molex
one company > a world of innovation

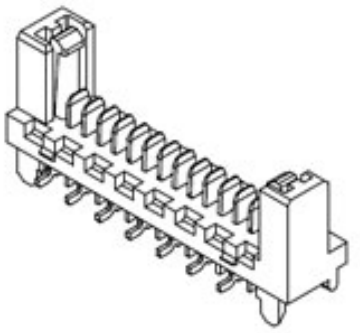
This document was generated on 04/23/2010

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

**Part Number:** 0908163010

**Status:** Active

**Description:** 1.27mm (.050") Pitch Picoflex® SMT Latched Vertical Header, 10 Circuits, Gold (Au) Plating, Black



*Series image - Reference only*

**Documents:**

3D Model
Drawing (PDF)
Product Specification PS-99020-0011 (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) | 10 |
| Circuits (maximum) | 10 |
| 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 | None |
| 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) | 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
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

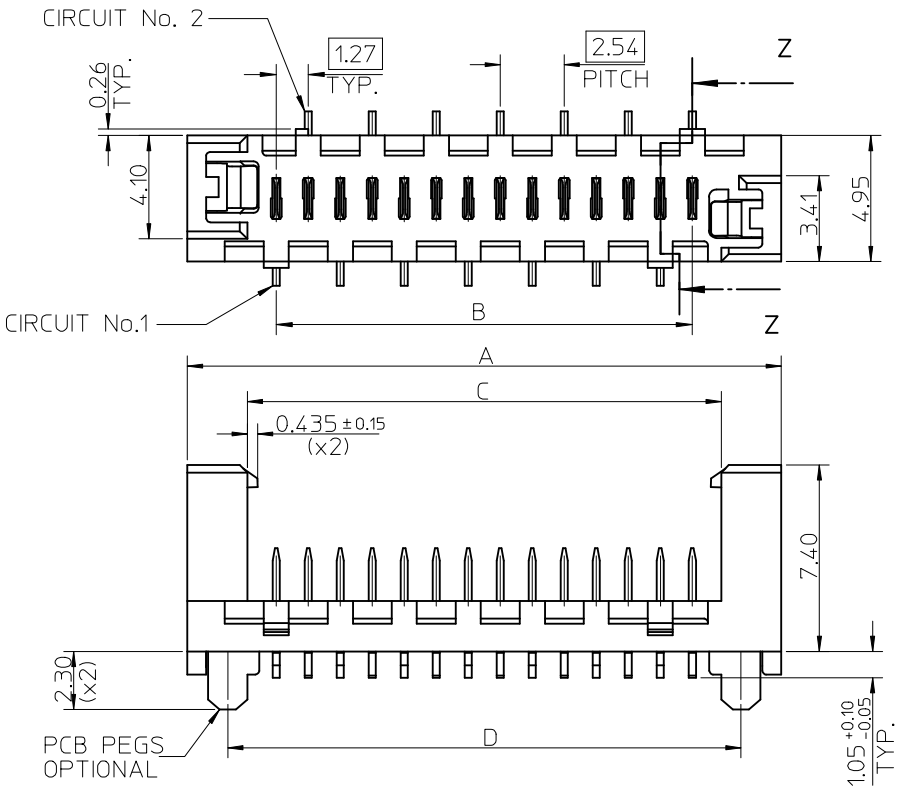
## Material Info

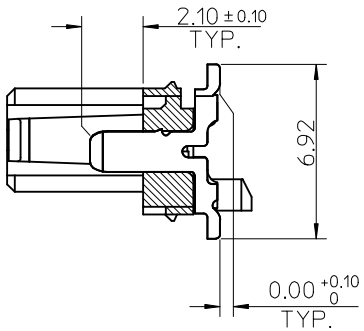
### Reference - Drawing Numbers

| | |
|---|---|
| Product Specification | PS-99020-0011 |
| Sales Drawing | SD-90816-001 |

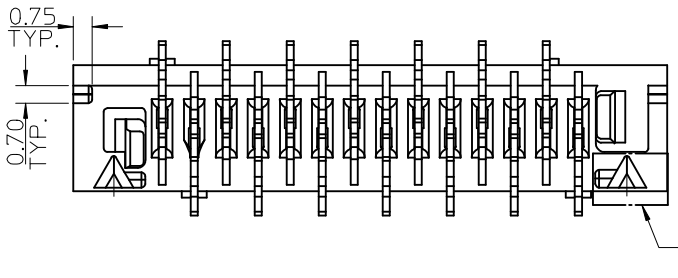
This document was generated on 04/23/2010

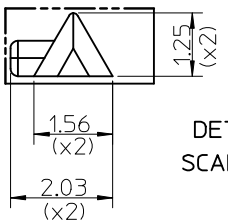
**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**




Z-Z




DETAIL1
SCALE 10:1

| 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 | |

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:

1- MATERIAL
HOUSING: PPA, GLASS-FILLED, COLOUR: BLACK
TERMINAL: BRASS

2- 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.

3- PRODUCT SPECIFICATION: PS-99020-0011

4- PACKAGING SPECIFICATION: FOR TAPE AND REEL SEE: PK-90816-006
FOR TUBE SEE: PK-90816-007

5- MATES WITH MOLEX 90327 PART SERIES.

