



## 1.85mm Male Precision Connector Clamp/Solder Attachment For PE-047SR, PE-SR047AL, PE-SR047FL

### TECHNICAL DATA SHEET

PE44799

#### 1.85mm Male Precision Connector Clamp/Solder Attachment For PE-047SR, PE-SR047AL, PE-SR047FL

##### Configuration

|  |                                  |
|--|----------------------------------|
| Connector                                | 1.85mm Male                      |
| Connector Interface Type                 | PE-047SR, PE-SR047AL, PE-SR047FL |
| Cable Attachment Method (Shield/Contact) | Clamp/Solder                     |
| Connector Design                         | Precision                        |
| Body Style                               | Straight                         |

##### Electrical Specifications

|                      |          |
|----------------------|----------|
| Frequency Range, GHz | DC to 65 |
| Impedance, Ohms      | 50       |
| Maximum VSWR         | 1.35:1   |

##### Mechanical Specifications

###### Size

|                     |               |
|---------------------|---------------|
| Length, in [mm]     | 0.585 [14.86] |
| Width/Dia., in [mm] | 0.35 [8.89]   |

###### Connector

|                                    |                            |
|------------------------------------|----------------------------|
| Type                               | 1.85mm Male                |
| Contact Material and Plating       | Beryllium Copper, Gold     |
| Contact Plating Specification      | 50 $\mu$ Inches.           |
| Coupling Nut Material and Plating  | Passivated Stainless Steel |
| Coupling Nut Plating Specification | SAE-AMS-2700               |
| Hex Size, Inch                     | 5/16                       |
| Torque, in-lbs [Nm]                | 8 [0.9]                    |
| Body Material and Plating          | Passivated Stainless Steel |
| Body Plating Specification         | SAE-AMS-2700               |
| Dielectric Type                    | PEI                        |

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

|                |     |
|----------------|-----|
| RoHS Compliant | Yes |
|----------------|-----|

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.85mm Male Precision Connector Clamp/Solder Attachment For PE-047SR, PE-SR047AL, PE-SR047FL PE44799](#)

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.



1.85mm Male Precision Connector Clamp/Solder  
Attachment For PE-047SR, PE-SR047AL, PE-SR047FL

TECHNICAL DATA SHEET

PE44799

**Plotted and Other Data**

Notes:

Values at 25 °C, sea level

1.85mm Male Precision Connector Clamp/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 fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

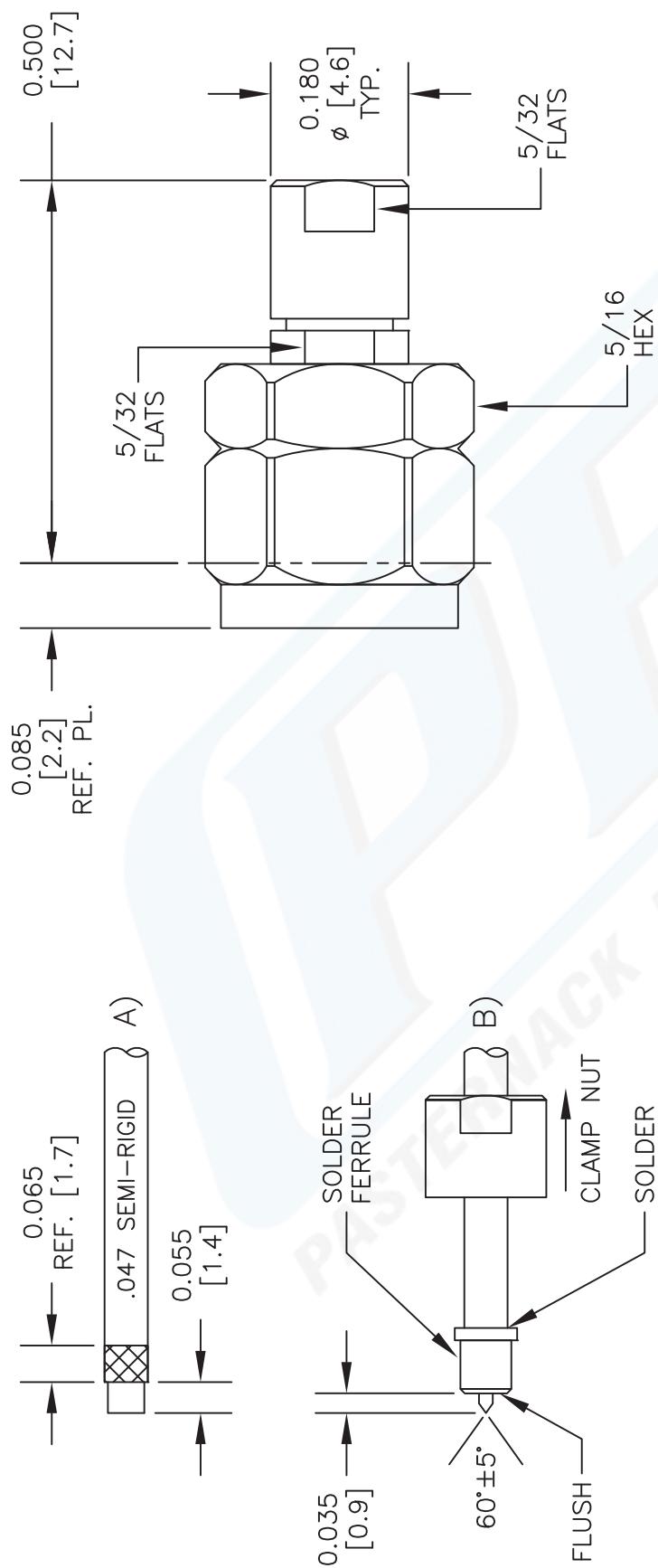
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.85mm Male Precision Connector Clamp/Solder Attachment For PE-047SR, PE-SR047AL, PE-SR047FL PE44799](#)

URL: <http://www.pasternack.com/1.85mm-male-standard-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe44799-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.

PE44799 CAD Drawing

## 1.85mm Male Precision Connector Clamp/Solder Attachment For PE-047SR, PE-SR047AL, PE-SR047FL



## 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.

**PASTERNACK®**

Pasternack Enterprises, Inc.  
P O Box 16759 | Irvine | CA | 926623

**Phone:** (949) 261-1920 | **Fax:** (949) 261-7451  
**Website:** [www.pasternack.com](http://www.pasternack.com) | **E-Mail:** [sales@pasternack.com](mailto:sales@pasternack.com)

DWG TITLE

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.

**Phone:** (949) 261-1920 **Fax:** (949) 261-4511  
**Website:** [www.pastermack.com](http://www.pastermack.com) | **E-Mail:** [sales@pastermack.com](mailto:sales@pastermack.com)



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

### RF Connectors Technical Data Sheet

**PE4404**

#### Configuration

- SMA Male Connector
- MIL-STD-348
- 50 Ohms
- Straight Body Geometry

- PE-047SR, PE-SR047AL, PE-SR047FL Interface Type
- Solder/Solder Attachment
- 5/16 inch Hex
- Precision Design

#### Features

- Max. Operating Frequency 18 GHz
- Excellent VSWR of 1.2:1

- Gold over Nickel Plated Beryllium Copper Contact
- 50  $\mu$ in minimum contact plating

#### Applications

- General Purpose Test
- Precision Test & Measurement
- Custom Cable Assemblies

#### Description

Pasternack's PE4404 SMA male precision 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 SMA male connector operates up to a maximum frequency of 18 GHz and offers excellent VSWR of 1.2:1.

