

## 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

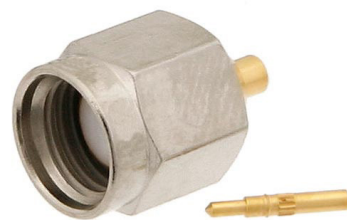
Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel 50 µin minimum
Insulation	PTFE	
Body	Brass	Gold over Nickel 50 µin minimum
Coupling Nut	Brass	Nickel 50 µin minimum

#### 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%)

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

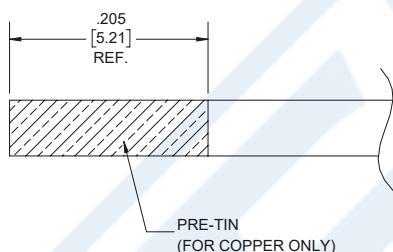


## RF Connectors Technical Data Sheet

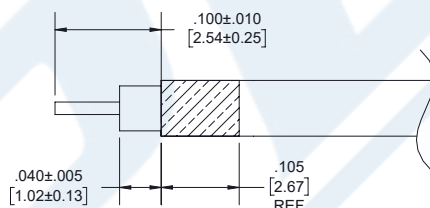
**PE4404**

### Assembly Instruction

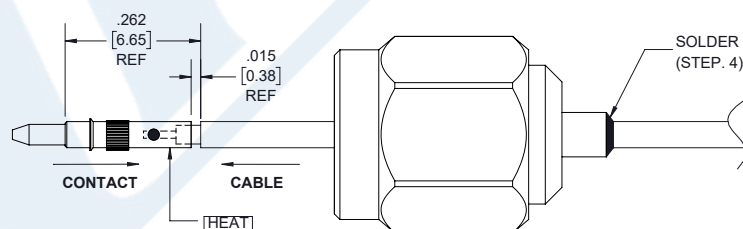
1. PRE-TIN CABLE JACKET TO THE REFERENCE LENGTH AS SHOWN. ONLY FOR COPPER OUTER CONDUCTOR CABLE.



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.

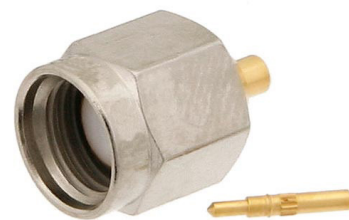


3. INSERT CENTER CONDUCTOR INTO CONTACT UNTIL DIELECTRIC BOTTOMS INSIDE CONTACT. SOFT SOLDER CONTACT TO CENTER CONDUCTOR. DO NOT OVER HEAT DIELECTRIC.



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.

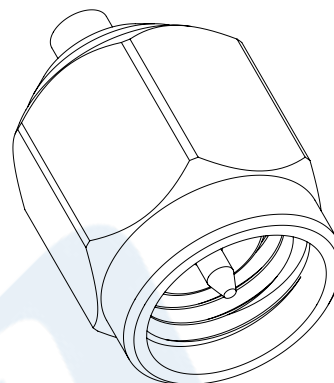
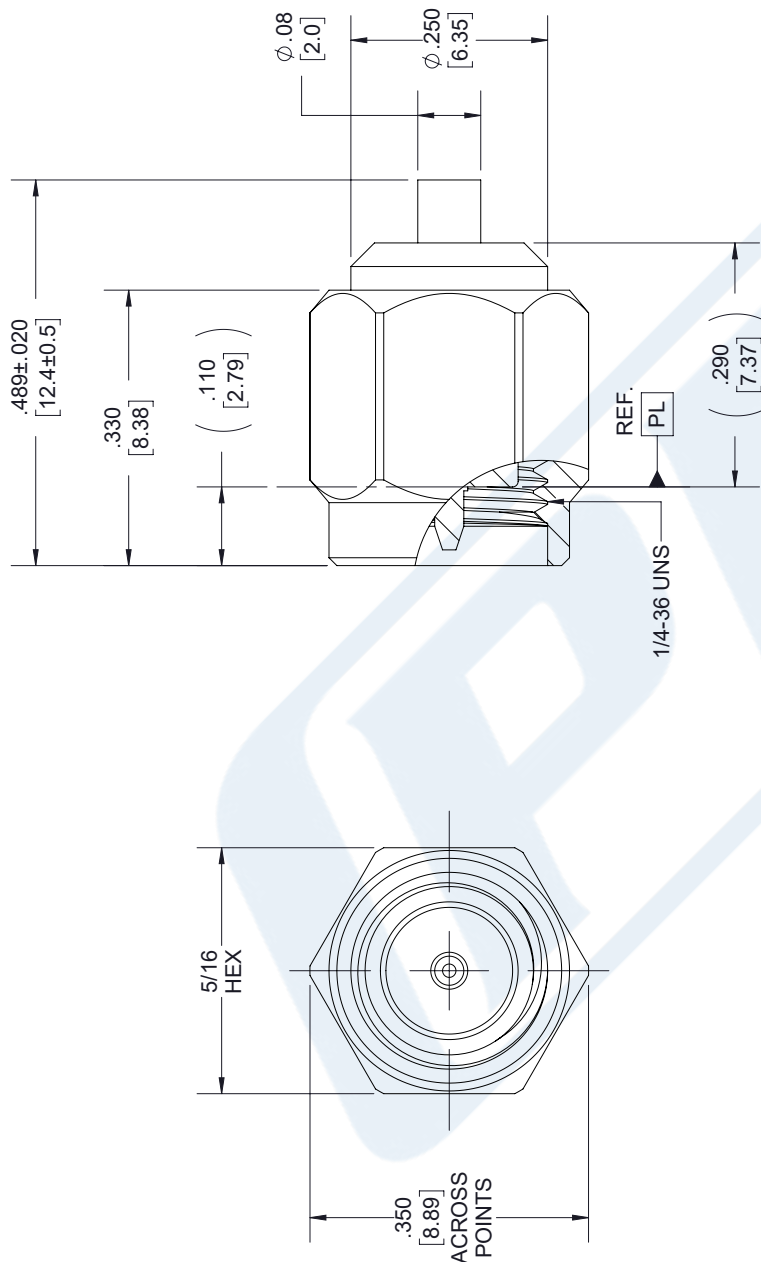
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Precision Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE4404](https://www.pasternack.com/sma-male-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe4404-p.aspx)

