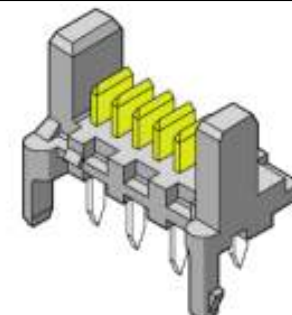
UL E29179

**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) 0.063 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) 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 Open Ends  
 Stackable No  
 Surface Mount Compatible (SMC) Yes



Series

image - Reference only

**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**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 AC/DC

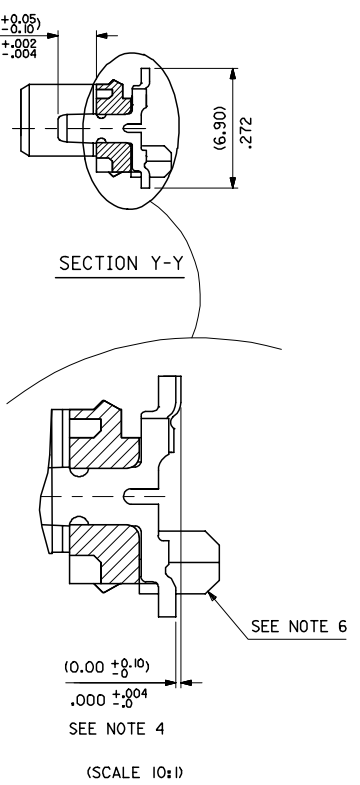
**Material Info**

**Reference - Drawing Numbers**

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

This document was generated on 04/23/2010

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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 DIMM. 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

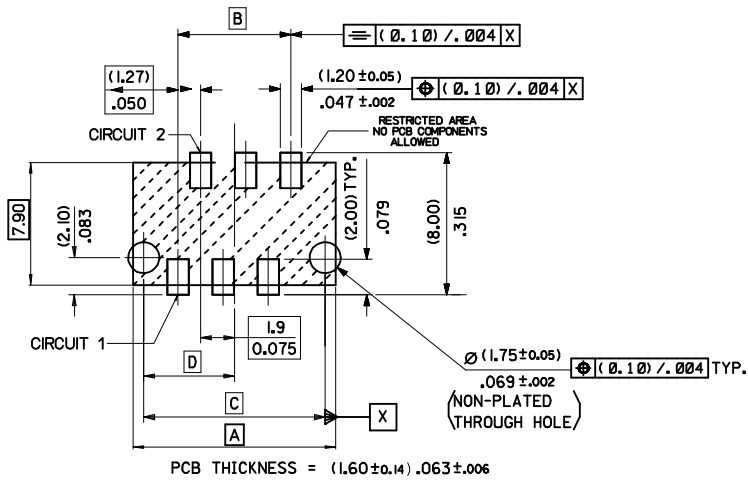
90814-**-34	34	(46.96)/1.849	(41.91)/1.650	(45.76)/1.802	10	NO
90814-**-26	26	(36.80)/1.449	(31.75)/1.250	(35.60)/1.402	14	YES
90814-**-24	24	(34.26)/1.349	(29.21)/1.150	(33.06)/1.302	15	YES
90814-**-22	22	(31.72)/1.249	(26.67)/1.050	(30.52)/1.202	16	YES
90814-**-20	20	(29.18)/1.149	(24.13)/ .950	(27.98)/1.102	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	DIMM. A	DIMM. B	DIMM. 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)  
 4 PLACES ± --- ± ---  
 3 PLACES ± --- ± .004  
 2 PLACES ± 0.10 ± ---  
 1 PLACE ± --- ± ---  
 ANGULAR ±1/2°  
 DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

MM/IN  
 DIMENSION STYLE  
 SCALE 5:1  
 DESIGN UNITS METRIC  
 THIRD ANGLE PROJECTION  
 DRAWN BY DATE DMCNAMAR 2001/08/16  
 CHECKED BY DATE PCURTIN 2001/08/16  
 APPROVED BY DATE MWILHITE 2001/08/16  
 MATERIAL NO. DOCUMENT NO. SDA-90814

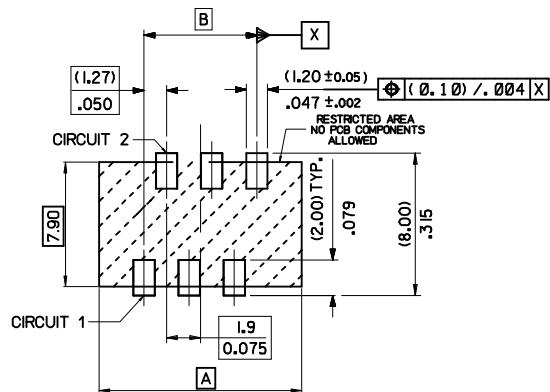
PICOFLEX SMT HEADER  
 MOLEX INCORPORATED  
 SHEET NO. 1 OF 2  
 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION



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

90814-0034	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

ADDED PART FOOTPRINT EC NO: E2009-0235 DRAWN: BYRNES 2008/11/07 CHKD: 2008/11/10 APPR: WALLACE 2008/11/10	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)	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°	mm INCH	DRAWN BY DMCNAMAR CHECKED BY BMAGUIRE APPROVED BY MWILHITE MATERIAL NO.	DATE 2001/08/23 DATE 2001/08/23 DATE 2001/08/23	TITLE PICOFLEX SMT HEADER	MOLEX INCORPORATED
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		DOCUMENT NO. SDA-90814	SHEET NO. 2 OF 2	