Our SMA male connector PE4404 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      |         | 18      | GHz   |
| VSWR                                   |         |         | 1.2:1   |       |
| Insertion Loss                         |         |         | 0.17    | dB    |
| Operating Voltage (AC)                 |         |         | 500     | Vrms  |
| Dielectric Withstanding Voltage (AC)   |         |         | 1,500   | Vrms  |
| High Potential Voltage<br>5 to 7.5 MHz |         |         | 1,000   | Vrms  |
| Corona Discharge<br>at 70,000 ft       |         |         | 375     | Vrms  |
| 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: [SMA Male Precision Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE4404](#)



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

### RF Connectors Technical Data Sheet

PE4404

#### Performance by Frequency

| Description     | F1       | F2       | F3 | F4 | F5 | Units |
|-----------------|----------|----------|----|----|----|-------|
| Frequency Range | DC to 14 | 14 to 18 |    |    |    | GHz   |
| VSWR, Max       | 1.13:1   | 1.2:1    |    |    |    |       |

#### Electrical Specification Notes:

Insertion loss:  $0.04 \times \sqrt{f(\text{GHz})}$  dB max.  
RF leakage: 90 dB min up to 1 GHz.

#### Mechanical Specifications

##### Size

Length  
Width/Dia.

0.489 in [12.42 mm]  
0.312 in [7.92 mm]

##### Weight

0.008 lbs [3.63 g]

Mating Cycles  
Mating Torque

500 Cycles  
7 to 10 in-lbs [0.79 to 1.13 Nm]

#### Material Specifications

| Description  | Material         | Plating                                 |
|--------------|------------------|---|
| Contact      | Beryllium Copper | Gold over Nickel<br>50 $\mu$ in minimum |
| Insulation   | PTFE             |   |
| Body         | Brass            | Gold over Nickel<br>50 $\mu$ in minimum |
| Coupling Nut | Brass            | Nickel<br>50 $\mu$ in minimum           |

#### Environmental Specifications

##### Temperature

|                 |   |
|-----------------|---|
| Operating Range | -65 to +165 deg C                         |
| Humidity        | MIL-STD-202, Method 106, No Vibration     |
| 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%) |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Precision Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL](#)  
**PE4404**



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

## RF Connectors Technical Data Sheet

PE4404

**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: [SMA Male Precision Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE4404](#)



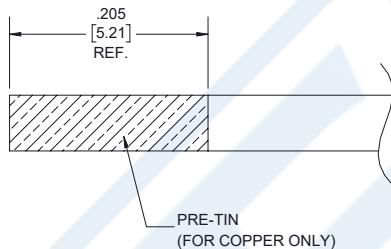
SMA Male Precision Connector Solder Attachment  
for PE-047SR, PE-SR047AL, PE-SR047FL

RF Connectors Technical Data Sheet

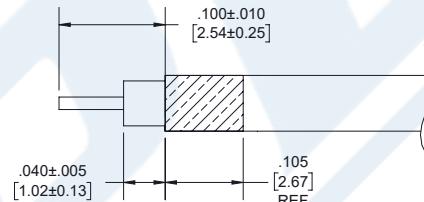
PE4404

**Assembly Instruction**

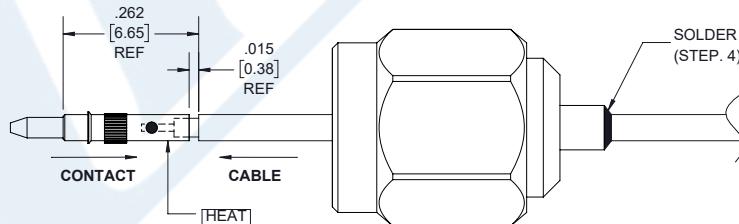
1. PRE-TIN CABLE JACKET TO THE REFERENCE LENGTH AS SHOWN. ONLY FOR COPPER OUTER CONDUCTOR CABLE.



2. A. STRIP CABLE TO THE DIMENSIONS AS SHOWN TO EXPOSE CENTER CONDUCTOR AND DIELECTRIC.  
B. PRE-TIN CABLE CENTER CONTACT.  
C. SLIDE CONNECTOR THROUGH CABLE.