6- ALL SMT TAILS TO LIE WITHIN A COPLANARITY BAND OF 0 - 0.10 MICROMETER REF. FROM EACH OTHER.

7- 4 CIRCUIT PART NOT AVAILABLE IN TAPE AND REEL.

| REV | DESCRIPTION | DRWN | CH'KD | APPR | EC NO |
|---|---|---|---|---|---|
| B | ADDED NOTE 7 | DBYRNES 2008/11/10 | | JWALLACE 2008/11/11 | E2009-0207 |

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± 0.25 | ± --- |
| 1 PLACE | ± 0.35 | ± --- |
| ANGULAR ± 2 ° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: 5:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

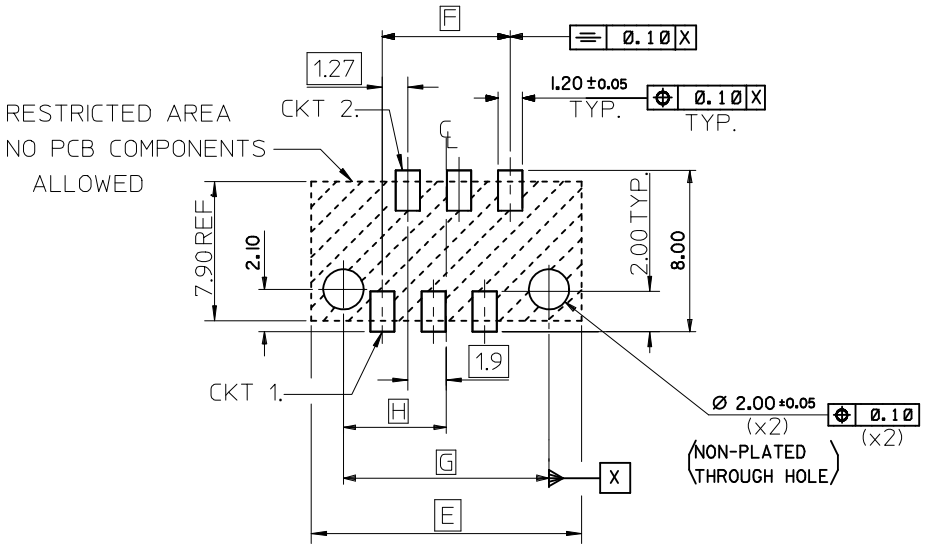
| | | DATE |
|---|---|---|
| DRAWN BY | D.BYRNES | 2008/08/16 |
| CHECKED BY | JDWALLACE | 2008/08/26 |
| APPROVED BY | JDWALLACE | 2008/08/27 |

TITLE: PICOFLEX SMT LATCHED HEADER

MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-90816-001
SHEET NO.: 1 OF 2
SIZE: A3

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION



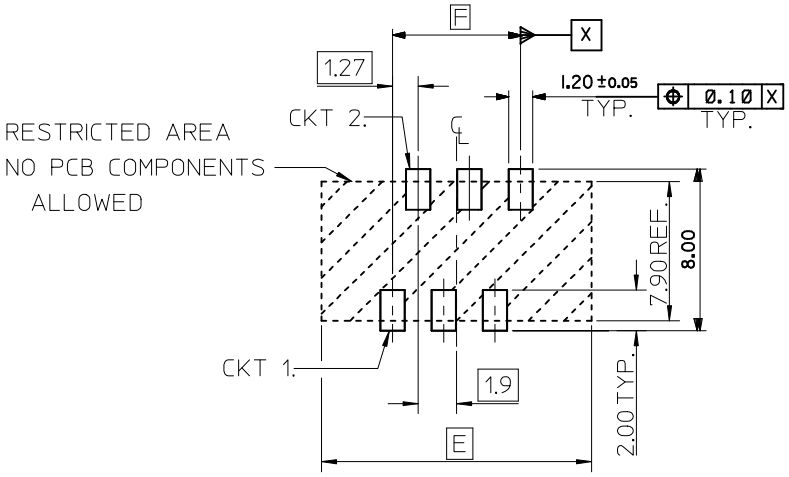

RECOMMENDED PCB THICKNESS 1.60±0.14

PCB LAYOUT FOR CLEARANCE FIT WITH PCB PEGS

HEADER VERSIONS 90816-*0**/*2**

VIEWED FROM COMPONENT SIDE

6CKT PART SHOWN FOR REFERENCE




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 ±0.10 | DIM. F ±0.10 | DIM. G ±0.10 | DIM. H ±0.10 |

SEE SHEET 1
EC NO: E2009-0207 2008/11/10
DRWN:DBYRNES 2008/11/10
CH'KD: 2008/11/11
APPR: JWALLACE
DESCRIPTION
REV B

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|---|---|---|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± 0.25 | ± --- |
| 1 PLACE | ± 0.35 | ± --- |
| ANGULAR ± 2 ° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: 5:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: D.BYRNES DATE: 2008/08/16
CHECKED BY: JDWALLACE DATE: 2008/08/26
APPROVED BY: JDWALLACE DATE: 2008/08/27
MATERIAL NO.: SEE SHEET 1

TITLE: PICOFLEX SMT LATCHED HEADER

molex MOLEX INCORPORATED

DOCUMENT NO.: SD-90816-001
SHEET NO.: 2 OF 2
SIZE: A3

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION