



## 2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

### RF Connectors Technical Data Sheet

**PE45411**

#### Configuration

- 2.4mm Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: PE-047SR, PE-SR047AL, PE-SR047FL
- 5/16 inch Hex

#### Features

- Max. Operating Frequency 50 GHz
- Excellent VSWR of 1.16:1
- Gold over Nickel Plated Beryllium Copper Contact
- 50 µin minimum contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE45411 2.4mm male connector with 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 2.4mm male connector operates up to a maximum frequency of 50 GHz and offers excellent VSWR of 1.16:1.

Our 2.4mm male connector PE45411 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.

#### Electrical Specifications

| Description                            | Minimum | Typical | Maximum | Units |
|----------------------------------------|---------|---------|---------|-------|
| Frequency Range                        | DC      |         | 50      | GHz   |
| VSWR                                   |         |         | 1.16:1  |       |
| Insertion Loss                         |         |         | 0.283   | dB    |
| Operating Voltage (AC)                 |         |         | 170     | Vrms  |
| Dielectric Withstanding Voltage (AC)   |         |         | 500     | Vrms  |
| High Potential Voltage<br>5 to 7.5 MHz |         |         | 325     | Vrms  |
| Corona Discharge<br>at 70,000 ft       |         |         | 125     | Vrms  |
| Insulation Resistance                  | 5,000   |         |         | MOhms |
| RF Leakage                             | -90     |         |         | dB    |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE45411](#)



## 2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

### RF Connectors Technical Data Sheet

**PE45411**

#### Performance by Frequency

| Description     | F1       | F2         | F3         | F4       | F5 | Units |
|-----------------|----------|------------|------------|----------|----|-------|
| Frequency Range | DC to 18 | 18 to 26.5 | 26.5 to 40 | 40 to 50 |    | GHz   |
| VSWR, Max       | 1.1:1    | 1.12:1     | 1.14:1     | 1.16:1   |    |       |

Electrical Specification Notes:  
Insertion loss:  $0.04 \times \sqrt{f(\text{GHz})}$  dB.

#### Mechanical Specifications

##### Size

|               |                                  |
|---------------|----------------------------------|
| Length        | 0.56 in [14.22 mm]               |
| Width/Dia.    | 0.312 in [7.92 mm]               |
| Height        | 0.35 in [8.89 mm]                |
| Mating Cycles | 500 Cycles                       |
| Mating Torque | 8 to 10 in-lbs [0.90 to 1.13 Nm] |

#### Material Specifications

| Description    | Material                   | Plating                            |
|----------------|----------------------------|------------------------------------|
| Contact        | Beryllium Copper           | Gold over Nickel<br>50 µin minimum |
| Insulation     | PEI                        |                                    |
| Body           | Beryllium Copper           | Gold over Nickel<br>50 µin minimum |
| Coupling Nut   | Passivated Stainless Steel | ASTM-A582                          |
| Retaining Ring | Beryllium Copper           |                                    |
| Gasket         | Silicone Rubber            |                                    |

#### Environmental Specifications

##### Temperature

|                 |                                                        |
|-----------------|--------------------------------------------------------|
| Operating Range | -65 to +150 deg C                                      |
| Shock           | MIL-STD-202, Method 213, Condition I                   |
| Vibration       | MIL-STD-202, Method 204, Condition D                   |
| Thermal Shock   | MIL-STD-202, Method 107, Condition B                   |
| Salt Spray      | MIL-STD-202, Method 101, Condition B, 5% salt solution |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE45411](#)



2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

## RF Connectors Technical Data Sheet

**PE45411**

**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: [2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL](#)  
**PE45411**



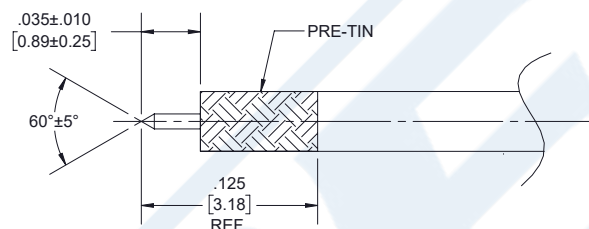
## 2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