URL: <https://www.pasternack.com/sma-male-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



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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



## Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL

### RF Connectors Technical Data Sheet

**PE45539**

#### Configuration

- Mini SMP Male Connector
- 50 Ohms
- Straight Body Geometry

- Connector Interface Types: PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL
- VITA 67 Design

#### Features

- Max. Operating Frequency 40 GHz
- Good VSWR of 1.45:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to ASTM B488
- Blind Mate Connector

- Coaxial interconnects on VPX platforms
- Standard MIL-STD-348 SMPM interface
- Rugged Stainless Steel construction
- Accepts 0.047" and 0.086" cable contacts for end-to-end solution

#### Applications

- General Purpose Test
- Custom Cable Assemblies

- Robust and Rugged high speed cabled solution

- VITA 67 Backplane
- High Density Applications

#### Description

Pasternack's PE45539 4-position block housing is part of our full line of VITA 67 Backplane solutions and is available for same-day shipping. Pasternack introduces 4 position (VITA 67.1) and 8 position (VITA 67.2) RF connector housings designed for 3U and 6U formats within the OpenVPX architecture. These blocks are machined from stainless steel for a rugged solution. The blocks are designed to accept both PE45535 (0.047" cable contact) & PE45536 (.086" cable contact) used in flexible or semi-rigid cables. These blocks are ideal for blind mating daughtercards to motherboards as the RF contacts provide +/- .010" radial misalignment tolerance and have excellent return loss up to 40 GHz.

The SMPM (Mini-SMP) 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. The block's right angle body geometry allows for easier connections in tight spaces.

Our SMPM (Mini-SMP) right angle block PE45539 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			1.45:1	
Dielectric Withstanding Voltage (AC)			325	Vrms
Inner Conductor DC Resistance			6	mOhms
Outer Conductor DC Resistance			5	mOhms
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: [Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL PE45539](#)





Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL

## RF Connectors Technical Data Sheet

**PE45539**

### Mechanical Specifications

#### Size

Length	0.42 in [10.67 mm]
Width/Dia.	0.19 in [4.83 mm]
Height	0.19 in [4.83 mm]
Weight	0.0016 lbs [0.73 g]
Mating Cycles	500 Cycles

### Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold ASTM B488
Insulation	PEI	
Body	Brass	Gold ASTM B488
Retaining Ring	Beryllium Copper	Nickel SAE-AMS-QQ-N-290

### Environmental Specifications

#### Temperature

Operating Range	-55 to +125 deg C
Humidity	1,000 megohms within 5 minutes after removal from humidity, tested per MIL-STD-202, Method 106
Shock	Sawtooth pulse of 100 g 6ms per MIL-STD-202, Method 213, Condition I
Vibration	MIL-STD-202, Method 214, Test Condition I, Curve D
Thermal Shock	MIL-STD-202, Method 107, Test Condition A

**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 Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL PE45539](#)





Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL

## RF Connectors Technical Data Sheet

**PE45539**

Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL 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.

