



## Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL

### RF Connectors Technical Data Sheet

**PE45539**

#### Configuration

- Mini SMP Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL
- VITA 67 Design

#### Features

- Max. Operating Frequency 40 GHz
- Good VSWR of 1.45:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to ASTM B488
- Blind Mate Connector
- Coaxial interconnects on VPX platforms
- Standard MIL-STD-348 SMPM interface
- Rugged Stainless Steel construction
- Accepts 0.047" and 0.086" cable contacts for end-to-end solution

#### Applications

- General Purpose Test
- Custom Cable Assemblies
- Robust and Rugged high speed cabled solution
- VITA 67 Backplane
- High Density Applications

#### Description

Pasternack's PE45539 4-position block housing is part of our full line of VITA 67 Backplane solutions and is available for same-day shipping. Pasternack introduces 4 position (VITA 67.1) and 8 position (VITA 67.2) RF connector housings designed for 3U and 6U formats within the OpenVPX architecture. These blocks are machined from stainless steel for a rugged solution. The blocks are designed to accept both PE45535 (0.047" cable contact) & PE45536 (.086" cable contact) used in flexible or semi-rigid cables. These blocks are ideal for blind mating daughtercards to motherboards as the RF contacts provide +/- .010" radial misalignment tolerance and have excellent return loss up to 40 GHz.

The SMPM (Mini-SMP) blind mate connector is ideal for applications where direct visual or tactile access to the connection point is not possible, for example, when two circuit boards need to be mated. The block's right angle body geometry allows for easier connections in tight spaces.

Our SMPM (Mini-SMP) right angle block PE45539 specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

#### Electrical Specifications

| Description                          | Minimum | Typical | Maximum | Units |
|--------------------------------------|---------|---------|---------|-------|
| Frequency Range                      | DC      |         | 40      | GHz   |
| VSWR                                 |         |         | 1.45:1  |       |
| Dielectric Withstanding Voltage (AC) |         |         | 325     | Vrms  |
| Inner Conductor DC Resistance        |         |         | 6       | mOhms |
| Outer Conductor DC Resistance        |         |         | 5       | mOhms |
| Insulation Resistance                | 5,000   |         |         | MOhms |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL PE45539](#)



Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL

## RF Connectors Technical Data Sheet

**PE45539**

### Mechanical Specifications

|               |                     |
|---------------|---------------------|
| <b>Size</b>   |                     |
| Length        | 0.42 in [10.67 mm]  |
| Width/Dia.    | 0.19 in [4.83 mm]   |
| Height        | 0.19 in [4.83 mm]   |
| Weight        | 0.0016 lbs [0.73 g] |
| Mating Cycles | 500 Cycles          |

### Material Specifications

| Description    | Material         | Plating                    |
|----------------|------------------|----------------------------|
| Contact        | Beryllium Copper | Gold<br>ASTM B488          |
| Insulation     | PEI              |                            |
| Body           | Brass            | Gold<br>ASTM B488          |
| Retaining Ring | Beryllium Copper | Nickel<br>SAE-AMS-QQ-N-290 |

### Environmental Specifications

|                    |                                                                                                |
|--------------------|------------------------------------------------------------------------------------------------|
| <b>Temperature</b> |                                                                                                |
| Operating Range    | -55 to +125 deg C                                                                              |
| Humidity           | 1,000 megohms within 5 minutes after removal from humidity, tested per MIL-STD-202, Method 106 |
| Shock              | Sawtooth pulse of 100 g 6ms per MIL-STD-202, Method 213, Condition I                           |
| Vibration          | MIL-STD-202, Method 214, Test Condition I, Curve D                                             |
| Thermal Shock      | MIL-STD-202, Method 107, Test Condition A                                                      |

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL PE45539](#)



Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL

## RF Connectors Technical Data Sheet

**PE45539**

Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

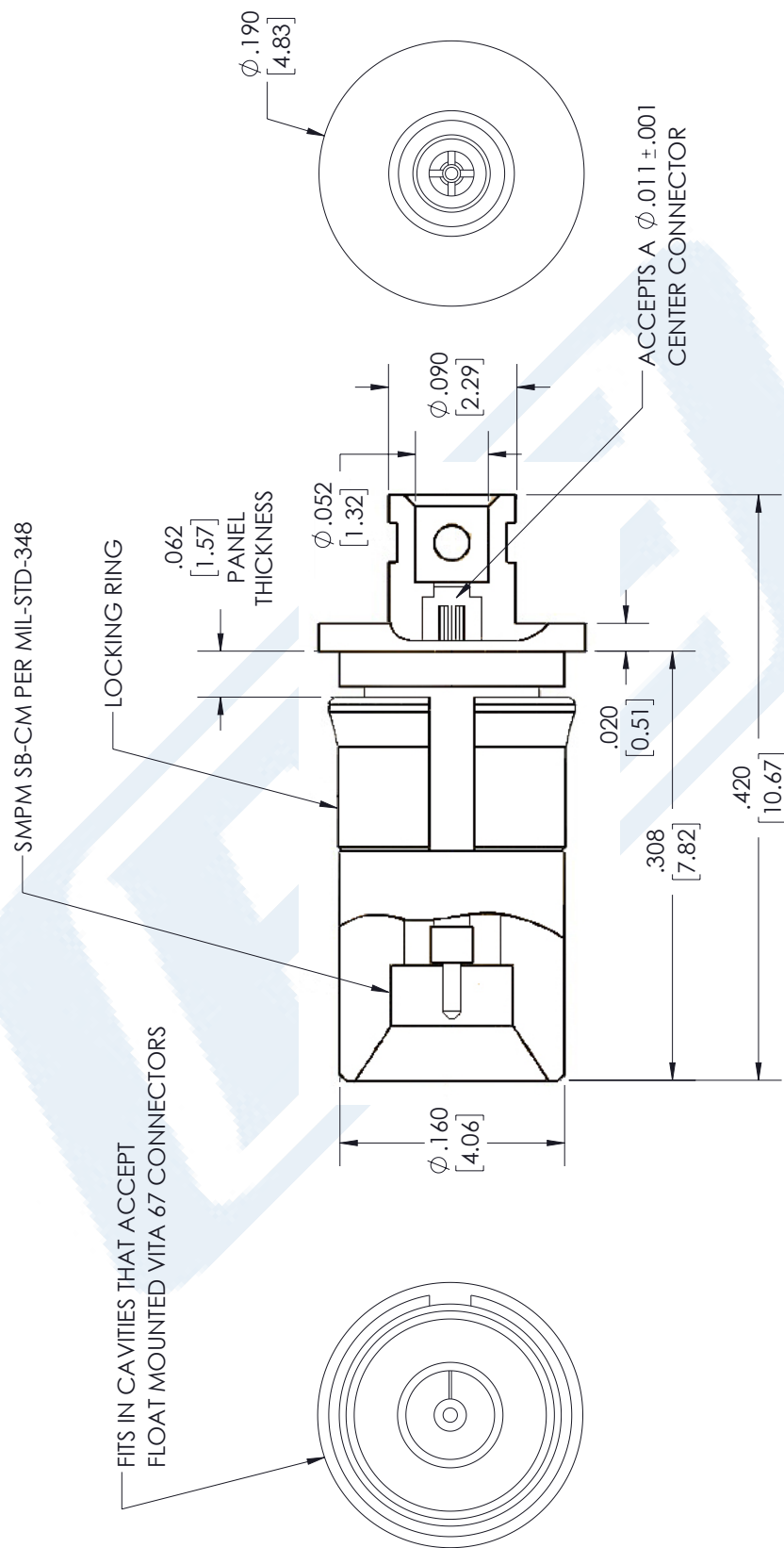
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL PE45539](https://www.pasternack.com/mini-smp-male-pe-p047-pe-p047ll-pe-sr047fl-connector-pe45539-p.aspx)