### RF Connectors Technical Data Sheet

**PE45411**

#### Assembly Instruction

### Assembly Instructions

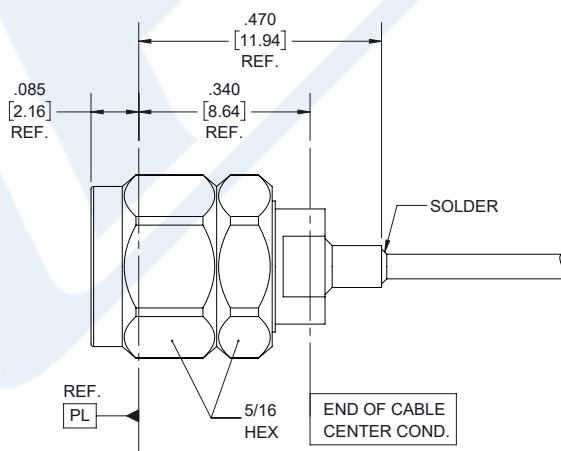


#### **STEP 1:**

- PRE-TIN CABLE OUTER JACKET OVER APPROX. LENGTH SHOWN.
- TRIM CABLE TO EXPOSE CENTER CONDUCTOR AS SHOWN.
- POINT CENTER CONDUCTOR AS INDICATED.

#### **STEP 2:**

- INSERT CABLE INTO CONNECTOR UNTIL CENTER CONDUCTOR PLUGS IN AND CABLE SEATS IN CONNECTOR BORE.
- SOLDER CABLE JACKET TO BODY WHERE SHOWN APPLYING HEAT TO EXTENDED BODY TAIL.



Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE45411](#)



## 2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

### RF Connectors Technical Data Sheet

**PE45411**

2.4mm 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 99.4% availability and are part of the broadest selection in the industry.

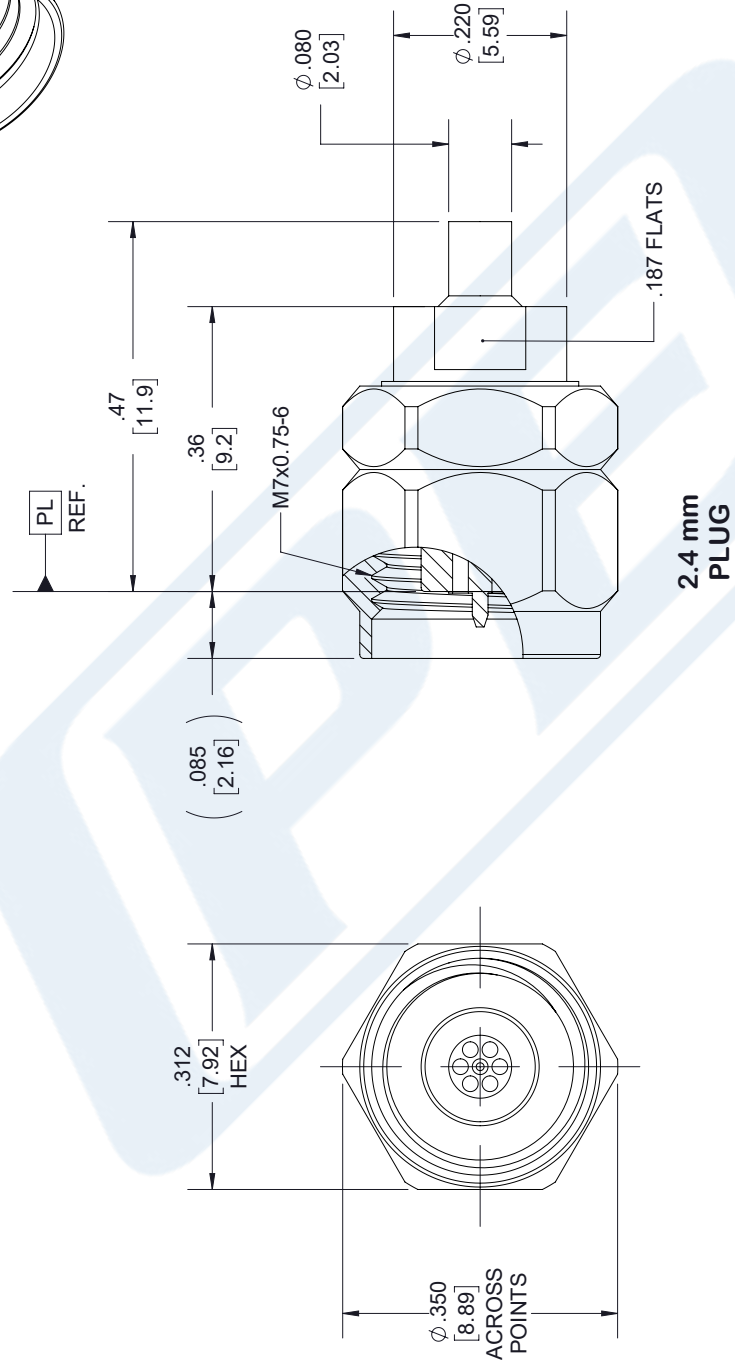
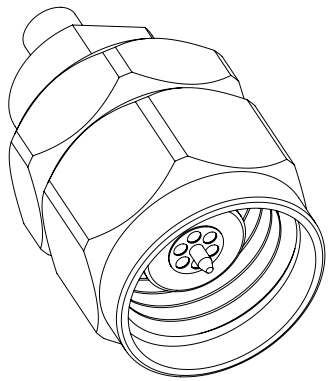
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE45411](https://www.pasternack.com/2.4mm-male-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe45411-p.aspx)

