



## 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  $\mu$ m 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 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

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**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 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%)

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



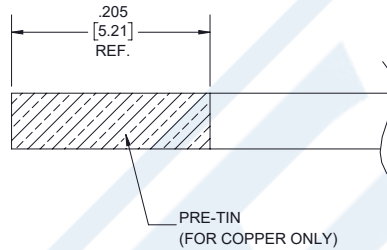
SMA Male Precision Connector Solder Attachment  
for PE-047SR, PE-SR047AL, PE-SR047FL

RF Connectors Technical Data Sheet

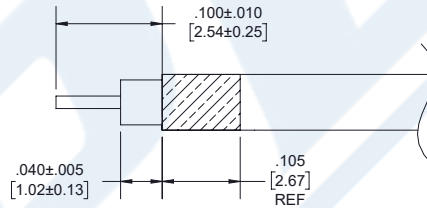
PE4404

**Assembly Instruction**

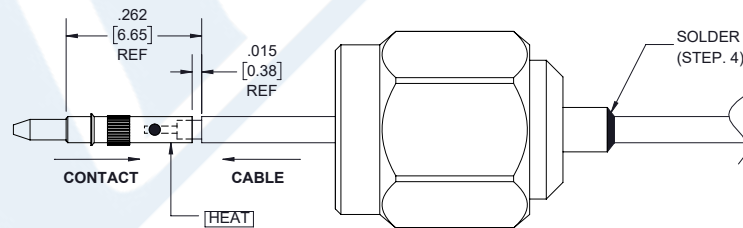
1. PRE-TIN CABLE JACKET TO THE REFERENCE LENGTH AS SHOWN. ONLY FOR COPPER OUTER CONDUCTOR CABLE.



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.

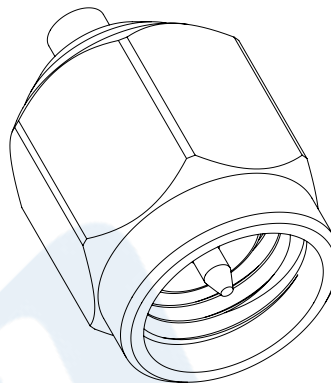
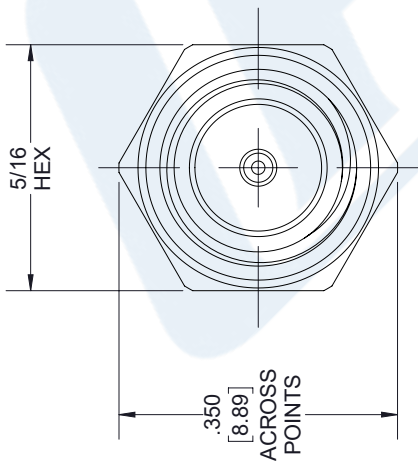
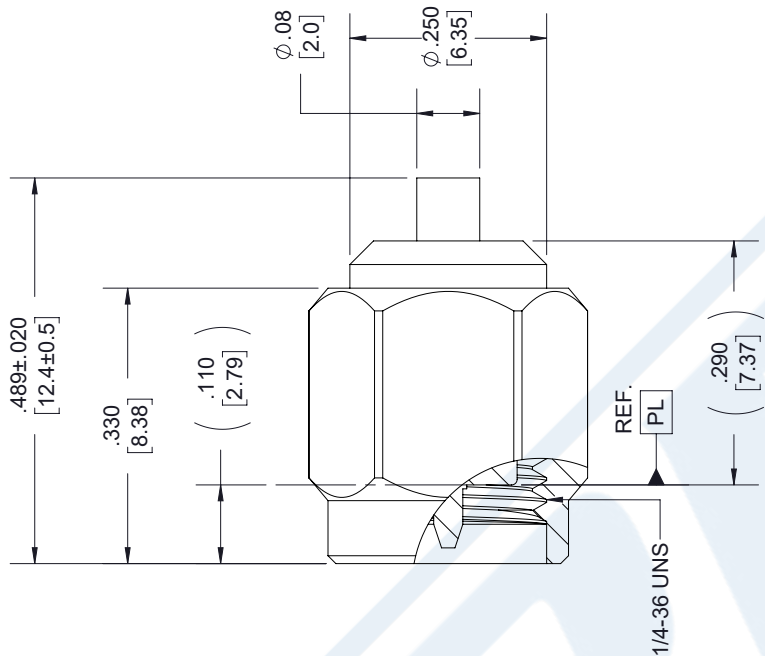
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Precision Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE4404](https://www.pasternack.com/sma-male-standard-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe4404-p.aspx)

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



THE ENGINEER'S RF SOURCE

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DWG TITLE

PE4404

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 010918

SCALE N/A

SIZE A

7361



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

### RF Connectors Technical Data Sheet

PE44757

#### Configuration

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

#### Features

- Max. Operating Frequency 27 GHz
- Excellent VSWR of 1.2:1
- Gold over Nickel Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE44757 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 27 GHz and offers excellent VSWR of 1.2:1.