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



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

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Precision Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE4404](#)



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

### RF Connectors Technical Data Sheet

PE4404

SMA Male Precision 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.

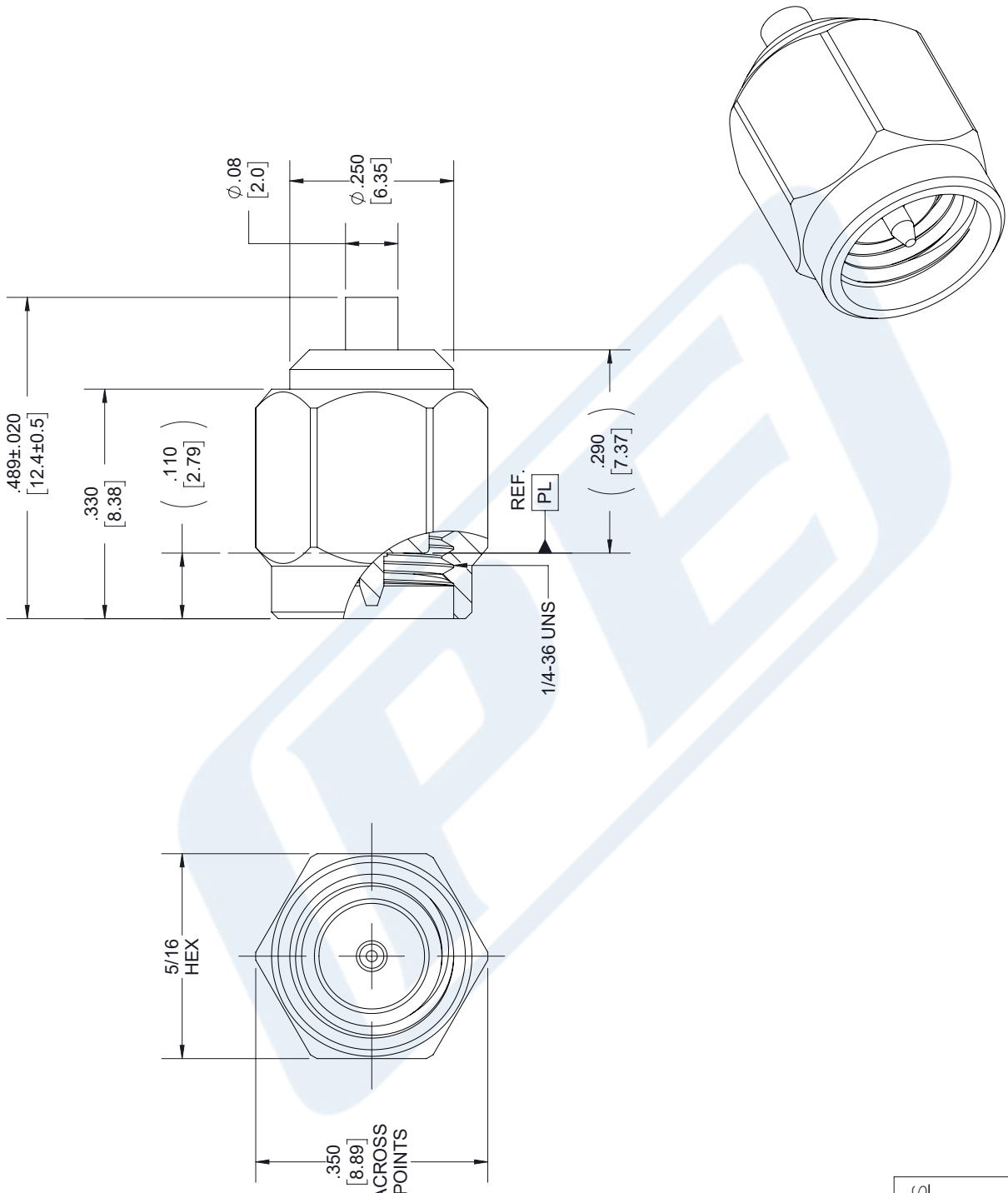
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Precision Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE4404](#)

URL: <https://www.pasternack.com/sma-male-standard-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe4404-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.

