



## 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 µin 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

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 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



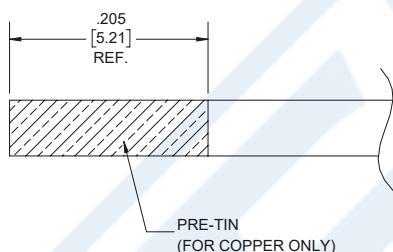
## SMA Male Precision Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

### RF Connectors Technical Data Sheet

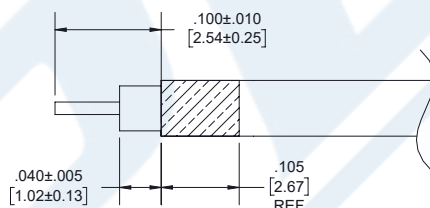
PE4404

#### Assembly Instruction

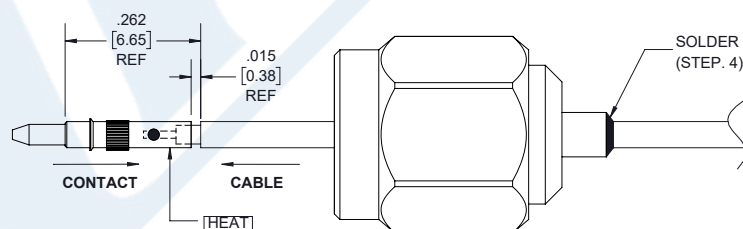
1. PRE-TIN CABLE JACKET TO THE REFERENCE LENGTH AS SHOWN. ONLY FOR COPPER OUTER CONDUCTOR CABLE.



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.

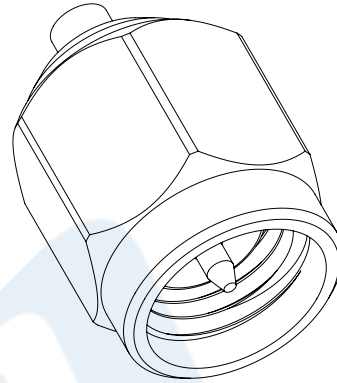
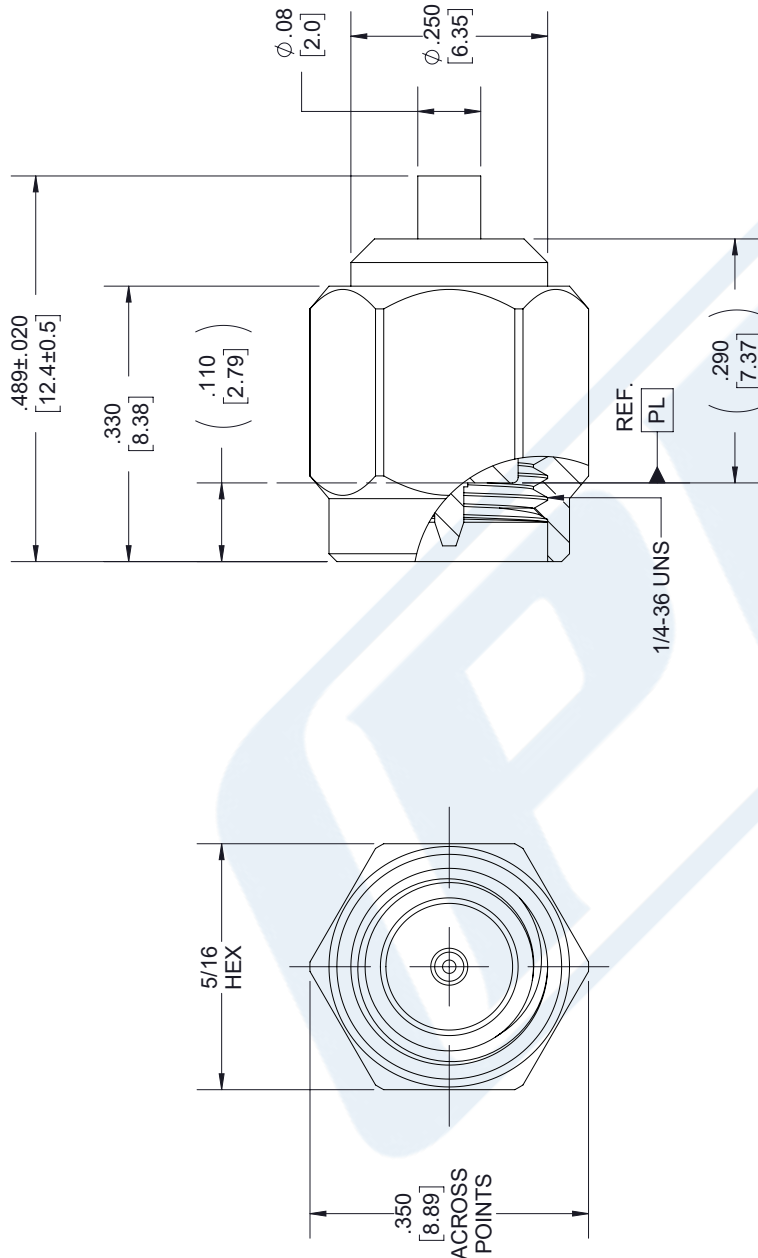
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Precision Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE4404](https://www.pasternack.com/sma-male-standard-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe4404-p.aspx)