URL: <https://www.pasternack.com/mini-smp-male-pe-p047-pe-p047ll-pe-sr047fl-connector-pe45539-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

# Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL

| REVISIONS |                 |            |          |
|-----------|-----------------|------------|----------|
| REV.      | DESCRIPTION     | DATE       | APPROVED |
| A         | INITIAL RELEASE | 09/16/2022 | AGANWANI |



|                                                                                                                                                                                                                                                             |                                                                          |                                             |                                                                                                                                                                                                                                                              |                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <p>UNLESS OTHERWISE SPECIFIED,<br/>LEADING DIMENSIONS ARE INCHES<br/>DIMENSIONS IN [ ] ARE MILLIMETERS</p>                                                                                                                                                  | <p>TOLERANCES:</p>                                                       |                                             |                                                                                                                                                                                                                                                              | <p>THIRD-ANGLE PROJECTION</p>  |
|                                                                                                                                                                                                                                                             | <p>X = ± .2 [ .008 ]<br/>XX = ± .02 [ .51 ]<br/>XXX = ± .005 [ .13 ]</p> | <p>FRACTIONS<br/>± 1/32<br/>ANGLES ± 1°</p> | <p>CABLE LENGTH (L) TOLERANCES:</p> <p>L ≤ 12 [305] = +1 [25] / -0<br/>12 [305] &lt; L ≤ 60 [1524] = +2 [51] / -0<br/>60 [1524] &lt; L ≤ 120 [3048] = +4 [102] / -0<br/>120 [3048] &lt; L ≤ 300 [7620] = +6 [152] / -0<br/>300 [7620] &lt; L = +5%L / -0</p> |                                                                                                                   |
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| <p>SHEET 1 OF 1</p>                                                                                                                                                                                                                                         |                                                                          |                                             |                                                                                                                                                                                                                                                              | <p>SCALE N/A</p>                                                                                                  |
| <p>PE <b>PASTERNAK</b> an INFINITE® brand</p> <p>Pasternack Enterprises, Inc.<br/>P.O. Box 16759, Irvine, CA 92623.<br/>Phone: 1.949.261.1920   1.866.727.8376<br/>Fax: 1.949.261.7451<br/>Website: www.pasternack.com<br/>E-mail: sales@pasternack.com</p> |                                                                          |                                             |                                                                                                                                                                                                                                                              | <p>REV A</p>                                                                                                      |
| <p>SIZE A</p>                                                                                                                                                                                                                                               |                                                                          | <p>CAGE CODE 53919</p>                      | <p>DRAWN BY BPUCHASKI</p>                                                                                                                                                                                                                                    | <p>ITEM NO. PE45539</p>                                                                                           |
| <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY</p>                                                                                                                                                                                                          |                                                                          |                                             |                                                                                                                                                                                                                                                              |                                                                                                                   |

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## N Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

### RF Connectors Technical Data Sheet

**PE4934**

#### Configuration

- N Male Connector
- MIL-STD-348
- 50 Ohms
- Straight Body Geometry
- PE-047SR, PE-SR047AL, PE-SR047FL Interface Type
- Solder/Solder Attachment

#### Features

- Gold Plated Contact
- Contact plating according to MIL-G-45204

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE4934 type N male connector with solder/solder attachment for PE-047SR, PE-SR047AL and PE-SR047FL is part of our full line of RF components available for same-day shipping.

