

Mini SMP Female Right Angle Connector Solder  
Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

**RF Connectors**  
**Technical Data Sheet**

**PE44493**

**Configuration**

- Mini SMP Female Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: PE-047SR, PE-SR047AL, PE-SR047FL

**Features**

- Max. Operating Frequency 12 GHz
- Gold Plated Beryllium Copper Contact
- Blind Mate Connector

**Applications**

- General Purpose Test
- Custom Cable Assemblies

**Description**

Pasternack's PE44493 Mini SMP female right angle 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 Mini SMP female connector operates up to a maximum frequency of 12 GHz. The Pasternack 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. Its right angle body geometry allows for easier connections in tight spaces.

Our Mini SMP female right angle connector PE44493 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		12	GHz
Operating Voltage (AC)			325	Vrms
Inner Conductor DC Resistance			6	mOhms
Outer Conductor DC Resistance			2	mOhms
Insulation Resistance	5,000			MOhms

**Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 6	6 to 12				GHz
VSWR, Max	1.11:1	1.23:1				

Electrical Specification Notes:  
Insertion loss =  $0.05 \times \sqrt{f(\text{GHz})}$  dB max up to 12 GHz.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE44493](#)



Mini SMP Female Right Angle Connector Solder  
Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

## RF Connectors Technical Data Sheet

**PE44493**

### Mechanical Specifications

#### Size

Length	0.24 in [6.1 mm]
Width/Dia.	0.136 in [3.45 mm]
Height	0.2 in [5.08 mm]
Weight	0.00073 lbs [0.33 g]

### Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold
Insulation	PTFE	
Outer Conductor	Beryllium Copper	Gold
Body	Brass	Gold

Mechanical Specification Notes:  
Mating cycles: 500 (smooth bore), 100 (full detent) minimum.

### Environmental Specifications

#### Temperature

Operating Range	-55 to +155 deg C
Humidity	MIL-STD-202, Method 106
Shock	MIL-STD-202, Method 213, Condition A
Vibration	MIL-STD-202, Method 204, Condition A
Thermal Shock	MIL-STD-202, Method 107, Condition B

**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 Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE44493](#)



Mini SMP Female Right Angle Connector Solder  
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**RF Connectors**  
**Technical Data Sheet**

**PE44493**

Mini SMP Female Right Angle 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.

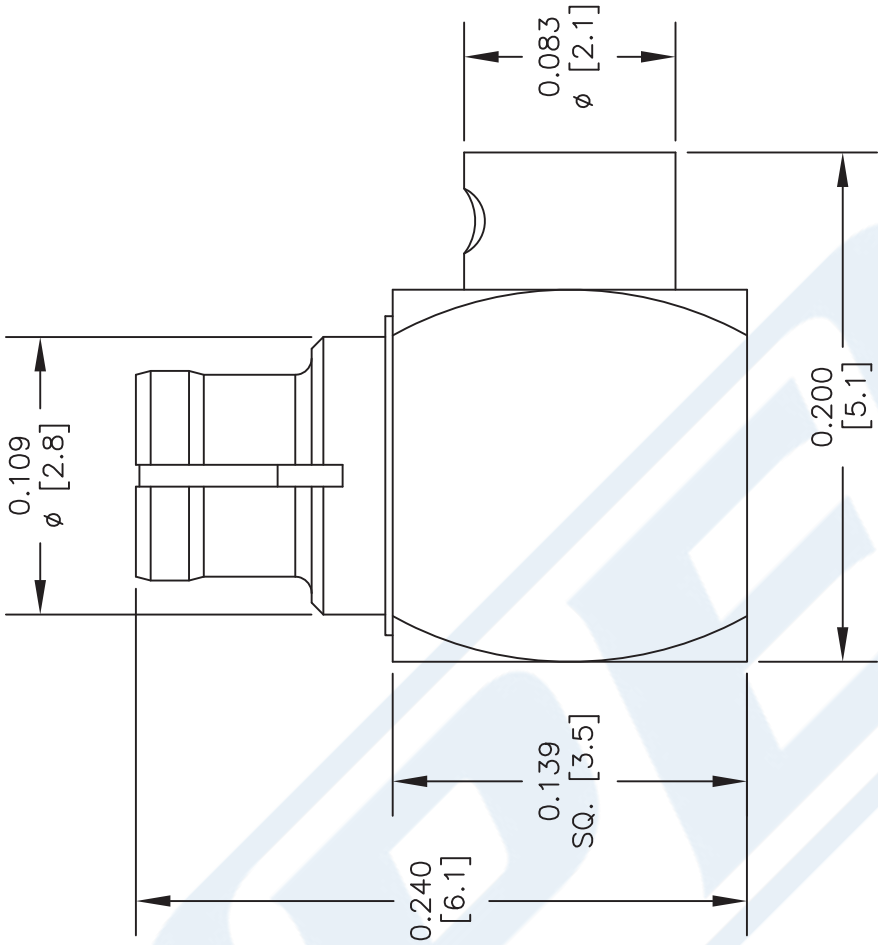
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE44493](https://www.pasternack.com/mini-smp-female-standard-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe44493-p.aspx)