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

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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

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



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

### RF Connectors Technical Data Sheet

PE44335

#### Configuration

- 1.85mm Male Connector
- 50 Ohms
- Straight Body Geometry

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

#### Features

- Max. Operating Frequency 65 GHz
- Good VSWR of 1.33:1

- Gold over Nickel Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE44335 1.85mm male connector with clamp/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 1.85mm male connector operates up to a maximum frequency of 65 GHz and offers good VSWR of 1.33:1.

Our 1.85mm male connector PE44335 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		65	GHz
VSWR			1.33:1	
Insertion Loss			0.41	dB

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

#### Mechanical Specifications

##### Size

Length	0.85 in [21.59 mm]
Width/Dia.	0.312 in [7.92 mm]
Weight	0.014 lbs [6.35 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: [1.85mm Male Connector Clamp/Solder Attachment for PE-047SR, PE-SR047AL, PE-SR-047FL PE44335](#)





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

### RF Connectors Technical Data Sheet

PE44335

#### Material Specifications

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

#### Environmental Specifications

##### Temperature

Operating Range

Vibration

Salt Spray

-55 to +100 deg C

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

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

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

#### Plotted and Other Data

Notes:

1.85mm Male 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 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: [1.85mm Male Connector Clamp/Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE44335](#)

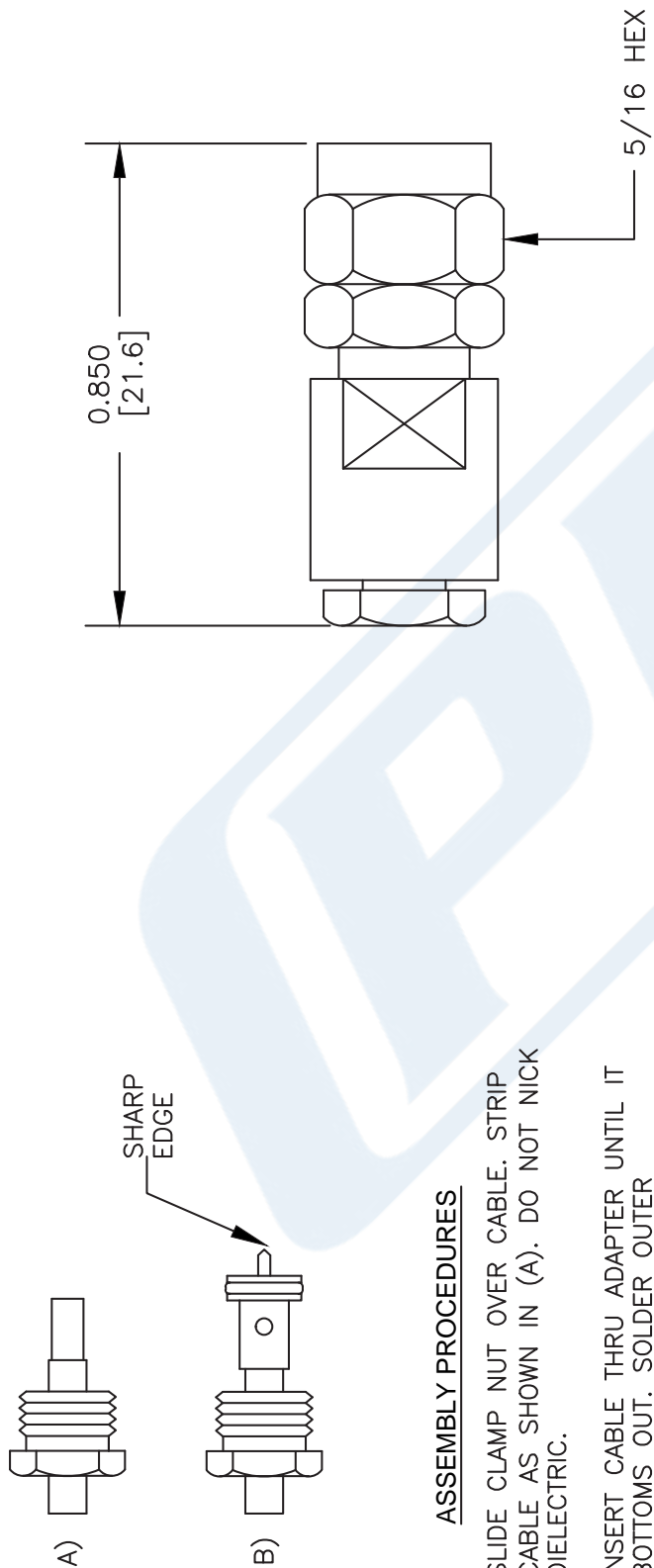
URL: <https://www.pasternack.com/1.85mm-male-standard-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe44335-p.aspx>

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PE44335 CAD Drawing

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



ASSEMBLY PROCEDURES

1. SLIDE CLAMP NUT OVER CABLE. STRIP CABLE AS SHOWN IN (A). DO NOT NICK DIELECTRIC.
2. INSERT CABLE THRU ADAPTER UNTIL IT BOTTOMS OUT. SOLDER OUTER CONDUCTOR TO ADAPTER & TRIM DIELECTRIC AS SHOWN IN (B).
3. SCREW ASSEMBLY INTO BODY & TIGHTEN NUT.