Our type N male connector PE4934 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

#### Mechanical Specifications

|             |                     |
|-------------|---------------------|
| <b>Size</b> |                     |
| Length      | 0.957 in [24.31 mm] |
| Width/Dia.  | 0.8 in [20.32 mm]   |
| Weight      | 0.034 lbs [15.42 g] |

#### Material Specifications

| Description  | Material | Plating             |
|--------------|----------|---------------------|
| Contact      |          | Gold<br>MIL-G-45204 |
| Insulation   | PTFE     |                     |
| Body         | Brass    | Gold<br>MIL-G-45204 |
| Coupling Nut | Brass    | Nickel<br>QQ-N-290  |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE4934](#)



## N Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

### RF Connectors Technical Data Sheet

PE4934

#### Environmental Specifications

##### Temperature

Operating Range

-65 to +165 deg C

**Compliance Certifications** (see [product page](#) for current document)

#### Plotted and Other Data

Notes:

N Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

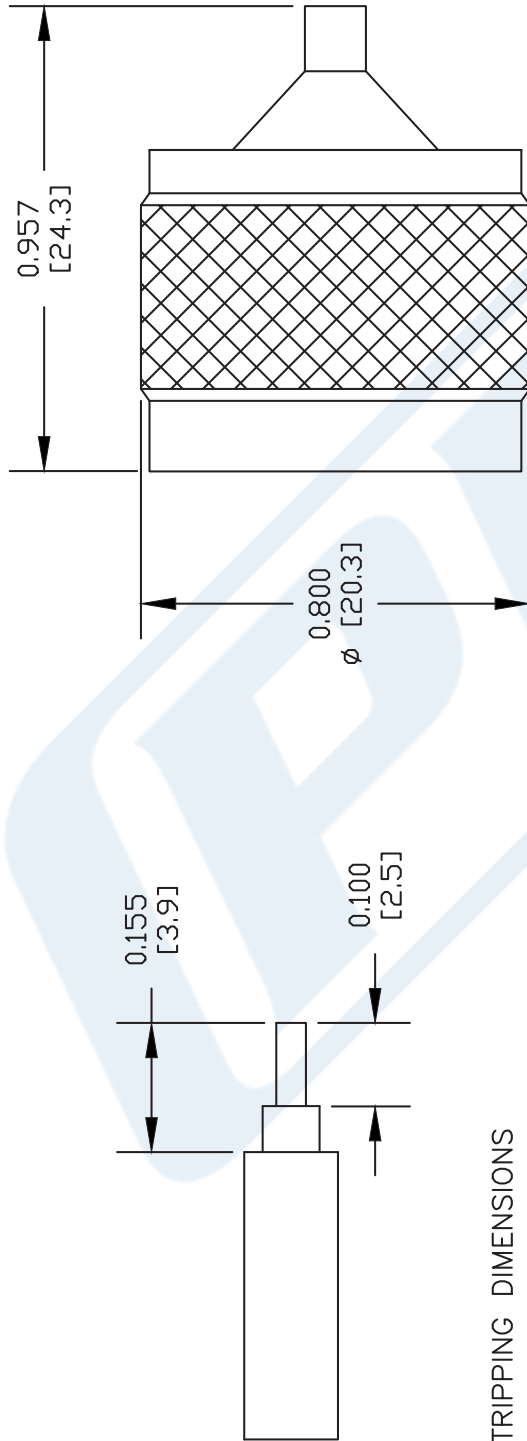
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE4934](#)

URL: <https://www.pasternack.com/n-male-standard-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe4934-p.aspx>

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# PE4934 CAD Drawing

N Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL



## STRIPPING DIMENSIONS

## ASSEMBLY PROCEDURES

STRIP CABLE AS SHOWN. DO NOT NICK CENTER CONDUCTOR. SLIDE CABLE THROUGH BODY.

INSERT CENTER CONDUCTOR INTO CONTACT UNTIL DIELECTRIC BOTTOMS INSIDE CONTACT. SOFT SOLDER CONTACT TO CENTER CONDUCTOR. DO NOT OVER HEAT DIELECTRIC.

USING ASSEMBLY TOOL, PRESS CONTACT FULLY INTO INSULATOR. SOLDER OUTER CONDUCTOR TO BODY.