URL: <https://www.pasternack.com/2.4mm-male-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe45411-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.

PE45411 CAD Drawing

2.4mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL



2.4 mm  
PLUG

| STANDARD TOLERANCES |        |
|---------------------|--------|
| .X                  | ±0.2   |
| .XX                 | ±0.02  |
| .XXX                | ±0.005 |

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



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DWG TITLE  
PE45411

CAGE CODE 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].

CAD FILE 110217

SCALE N/A

SIZE A

7361



## 2.92mm Male Connector Clamp/Solder Attachment for PE-SR047FL, PE-SR047AL, PE-047SR

### RF Connectors Technical Data Sheet

**PE44797**

#### Configuration

- 2.92mm Male Connector
- 50 Ohms
- Straight Body Geometry
- PE-SR047FL, PE-SR047AL, PE-047SR Interface Type
- Clamp/Solder Attachment
- 5/16 inch Hex

#### Features

- Max. Operating Frequency 40 GHz
- Good VSWR of 1.35:1
- Gold over Nickel Plated Beryllium Copper Contact
- 50 µin minimum contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE44797 2.92mm male connector with clamp/solder attachment for PE-SR047FL, PE-SR047AL and PE-047SR is part of our full line of RF components available for same-day shipping. Our 2.92mm male connector operates up to a maximum frequency of 40 GHz and offers good VSWR of 1.35:1.

Our 2.92mm male connector PE44797 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.

#### Electrical Specifications

| Description     | Minimum | Typical | Maximum | Units |
|-----------------|---------|---------|---------|-------|
| Frequency Range | DC      |         | 40      | GHz   |
| VSWR            |         |         | 1.35:1  |       |

#### Mechanical Specifications

|               |                                  |
|---------------|----------------------------------|
| <b>Size</b>   |                                  |
| Length        | 0.46 in [11.68 mm]               |
| Width/Dia.    | 0.35 in [8.89 mm]                |
| Weight        | 0.01 lbs [4.54 g]                |
| Mating Torque | 8 to 10 in-lbs [0.90 to 1.13 Nm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.92mm Male Connector Clamp/Solder Attachment for PE-SR047FL, PE-SR047AL, PE-047SR PE44797](#)





2.92mm Male Connector Clamp/Solder Attachment  
for PE-SR047FL, PE-SR047AL, PE-047SR

**RF Connectors Technical Data Sheet**

**PE44797**

**Material Specifications**

| Description  | Material                   | Plating                            |
|--------------|----------------------------|------------------------------------|
| Contact      | Beryllium Copper           | Gold over Nickel<br>50 µin minimum |
| Insulation   | PEI                        |                                    |
| Body         | Passivated Stainless Steel | SAE-AMS-2700                       |
| Coupling Nut | Passivated Stainless Steel | SAE-AMS-2700                       |

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

**Plotted and Other Data**

Notes:

2.92mm Male Connector Clamp/Solder Attachment for PE-SR047FL, PE-SR047AL, PE-047SR 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: [2.92mm Male Connector Clamp/Solder Attachment for PE-SR047FL, PE-SR047AL, PE-047SR PE44797](#)