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  
**PE44335**

FSCM NO. 53919

127

SIZE A

SCALE N/A

CAD FILE 030704

**PE PASTERNAK®**  
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## 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
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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]

**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.

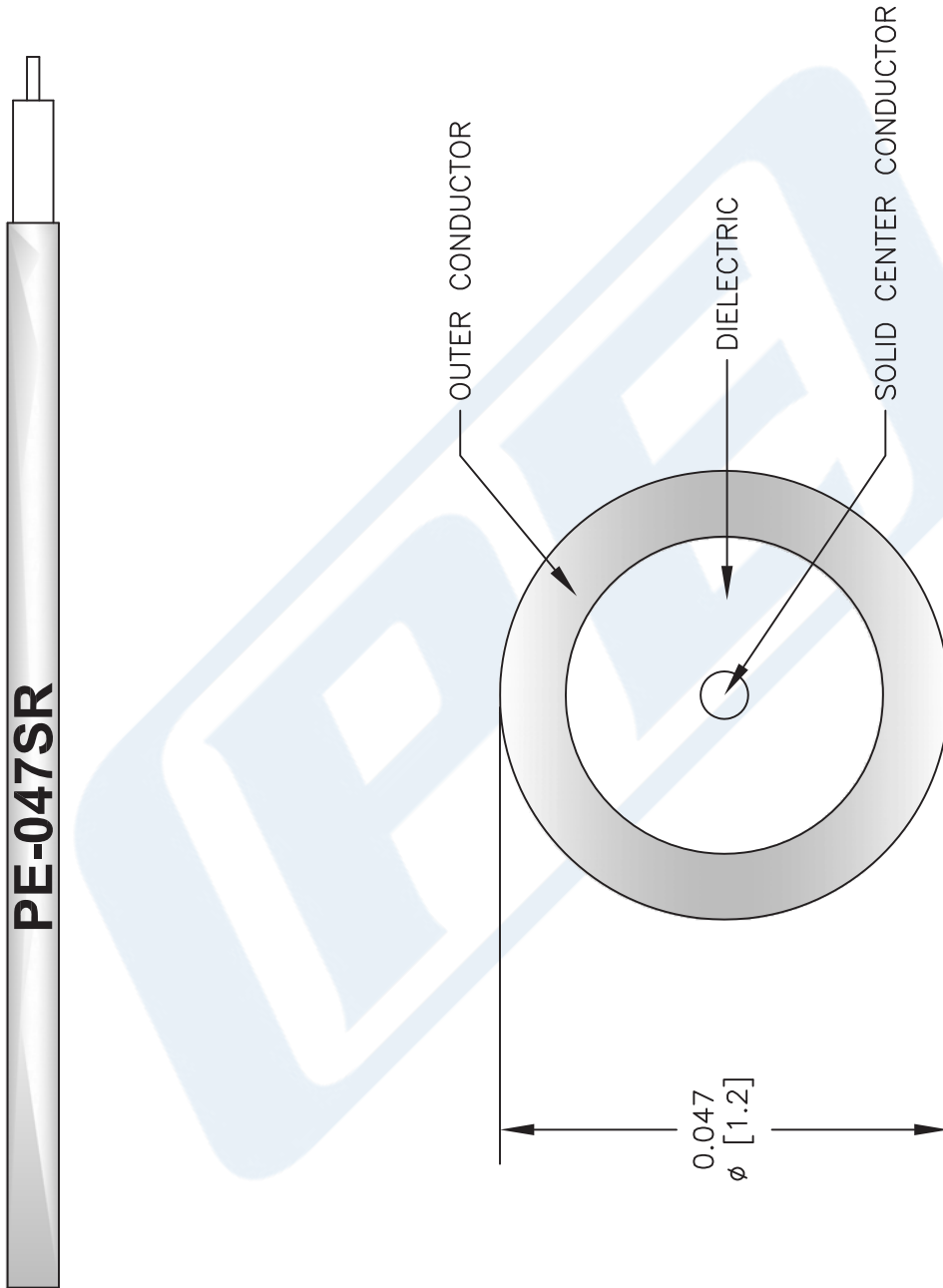
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [047 Semi-rigid Coax Cable with Copper Outer Conductor PE-047SR](http://www.pasternack.com/semirigid-0.047-50-ohm-coax-cable-copper-pe-047sr-p.aspx)

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

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# 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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