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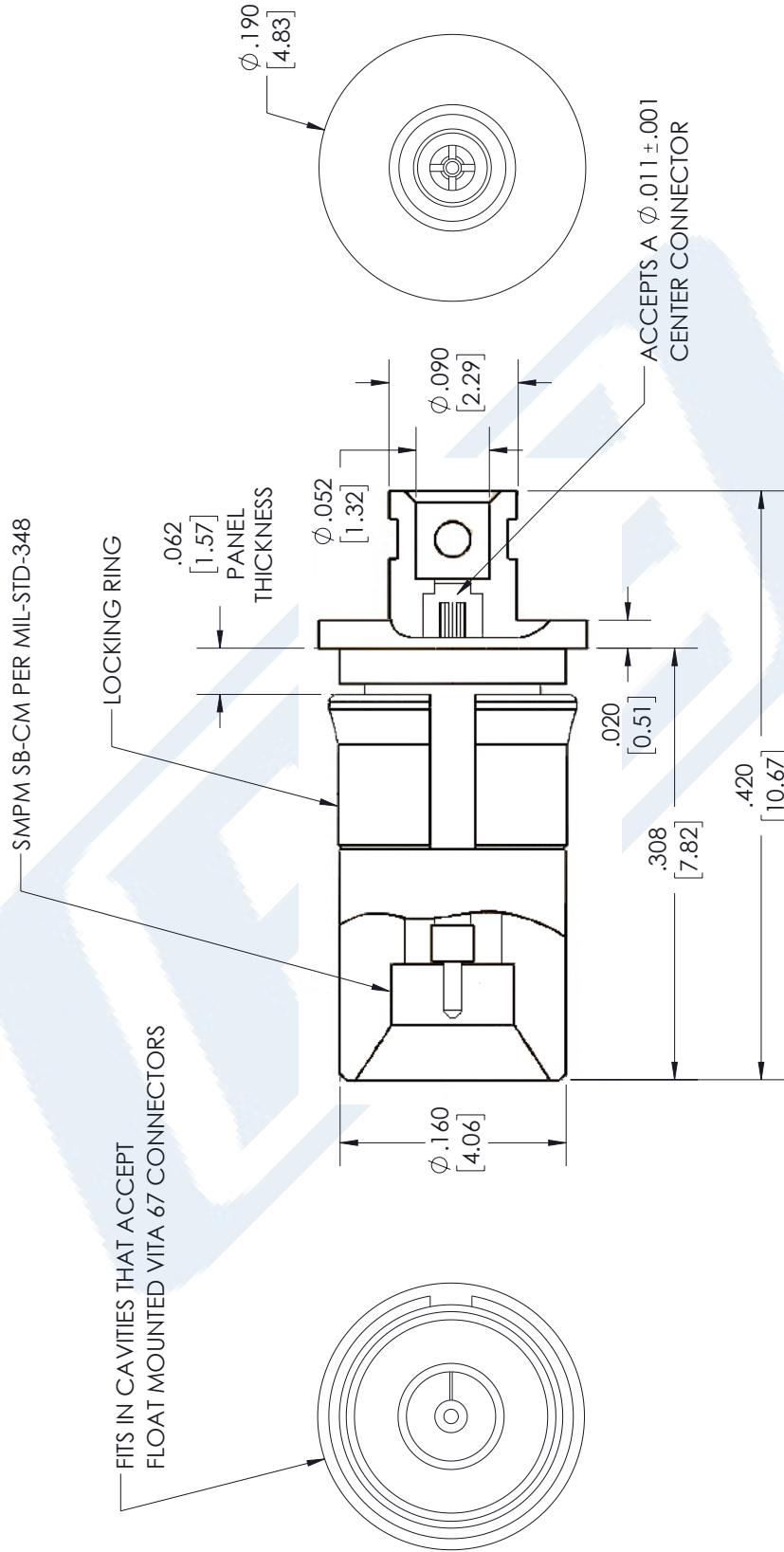
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# PE45539 CAD Drawing

Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	09/16/2022	AGANWANI



UNLESS OTHERWISE SPECIFIED  
LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

XX	FRACTIONS	ANGLES
.X = ±.2	[.08]	±.1/32
.XX = ±.02	[.51]	±.1/32
.XXX = ±.005	[.13]	±.1/32

CABLE LENGTH (L) TOLERANCES:

L	TOLERANCES
L ≤ 12 [305]	±.1 [25] / -0
12 [305] < L ≤ 60 [1524]	±.1 [25] / -0
60 [1524] < L ≤ 120 [3048]	±.1 [25] / -0
120 [3048] < L ≤ 300 [7620]	±.1 [25] / -0
300 [7620] < L	±.1 [25] / -0

ALL DIMENSIONS SHOWN  
ARE FOR REFERENCE ONLY.

