

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

**Part Number:** [0908163220](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Pitch Picoflex® SMT Latched Vertical Header, 20 Circuits, Gold (Au) Plating, Black

**Documents:**

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

**General**

Product Family	PCB Headers
Series	<a href="#">90816</a>
Application	Wire-to-Board
Product Name	Picoflex®

**Physical**

Breakaway	No
Circuits (Loaded)	20
Circuits (maximum)	20
Color - Resin	Black
Durability (mating cycles max)	5
First Mate / Last Break	No
Glow-Wire Compliant	No
Guide to Mating Part	Yes
Keying to Mating Part	N/A
Lock to Mating Part	Yes
Material - Metal	Brass
Material - Plating Mating	Gold
Material - Plating Termination	Nickel
Material - Resin	Nylon
Number of Rows	1
Orientation	Vertical
PC Tail Length (in)	0.041 In
PC Tail Length (mm)	1.05 mm
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.063 In
PCB Thickness Recommended (mm)	1.60 mm
Packaging Type	Embossed Tape on Reel
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)	0.76
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Shrouded	Partial
Stackable	No
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Surface Mount

**Electrical**

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



**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**

[90816Series](#)

**Mates With**

[90327 Picoflex® PF-50](#)

**Material Info**

**Reference - Drawing Numbers**

Product Specification

PS-99020-0011

Sales Drawing

SD-90816-001

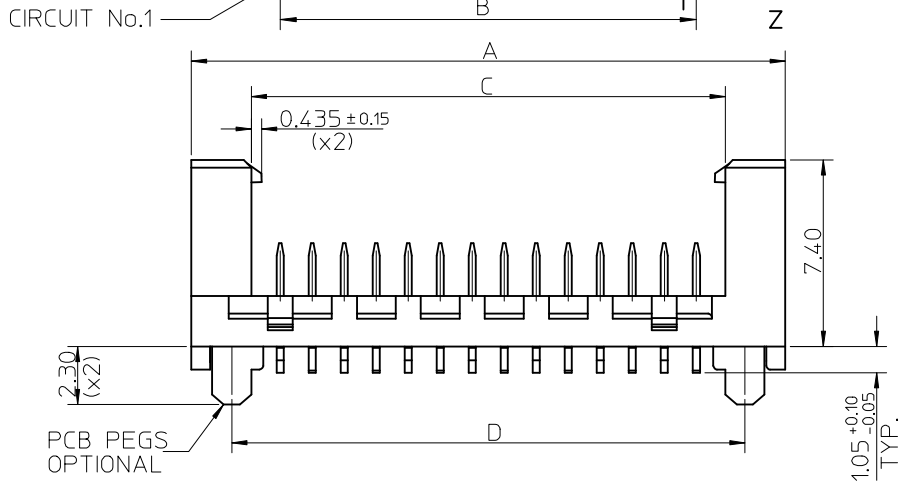
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PART NO.	NUMBER OF CKTS	DIMN. A	DIMN. B	DIMN. C	DIMN. D
90816-**-04	4	10.86	3.81	6.11	7.66
90816-**-06	6	13.40	6.35	8.65	10.20
90816-**-08	8	15.94	8.89	11.19	12.74
90816-**-10	10	18.48	11.43	13.73	15.28
90816-**-12	12	21.02	13.97	16.27	17.82
90816-**-14	14	23.56	16.51	18.81	20.36
90816-**-16	16	26.10	19.05	21.35	22.90
90816-**-18	18	28.64	21.59	23.89	25.44
90816-**-20	20	31.18	24.13	26.43	27.98
90816-**-22	22	33.72	26.67	28.97	30.52
90816-**-24	24	36.26	29.21	31.51	33.06
90816-**-26	26	38.80	31.75	34.05	35.60

NOTE 7



14 CIRCUIT SHOWN FOR ILLUSTRATION ONLY.

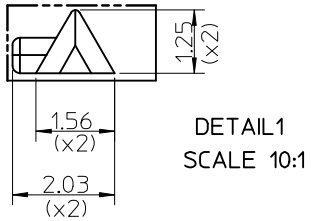
90816 - \* \* \* \*

CIRCUIT SIZE.

