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Part Number: [0908160020](#)
Status: **Active**
Description: 1.27mm (.050") Pitch Picoflex® SMT Latched Vertical Header, 20 Circuits, Tin (Sn) Plating, Black

Documents:

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

General

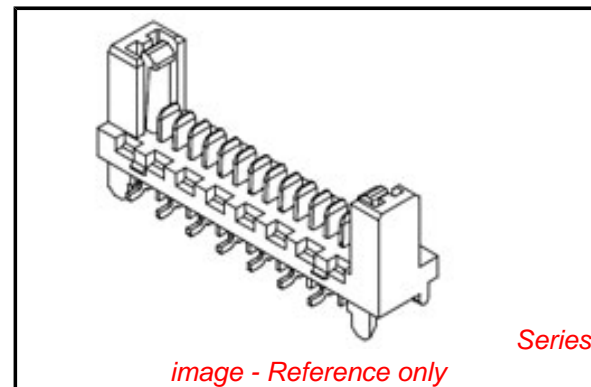
| | |
|----------------|-----------------------|
| Product Family | PCB Headers |
| Series | 90816 |
| Application | Wire-to-Board |
| Product Name | Picoflex® |

Physical

| | |
|--------------------------------|-----------------|
| Breakaway | No |
| Circuits (Loaded) | 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 | 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 | 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) | 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
 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

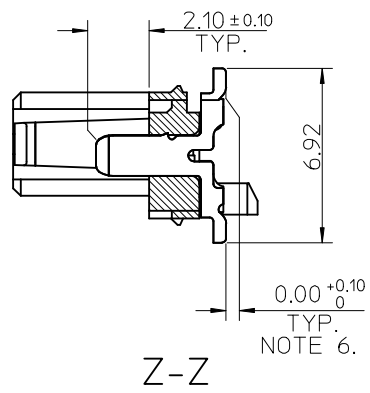
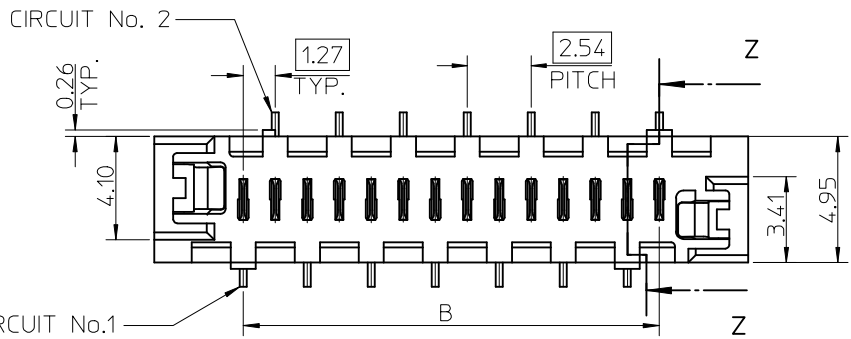
PS-99020-0011

Sales Drawing

SD-90816-001

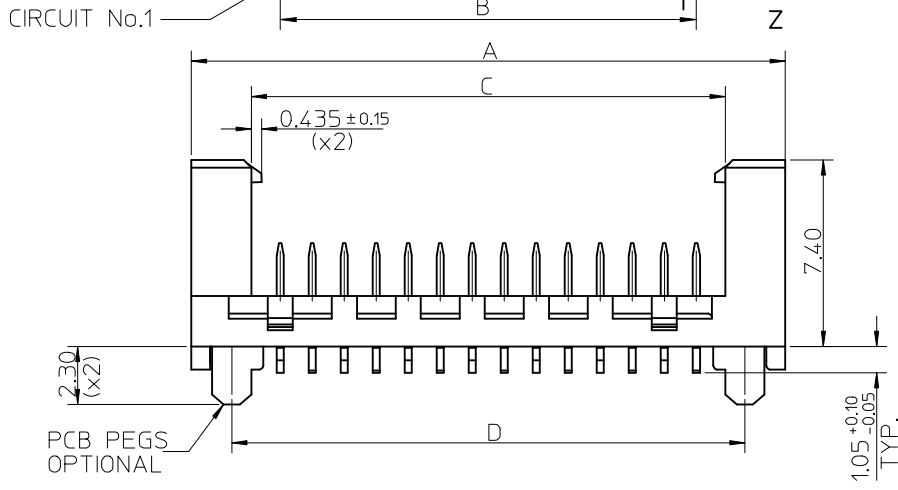
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| PART NO. | NUMBER OF CKTS | DIMN. A | DIMN. B | DIMN. C | DIMN. D |
|-------------|----------------|---------|---------|---------|---------|
| 90816-**-04 | 4 | 10.86 | 3.81 | 6.11 | 7.66 |
| 90816-**-06 | 6 | 13.40 | 6.35 | 8.65 | 10.20 |
| 90816-**-08 | 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.