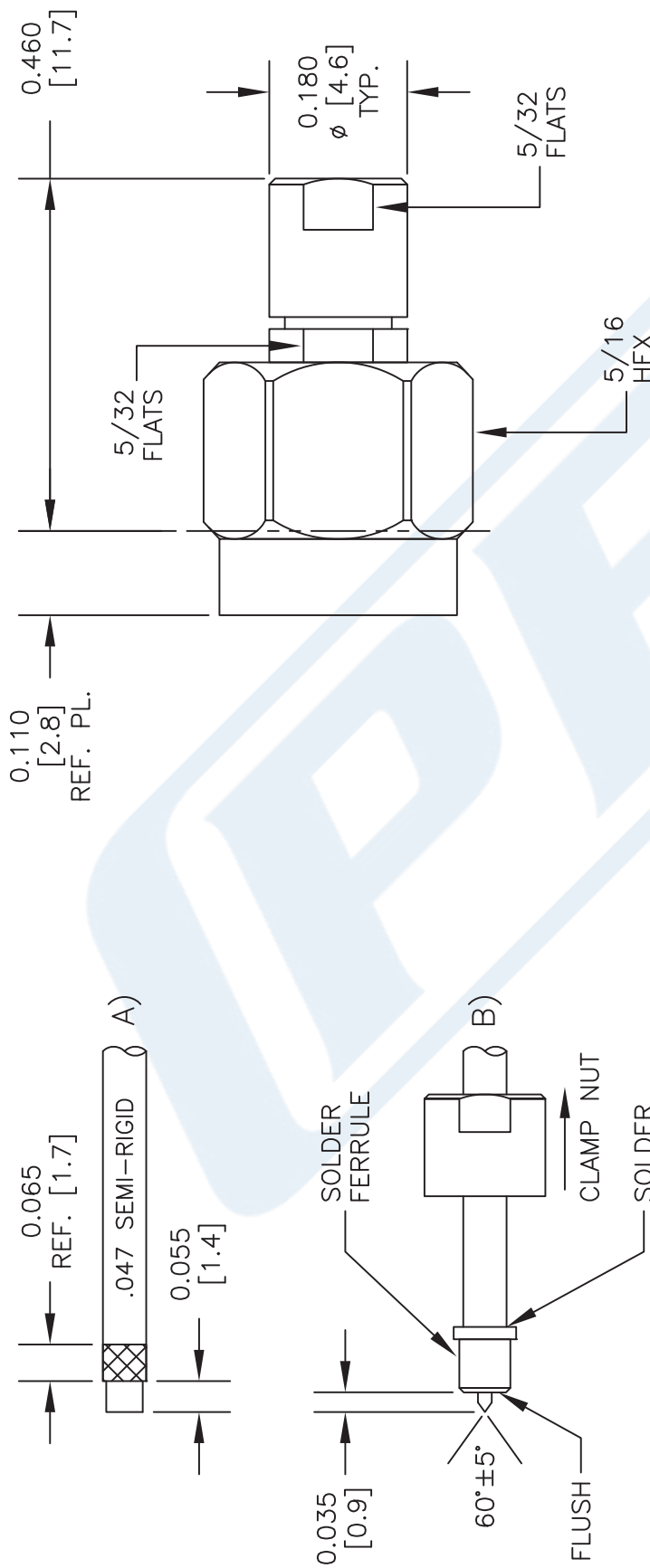
URL: <https://www.pasternack.com/2.92mm-male-standard-pe-sr047fl-pe-sr047al-pe-047sr-connector-pe44797-p.aspx>

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PE44797 CAD Drawing

2.92mm Male Connector Clamp/Solder Attachment for PE-SR047FL, PE-SR047AL, PE-047SR



STRIPPING DIMENSIONS

ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN IN (A). DO NOT NICK DIELECTRIC.
2. PRE-TIN CABLE JACKET TO APPROXIMATE DIMENSION AS SHOWN IN (A).
3. INSERT CABLE THRU ADAPTER UNTIL IT BOTTOMS OUT. SOLDER OUTER CONDUCTOR TO ADAPTER & TRIM DIELECTRIC AS SHOWN IN (B).
4. SCREW ASSEMBLY INTO BODY & TIGHTEN NUT.

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DWG TITLE  
**PE44797**

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.

FSCM NO. 53919

CAD FILE 042313

SCALE N/A

SIZE A

2233

## 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.

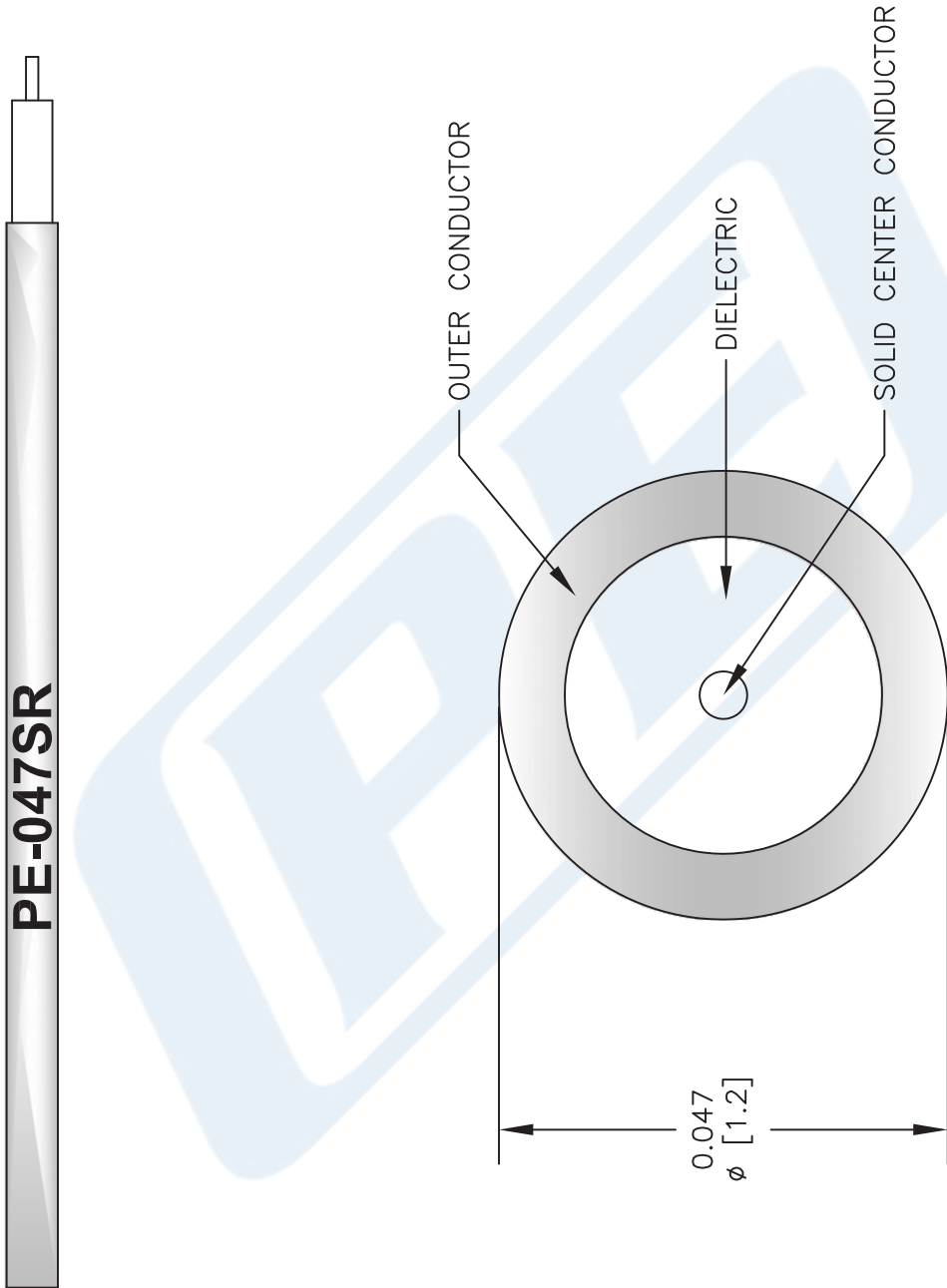
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [047 Semi-rigid Coax Cable with Copper Outer Conductor PE-047SR](http://www.pasternack.com/semirigid-0.047-50-ohm-coax-cable-copper-pe-047sr-p.aspx)

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PE-047SR CAD Drawing

047 Semi-rigid Coax Cable with Copper Outer Conductor



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DWG TITLE  
**PE-047SR**

FSCM NO. 53919

CAD FILE 073113

SCALE N/A

SIZE A

2233

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