URL: <https://www.pasternack.com/mini-smp-female-standard-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe44493-p.aspx>

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PE44493 CAD Drawing

Mini SMP Female Right Angle Connector Solder Attachment  
for PE-047SR, PE-SR047AL, PE-SR047FL



STRIPPING DIMENSIONS

ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN TIN CENTER CONDUCTOR.
2. INSERT CABLE INTO BODY UNTIL IT STOPS.
3. SOFT SOLDER CONTACT AND OUTER CONDUCTOR, PRESS CAP DOWN.

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.

DWG TITLE

PE44493

REV. A

FSCM NO. 53919

CAD FILE 081412

SCALE N/A

SIZE A

2233

PASTERNAK ENTERPRISES, INC.

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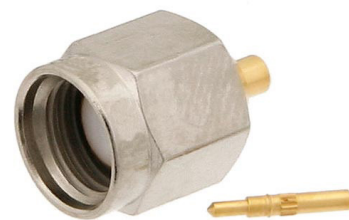
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E-MAIL ADDRESS: [sales@pasternack.com](mailto:sales@pasternack.com)

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PASTERNAK ENTERPRISES®  
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## 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
- Connector Interface Types: PE-047SR, PE-SR047AL, PE-SR047FL
- 5/16 inch Hex
- Precision Design

#### Features

- Max. Operating Frequency 10 GHz
- Excellent VSWR of 1.2:1
- Gold over Nickel Plated Beryllium Copper Contact
- 50  $\mu$ m minimum contact plating

#### Applications

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

#### Description

Pasternack's PE4404 SMA 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 SMA male connector operates up to a maximum frequency of 10 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		10	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 5 to 7.5 MHz			1,000	Vrms
Corona Discharge 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 10				GHz
VSWR, Max	1.13:1	1.2:1				

Electrical Specification Notes:  
Insertion loss: 0.04 x sqrt(fGHz) dB max.  
RF leakage: 90 dB min up to 1 GHz.

#### Mechanical Specifications

<b>Size</b>	
Length	0.489 in [12.42 mm]
Width/Dia.	0.312 in [7.92 mm]
Weight	0.008 lbs [3.63 g]
Mating Cycles	500 Cycles
Mating Torque	7 to 10 in-lbs [0.79 to 1.13 Nm]

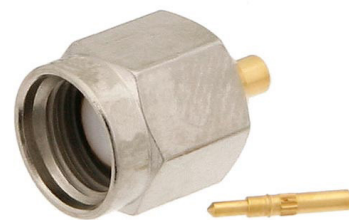
#### Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel 50 µin minimum
Insulation	PTFE	
Body	Brass	Gold over Nickel 50 µin minimum
Coupling Nut	Brass	Nickel 50 µin minimum

#### Environmental Specifications

<b>Temperature</b>	
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%)

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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

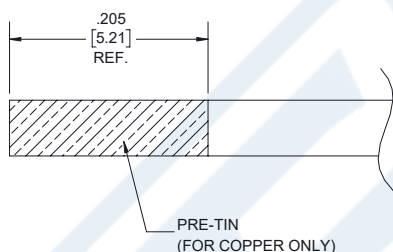


## RF Connectors Technical Data Sheet

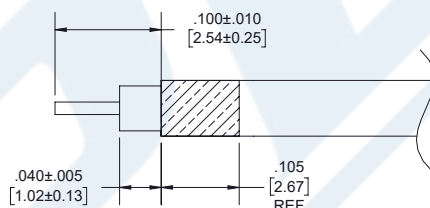
**PE4404**

### Assembly Instruction

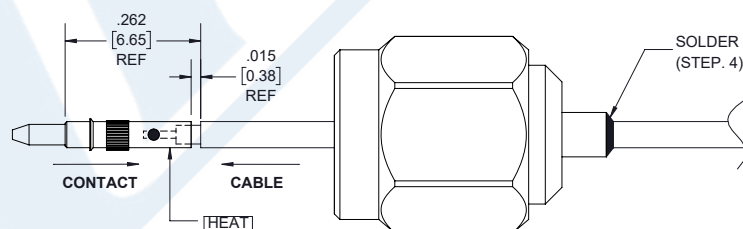
1. PRE-TIN CABLE JACKET TO THE REFERENCE LENGTH AS SHOWN. ONLY FOR COPPER OUTER CONDUCTOR CABLE.