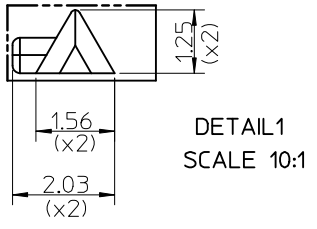
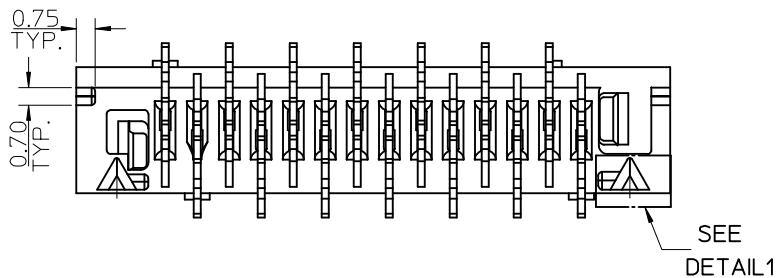
90816 - * * * *

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 |

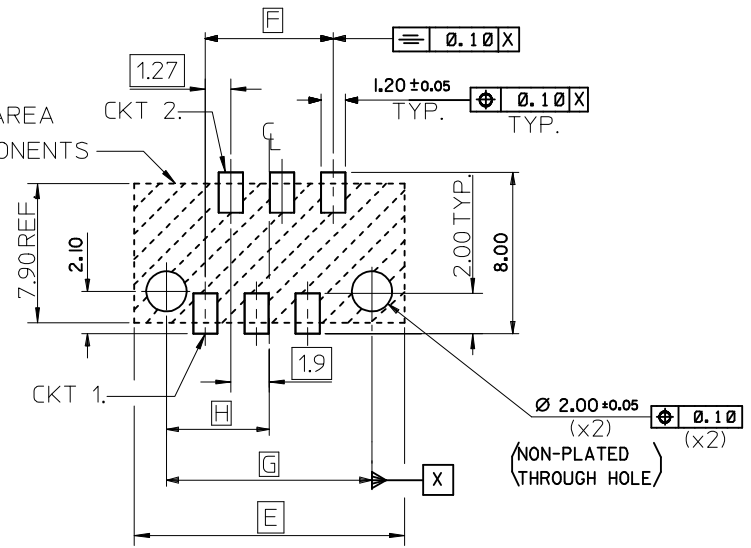
0 = TIN VERSION
3 = GOLD VERSION

- 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.



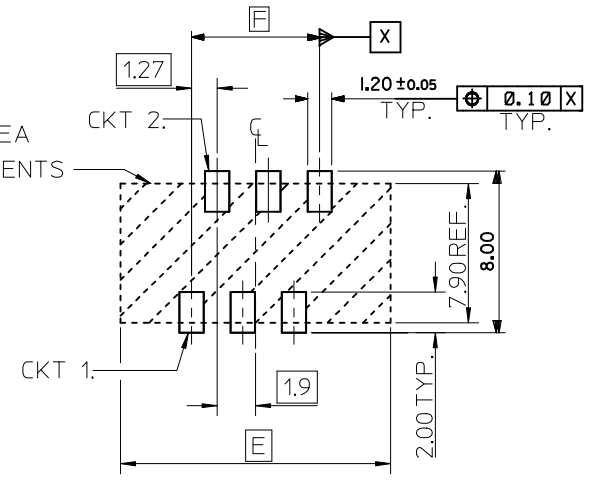
| | | | | | | | |
|---|--|--|---|---------------------|------------------------|------------------------|--------------------------------------|
| ADDED NOTE 7 EC NO: E2009-0207 DRWN: DBYRNES 2008/11/10 CHKD: 2008/11/10 APPR: JWALLACE 2008/11/11 | QUALITY SYMBOLS ▽ = 0 ◻ = 0 | GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± 0.35 ± --- ANGULAR ± 2 ° | DIMENSION STYLE MM ONLY DRAWN BY: D.BYRNES DATE: 2008/08/16 CHECKED BY: JDWALLACE DATE: 2008/08/26 APPROVED BY: JDWALLACE DATE: 2008/08/27 | SCALE 5:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | TITLE PICOFLEX SMT LATCHED HEADER |
| | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | MATERIAL NO. SEE CHART | MOLEX INCORPORATED DOCUMENT NO. SD-90816-001 | SHEET NO. 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 | DIM. F | DIM. G | DIM. H |
| | | ±0.10 | ±0.10 | ±0.10 | ±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 |
| | ▽=0 ∇=0 | mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± 0.35 ± --- ANGULAR ± 2 ° | MM ONLY | 5:1 | METRIC | |
| | | | DRAWN BY DATE | TITLE | | |
| | | | D.BYRNES 2008/08/16 | PICOFLEX SMT LATCHED HEADER | | |
| | | CHECKED BY DATE | MATERIAL NO. | | | |
| | | JDWALLACE 2008/08/26 | DOCUMENT NO. | | | |
| | | APPROVED BY DATE | MOLEX INCORPORATED | | | |
| | | JDWALLACE 2008/08/27 | SD-90816-001 | | | |
| | | | SHEET NO. | | | |
| | | | 2 OF 2 | | | |
| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | |