

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

**Part Number:** [0908160224](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Pitch Picoflex® SMT Latched Vertical Header, 24 Circuits, Tin (Sn) Plating, Black

**Documents:**

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

**General**

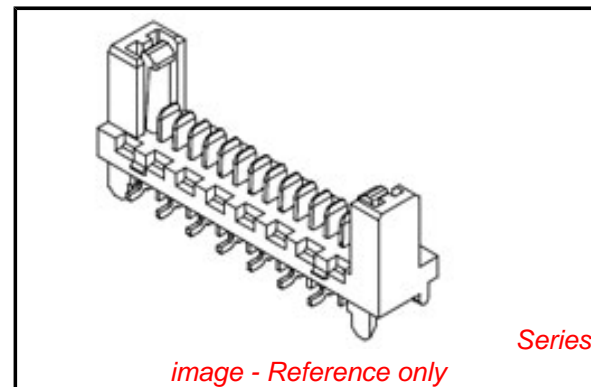
Product Family PCB Headers  
 Series [90816](#)  
 Application Wire-to-Board  
 Product Name Picoflex®

**Physical**

Breakaway No  
 Circuits (Loaded) 24  
 Circuits (maximum) 24  
 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 Tin  
 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 None  
 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) 3  
 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  
 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**

[90816Series](#)

**Mates With**

[90327 Picoflex® PF-50](#)

**Material Info**

**Reference - Drawing Numbers**

Product Specification

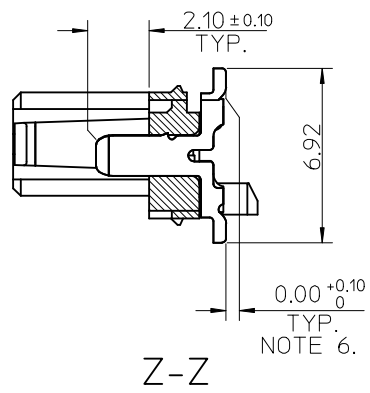
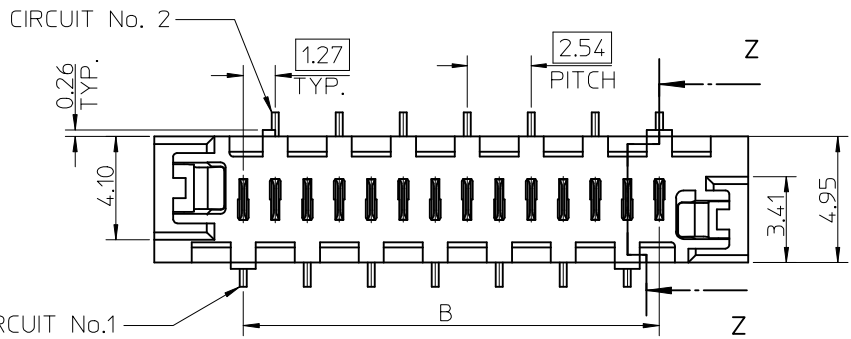
PS-99020-0011

Sales Drawing

SD-90816-001

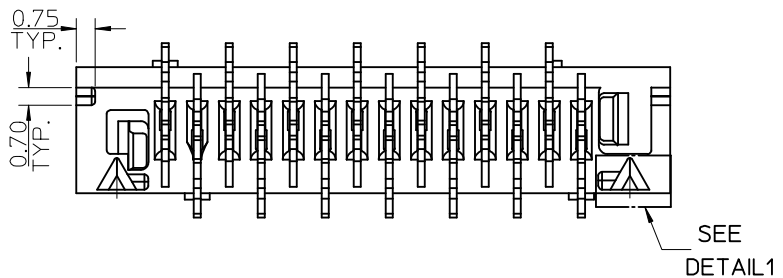
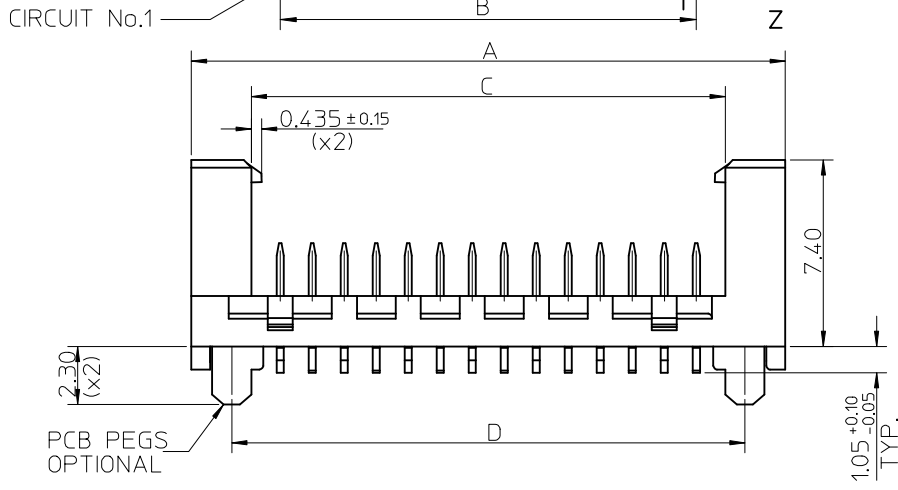
This document was generated on 04/23/2010

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14 CIRCUIT SHOWN FOR ILLUSTRATION ONLY.

| PART NO.    | NUMBER OF CKTS | DIMN. A | DIMN. B | DIMN. C | DIMN. D |        |
|-------------|----------------|---------|---------|---------|---------|--------|
| 90816-**-04 | 4              | 10.86   | 3.81    | 6.11    | 7.66    | NOTE 7 |
| 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   |        |



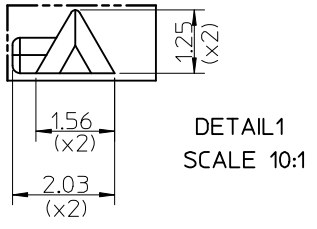
90816 - \* \* \* \*

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                |

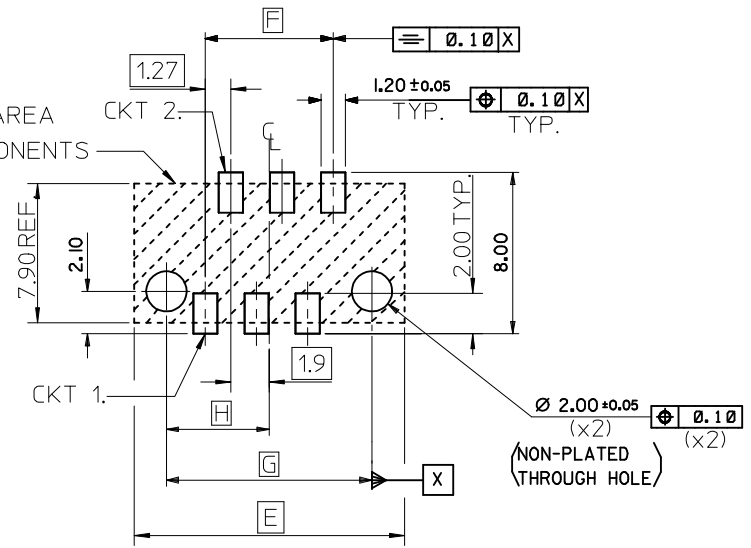
0 = TIN VERSION  
3 = GOLD VERSION

- 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.



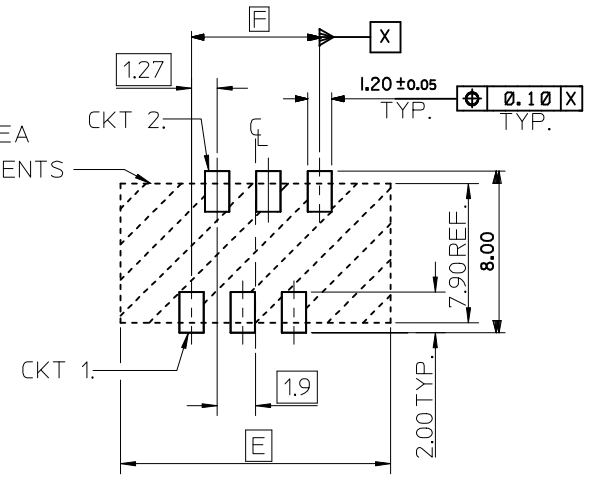
|   |  |  |   |                     |                        |                        |                                      |
|---|--|--|---|---------------------|------------------------|------------------------|--------------------------------------|
| <b>ADDED NOTE 7</b><br>EC NO: E2009-0207<br>DRWN: DBYRNES 2008/11/10<br>CHKD: 2008/11/10<br>APPR: JWALLACE 2008/11/11 | QUALITY SYMBOLS<br>▽ = 0<br>◻ = 0                    | GENERAL TOLERANCES (UNLESS SPECIFIED)<br>mm INCH<br>4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.25 ± ---<br>1 PLACE ± 0.35 ± ---<br>ANGULAR ± 2 ° | DIMENSION STYLE<br>MM ONLY<br>DRAWN BY: D.BYRNES<br>DATE: 2008/08/16<br>CHECKED BY: JDWALLACE<br>DATE: 2008/08/26<br>APPROVED BY: JDWALLACE<br>DATE: 2008/08/27<br>MATERIAL NO. | SCALE<br>5:1        | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION | TITLE<br>PICOFLEX SMT LATCHED HEADER |
|   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | SEE CHART  | MOLEX MOLEX INCORPORATED<br>DOCUMENT NO. SD-90816-001   | SHEET NO.<br>1 OF 2 |                        |                        |                                      |

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           |
| 90816-***18 | 18             | 28.64           | 21.59           | 25.44           | 12.72           |
| 90816-***16 | 16             | 26.10           | 19.05           | 22.90           | 11.45           |
| 90816-***14 | 14             | 23.56           | 16.51           | 20.36           | 10.18           |
| 90816-***12 | 12             | 21.02           | 13.97           | 17.82           | 8.91            |
| 90816-***10 | 10             | 18.48           | 11.43           | 15.28           | 7.64            |
| 90816-***08 | 8              | 15.94           | 8.89            | 12.74           | 6.37            |
| 90816-***06 | 6              | 13.40           | 6.35            | 10.20           | 5.10            |
| 90816-***04 | 4              | 10.86           | 3.81            | 7.66            | 3.83            |
| PART NO.    | NUMBER OF CKTS | DIM. E<br>±0.10 | DIM. F<br>±0.10 | DIM. G<br>±0.10 | DIM. H<br>±0.10 |

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