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**Website:** [www.pasternack.com](http://www.pasternack.com) | **E-Mail:** [sales@pasternack.com](mailto:sales@pasternack.com)

DWG TITLE

**PE4934**

**FSCM NO. 53919**

NOTES:

1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

CAD FILE

042409

SCALE N/A

SIZE A

XXX

## 047 Semi-rigid Coax Cable with Copper Outer Conductor

## TECHNICAL DATA SHEET

PE-047SR

**Configuration**

|                                      |                           |
|--------------------------------------|---------------------------|
| Inner Conductor Material and Plating | Copper Clad Steel, Silver |
| Dielectric Type                      | PTFE                      |
| Shield Materials                     | Copper                    |

**Electrical Specifications**

|                                       |       |
|---------------------------------------|-------|
| Impedance, Ohms                       | 50    |
| Maximum Operating Frequency, GHz      | 40    |
| Dielectric Withstanding Voltage, Vrms | 2,000 |

**Electrical Specifications by Frequency****Frequency 1**

|                                 |             |
|---------------------------------|-------------|
| Frequency, MHz                  | 1000        |
| Attenuation, dB/100ft [dB/100m] | 40 [131.23] |
| Power Handling, Watts           | 32          |

**Frequency 2**

|                                 |              |
|---------------------------------|--------------|
| Frequency, GHz                  | 10           |
| Attenuation, dB/100ft [dB/100m] | 130 [426.51] |
| Power Handling, Watts           | 9            |

**Frequency 3**

|                                 |              |
|---------------------------------|--------------|
| Frequency, GHz                  | 20           |
| Attenuation, dB/100ft [dB/100m] | 190 [623.36] |
| Power Handling, Watts           | 6.5          |

**Mechanical Specifications****Temperature**

|                        |             |
|------------------------|-------------|
| Operating Range, deg C | -55 to +100 |
|------------------------|-------------|

**Inner Conductor**

|                   |                   |
|-------------------|-------------------|
| Number of Strands | 1                 |
| Material          | Copper Clad Steel |
| Plating           | Silver            |
| Diameter, in [mm] | 0.011 [0.28]      |

**Dielectric:**

|                   |              |
|-------------------|--------------|
| Type              | PTFE         |
| Diameter, in [mm] | 0.037 [0.94] |

**Shield:**

|                   |              |
|-------------------|--------------|
| Number of         | 1            |
| Material 1        | Copper       |
| Diameter, in [mm] | 0.047 [1.19] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [047 Semi-rigid Coax Cable with Copper Outer Conductor PE-047SR](#)

## 047 Semi-rigid Coax Cable with Copper Outer Conductor

## TECHNICAL DATA SHEET

PE-047SR

**Jacket:**

|                                       |              |
|---------------------------------------|--------------|
| Diameter, in [mm]                     | 0.047 [1.19] |
| One Time Minimum Bend Radius, in [mm] | 0.05 [1.27]  |
| Weight, lbs/ft [Kg/m]                 | 0.005 [0.01] |

**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

|                 |            |
|-----------------|------------|
| RoHS Compliant  |            |
| REACH Compliant | 12/19/2011 |