# PE4404 CAD Drawing

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



| STANDARD TOLERANCES |        |
|---------------------|--------|
| .X                  | ±0.2   |
| .XX                 | ±0.01  |
| .XXX                | ±0.005 |

\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES

**PASTERNACK**  
THE ENGINEER'S RESOURCE

Pasterнак Enterprises, Inc.  
P.O. Box 16759 | Irvine | CA | 92623

Phone: (949) 261-1920 | Fax: (949) 261-7451  
Website: [www.pasterнак.com](http://www.pasterнак.com) | E-Mail: [sales@pasterнак.com](mailto:sales@pasterнак.com)

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].

| CAGE CODE | 53919 | CAD FILE | 010918 | SCALE | N/A | SIZE | A    |
|-----------|-------|----------|--------|-------|-----|------|------|
|           |       |          |        |       |     |      | 7361 |

## 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

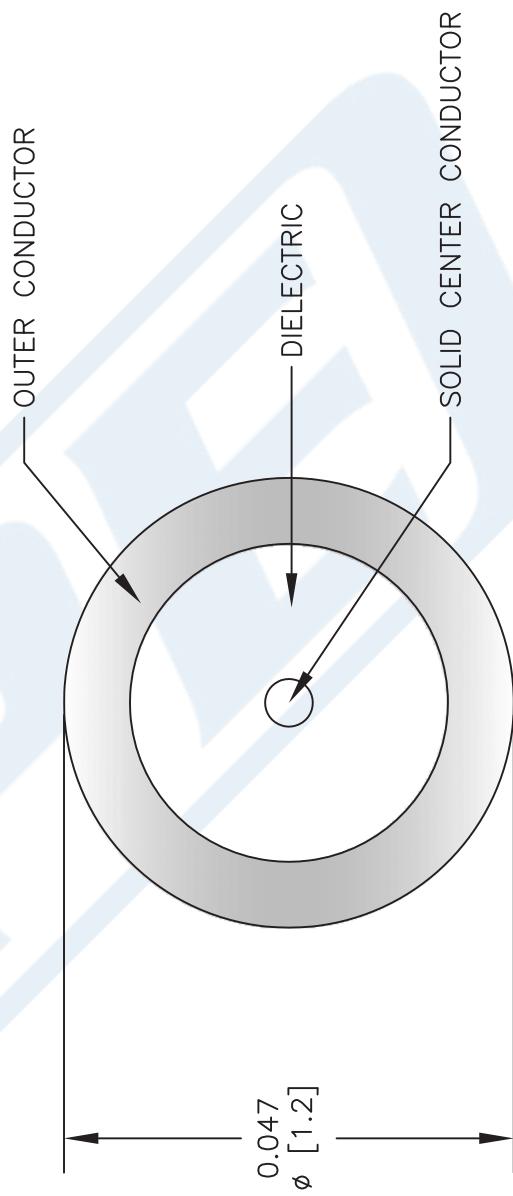
047 Semi-rigid Coax Cable with Copper Outer Conductor from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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>

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.

**PE-047SR**



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].

**DWG TITLE**  
**PE-047SR**

**PE PASTERNACK®**

Pasternack Enterprises, Inc.  
P.O. Box 16759 | Irvine | CA | 92623

Phone: (949) 261-1920 | Fax: (949) 261-7451  
Website: [www.pasternack.com](http://www.pasternack.com) | E-Mail: [sales@pasternack.com](mailto:sales@pasternack.com)

| FSCM NO. | CAD FILE | SCALE | SIZE | REV  |
|----------|----------|-------|------|------|
| 53919    | 073113   | N/A   | A    | 2233 |