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**

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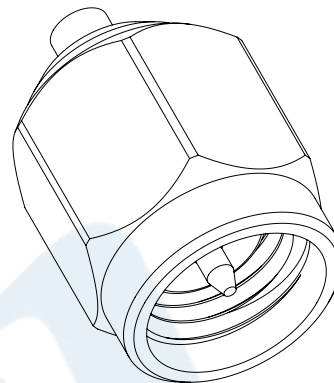
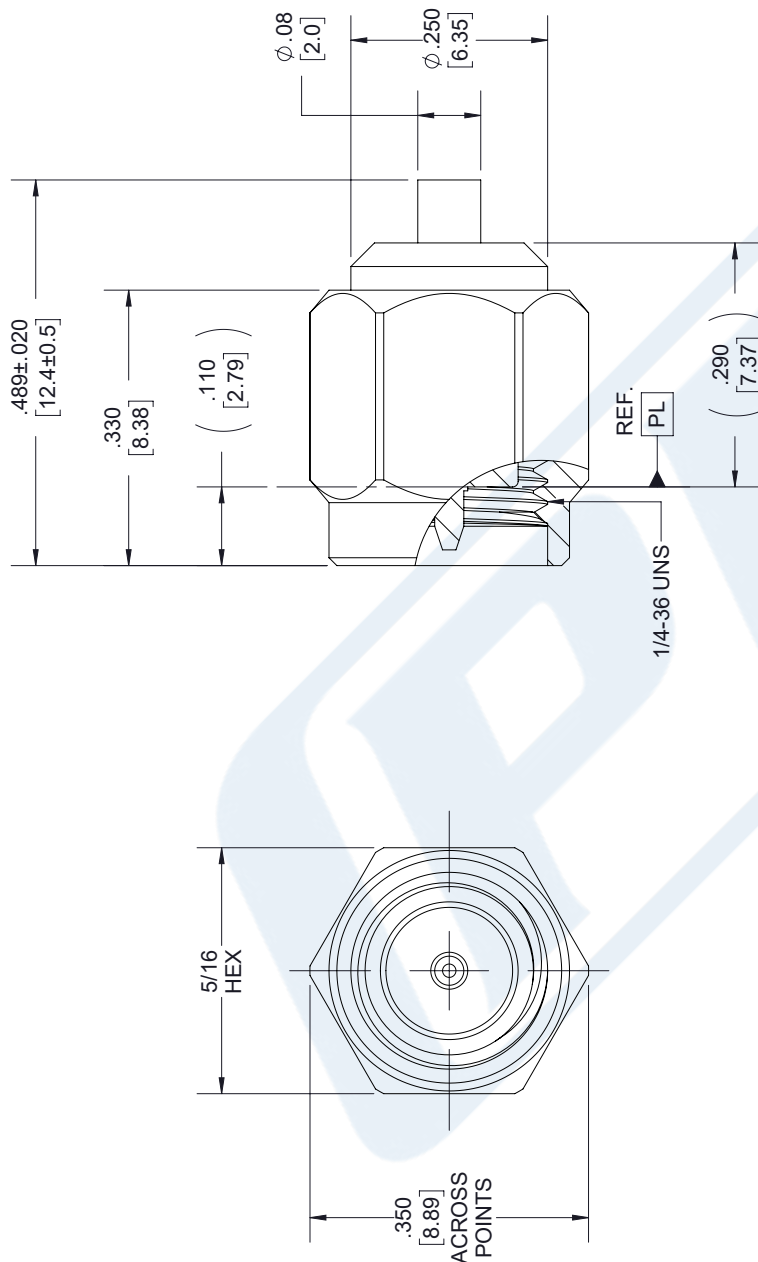
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# PE4404 CAD Drawing

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



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DWG TITLE

PE4404

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CAGE CODE 53919

CAD FILE 010918

SCALE N/A

SIZE A

7361

## 047 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor

### TECHNICAL DATA SHEET

PE-SR047AL

#### 047 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor

##### Configuration

Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Shield Materials	Tinned Aluminum

##### Electrical Specifications

Impedance, Ohms	50
Velocity of Propagation, %	69.5
Maximum Operating Frequency, GHz	20
RF Shielding, dB	90
Maximum Operating Voltage, Volts	1,000

##### Electrical Specifications by Frequency

###### Frequency 1

Frequency, MHz	1000
Attenuation, dB/100ft [dB/100m]	41 [134.51]
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
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###### 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]

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 Tinned Aluminum Outer Conductor PE-SR047AL](#)

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047 Semi-rigid Coax Cable with Tinned  
Aluminum Outer Conductor

TECHNICAL DATA SHEET

PE-SR047AL

**Shield:**

Number of	1
Material 1	Tinned Aluminum

**Jacket:**

Diameter, in [mm]	0.047 [1.19]
One Time Minimum Bend Radius, in [mm]	0.05 [1.27]
Weight, lbs/ft [Kg/m]	0.002 [0]

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

**Plotted and Other Data**

Notes: Values at 25 °C, sea level

047 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor 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.

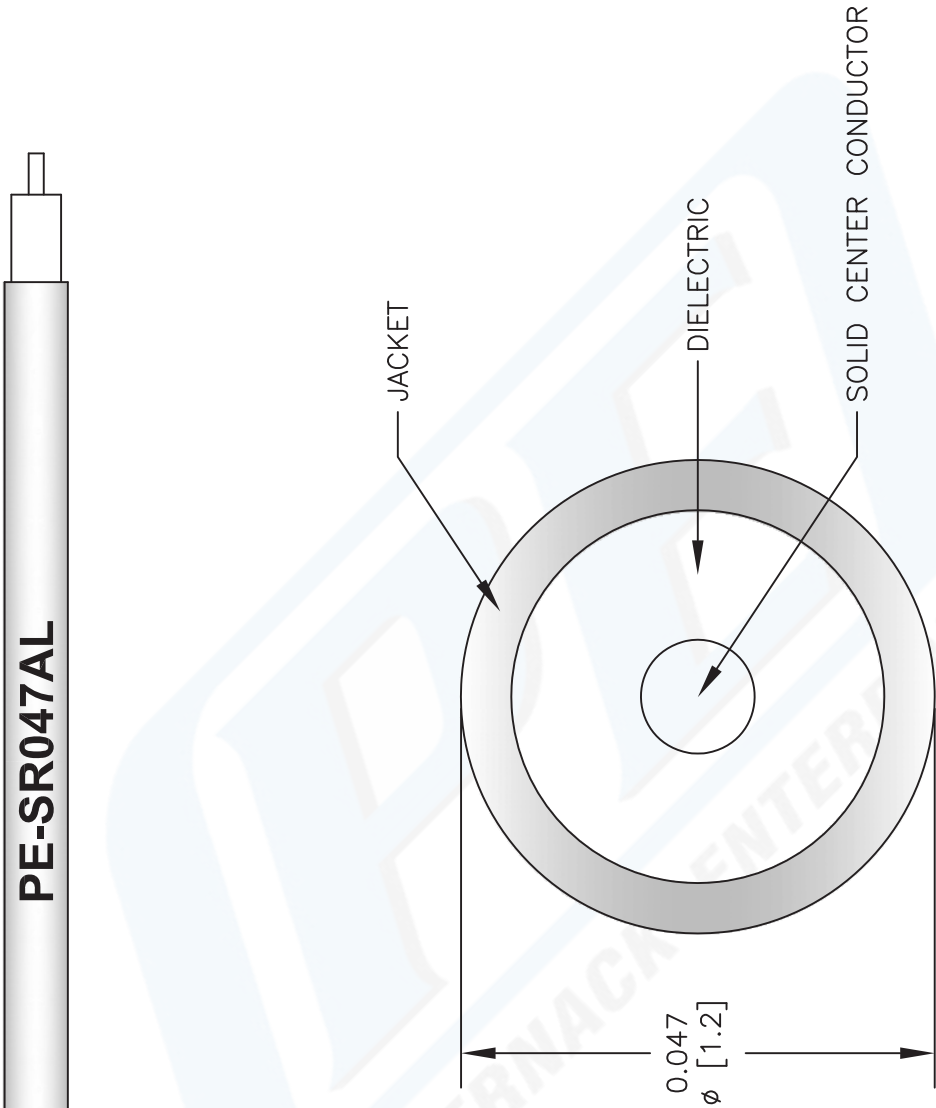
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [047 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor PE-SR047AL](#)

URL: <http://www.pasternack.com/semirigid-0.047-50-ohm-coax-cable-tinned-aluminum-pe-sr047al-p.aspx>

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PE-SR047AL CAD Drawing

047 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor



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DWG TITLE  
**PE-SR047AL**

FSCM NO. 53919

2233

SIZE A

SCALE N/A

CAD FILE 103112-B

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