**Plotted and Other Data**

## Notes:

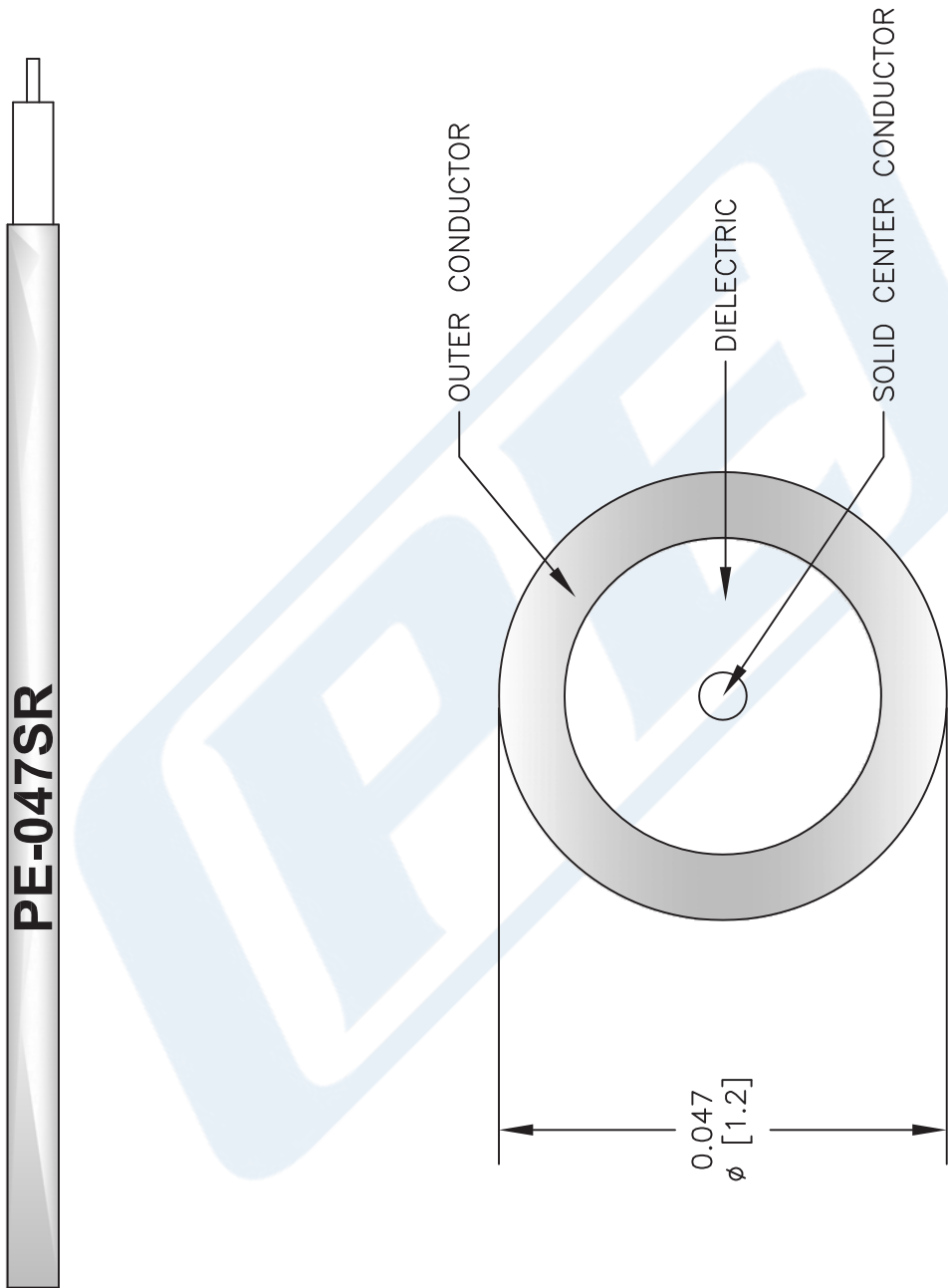
- Values at +25 °C, sea level

047 Semi-rigid Coax Cable with Copper Outer Conductor from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [047 Semi-rigid Coax Cable with Copper Outer Conductor PE-047SR](http://www.pasternack.com/semirigid-0.047-50-ohm-coax-cable-copper-pe-047sr-p.aspx)

URL: <http://www.pasternack.com/semirigid-0.047-50-ohm-coax-cable-copper-pe-047sr-p.aspx>

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3. DIMENSIONS ARE IN INCHES [mm].

|           |          |       |          |        |
|-----------|----------|-------|----------|--------|
| DWG TITLE | PE-047SR |       |          |        |
|           | FSCM NO. | 53919 | CAD FILE | 073113 |
|           |          |       | SCALE    | N/A    |
|           |          |       | SIZE     | A      |
|           |          |       |          | 2233   |



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