	PCB PEGS	TUBE PACKED	TAPE & REEL PACKED
0	YES	YES	NO
2	YES	NO	YES
3	NO	YES	NO
5	NO	NO	YES

0 = TIN VERSION  
3 = GOLD VERSION

- NOTES:
- MATERIAL HOUSING: PPA, GLASS-FILLED, COLOUR: BLACK TERMINAL: BRASS
  - FINISHES: TERMINAL GOLD: CONTACT AREA: SELECTIVE GOLD, 0.76 MICRONS MINIMUM, SMT TAILS: GOLD FLASH, 0.10 MICRONS GOLD FLASH OVER NICKEL UNDERPLATE. TIN: 3 MICRONS MINIMUM OVER NICKEL UNDERPLATE.
  - PRODUCT SPECIFICATION: PS-99020-0011
  - PACKAGING SPECIFICATION: FOR TAPE AND REEL SEE: PK-90816-006 FOR TUBE SEE: PK-90816-007
  - MATES WITH MOLEX 90327 PART SERIES.
  - ALL SMT TAILS TO LIE WITHIN A COPLANARITY BAND OF 0 - 0.10 MICROMETER REF. FROM EACH OTHER.
  - 4 CIRCUIT PART NOT AVAILABLE IN TAPE AND REEL.



ADDED NOTE 7 EC NO: E2009-0207 DRWN: DBYRNES 2008/11/10 CHKD: 2008/11/10 APPR: JWALLACE 2008/11/11	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽ = 0 ◻ = 0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± 0.35 ± --- ANGULAR ± 2 °	MM ONLY	5:1	METRIC	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY DATE	TITLE		
			D.BYRNES 2008/08/16	PICOFLEX SMT LATCHED HEADER		
			CHECKED BY DATE	MOLEX INCORPORATED		
			JDWALLACE 2008/08/26	DOCUMENT NO. SD-90816-001		
			APPROVED BY DATE	SHEET NO. 1 OF 2		
			JDWALLACE 2008/08/27			
			MATERIAL NO.			
			SEE CHART			
			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

RESTRICTED AREA  
NO PCB COMPONENTS  
ALLOWED



RECOMMENDED PCB THICKNESS 1.60±0.14  
PCB LAYOUT FOR CLEARANCE FIT WITH PCB PEGS  
HEADER VERSIONS 90816-\*0\*\*/\*2\*\*  
VIEWED FROM COMPONENT SIDE  
6CKT PART SHOWN FOR REFERENCE

RESTRICTED AREA  
NO PCB COMPONENTS  
ALLOWED



RECOMMENDED PCB THICKNESS 1.60±0.14  
PCB LAYOUT WITHOUT PCB PEGS  
HEADER VERSIONS 90816-\*3\*\*/\*5\*\*  
VIEWED FROM COMPONENT SIDE  
6CKT PART SHOWN FOR REFERENCE

90816-***26	26	38.80	31.75	35.60	17.80
90816-***24	24	36.26	29.21	33.06	16.53
90816-***22	22	33.72	26.67	30.52	15.26
90816-***20	20	31.18	24.13	27.98	13.99
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PART NO.	NUMBER OF CKTS	DIM. E ±0.10	DIM. F ±0.10	DIM. G ±0.10	DIM. H ±0.10

SEE SHEET 1 EC NO: E2009-0207 DRWN:DBYRNES 2008/11/10 CHKD: 2008/11/10 APPR: JWALLACE 2008/11/11	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
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		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY DATE D.BYRNES 2008/08/16 CHECKED BY DATE JDWALLACE 2008/08/26 APPROVED BY DATE JDWALLACE 2008/08/27	TITLE PICO FLEX SMT LATCHED HEADER		
			MATERIAL NO. SEE SHEET 1	MOLEX INCORPORATED DOCUMENT NO. SD-90816-001		