**PE PASTERNAK**  
an INFINITE brand

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1  
SCALE N/A

REV A

ITEM NO. PE45539

SIZE A

CAGE CODE 53919

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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.

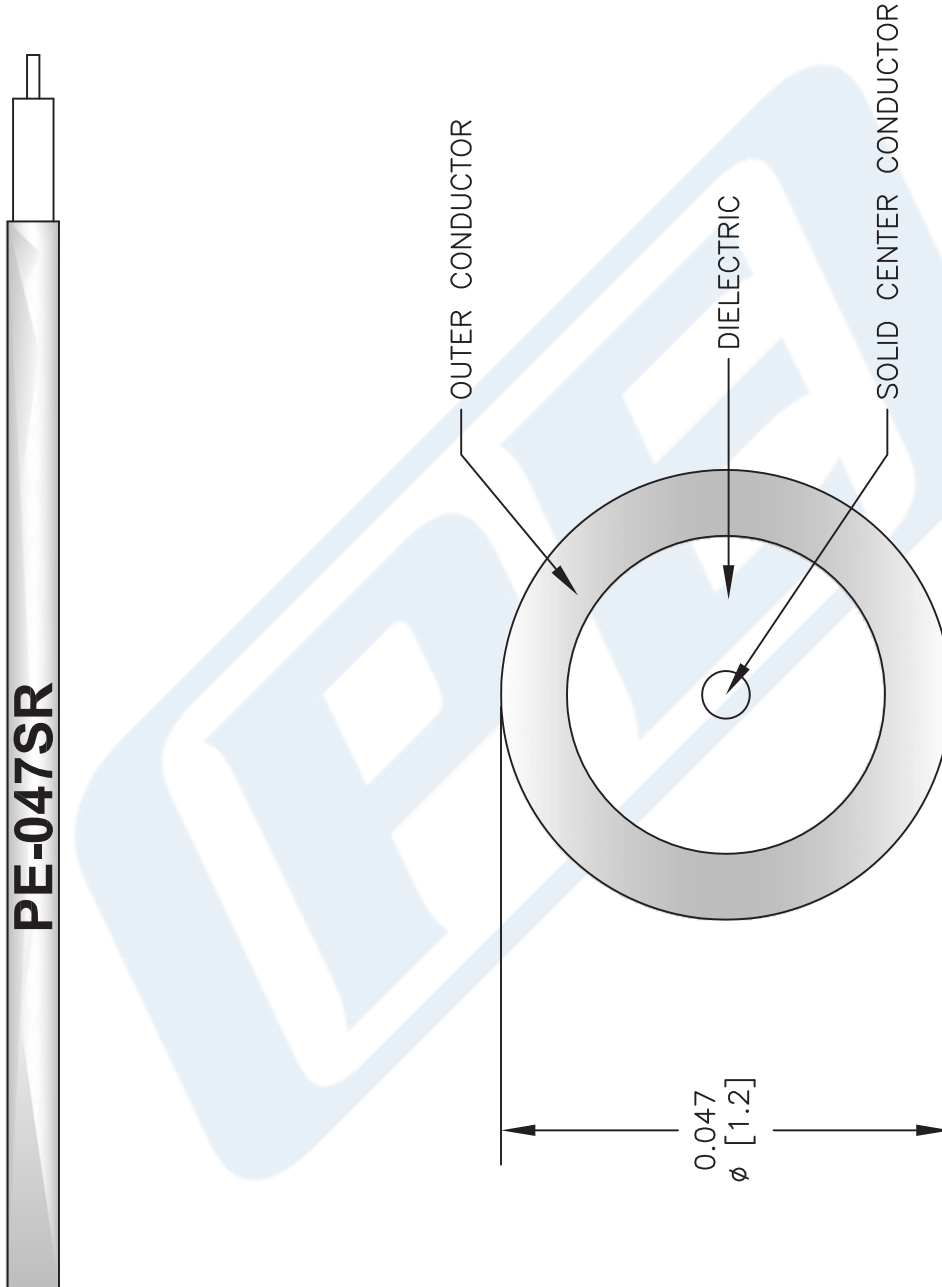
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URL: <http://www.pasternack.com/semirigid-0.047-50-ohm-coax-cable-copper-pe-047sr-p.aspx>

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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

2233

SIZE A

SCALE N/A

CAD FILE 073113



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