Our SMA male connector PE44757 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		27	GHz
VSWR			1.2:1	
Insertion Loss			0.26	dB

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

#### Mechanical Specifications

Size	
Length	0.437 in [11.1 mm]
Width/Dia.	0.312 in [7.92 mm]
Weight	0.007 lbs [3.18 g]
Mating Cycles	500 Cycles
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: [SMA Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE44757](#)



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

RF Connectors Technical Data Sheet

PE44757

**Material Specifications**

Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel MIL-G-45204
Insulation	PTFE	
Body	Stainless Steel	Gold MIL-G-45204
Coupling Nut	Passivated Stainless Steel	ASTM-A380

**Environmental Specifications**

**Temperature**

Operating Range

-55 to +100 deg C

Vibration

MIL-STD-202, Method 204, Condition D (20 G's)

Salt Spray

MIL-STD-202, Method 101, Condition B, 5% salt solution

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

**Plotted and Other Data**

Notes:

SMA 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.

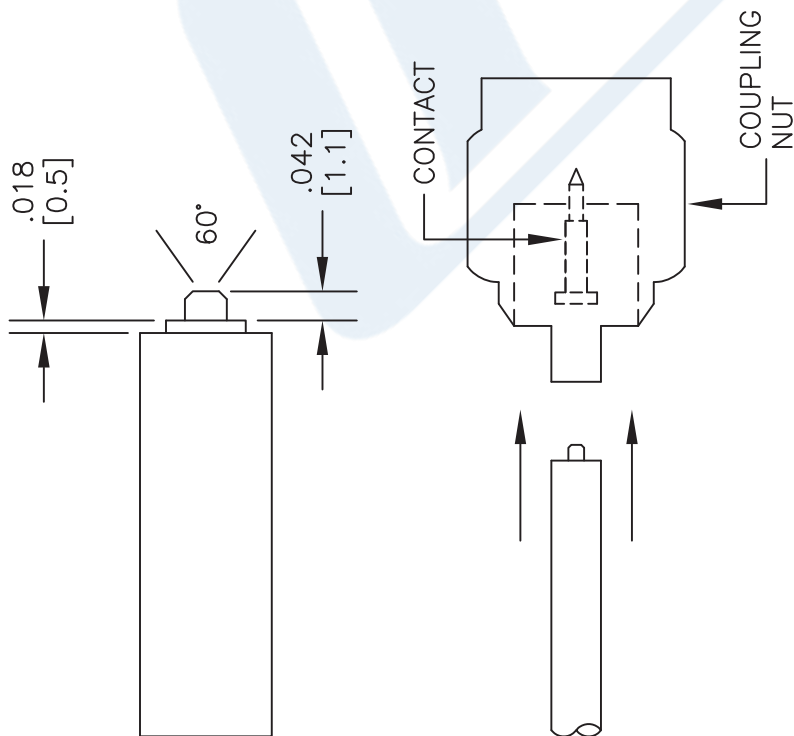
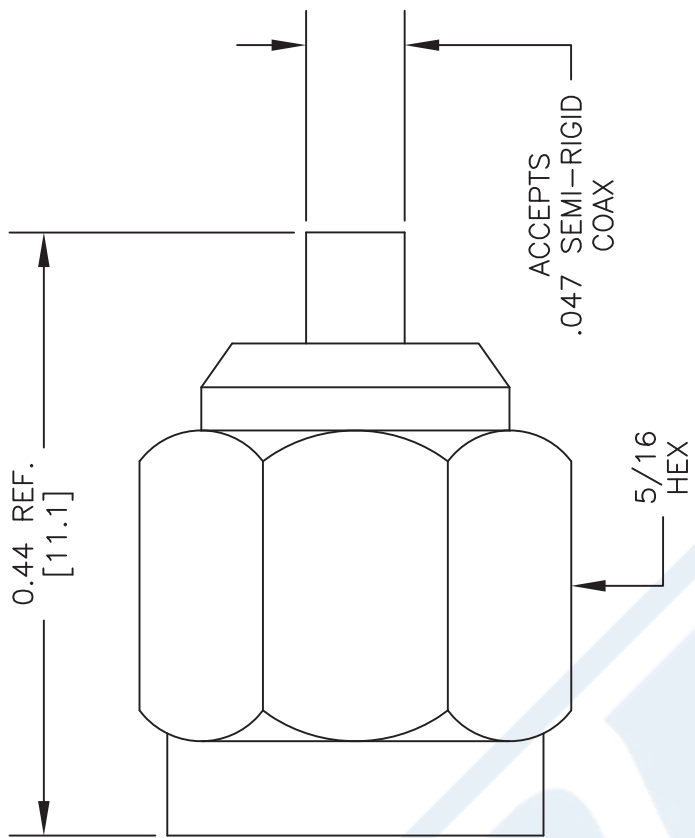
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URL: <https://www.pasternack.com/sma-male-precision-connector-solder-attachment-for-pe-047sr-pe-sr047al-pe-sr047al-p.aspx>

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# PE44757 CAD Drawing

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



### STRIPPING DIMENSIONS

### ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN. DO NOT NICK CENTER CONDUCTOR.
2. FILE CHAMFER.
3. INSERT CABLE INTO CONNECTOR BODY. MATING THE CENTER CONDUCTOR IN TO CAPTIVATE CENTER PIN.
4. SOLDER CABLE TO CONNECTOR BODY.

DWG TITLE

**PE44757**

- 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 101112-A

SCALE N/A

SIZE A

2233



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## 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 Material 1	1 Tinned Aluminum
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**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.

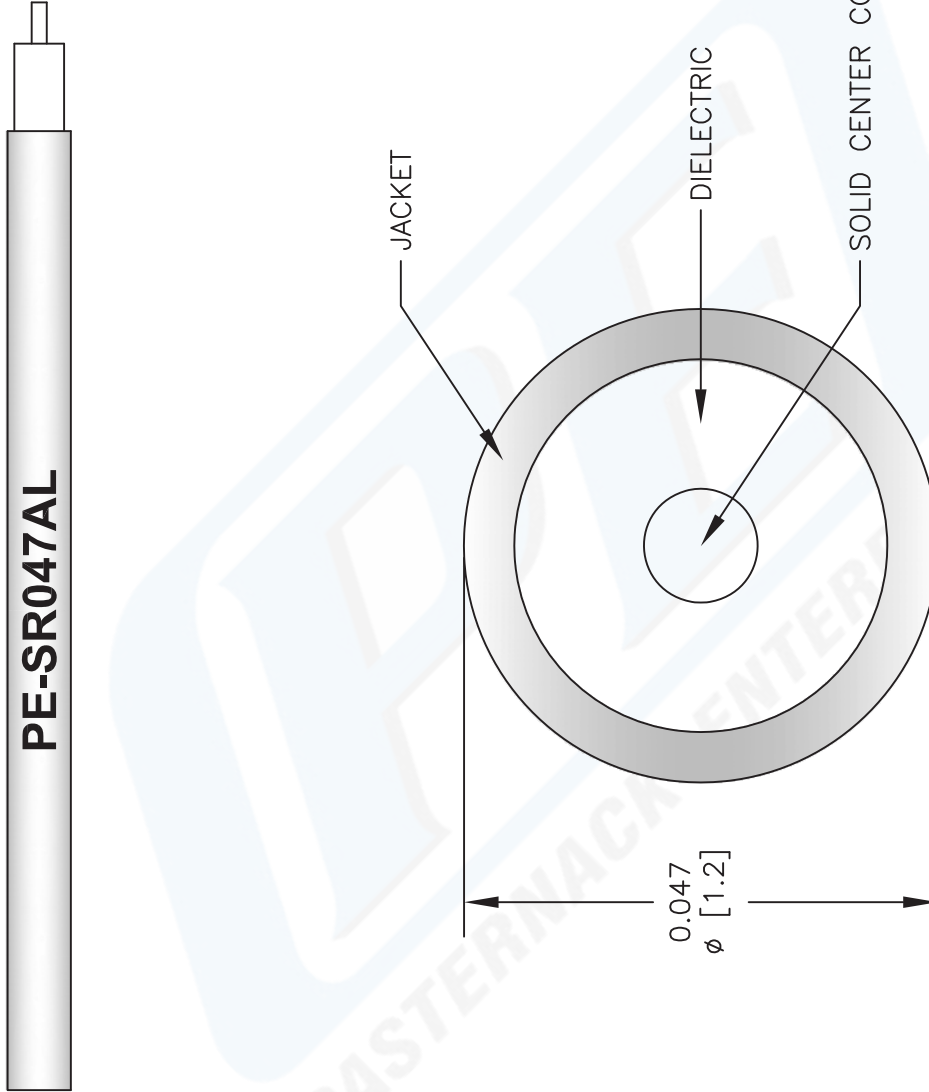
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [047 Semi-rigid Coax Cable with Tinned Aluminum Outer Conductor PE-SR047AL](#)

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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 3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE  
**PE-SR047AL**

FSCM NO. 53919

2233

SIZE A

SCALE N/A

CAD FILE 103112-B

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