



## 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 Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

### 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.

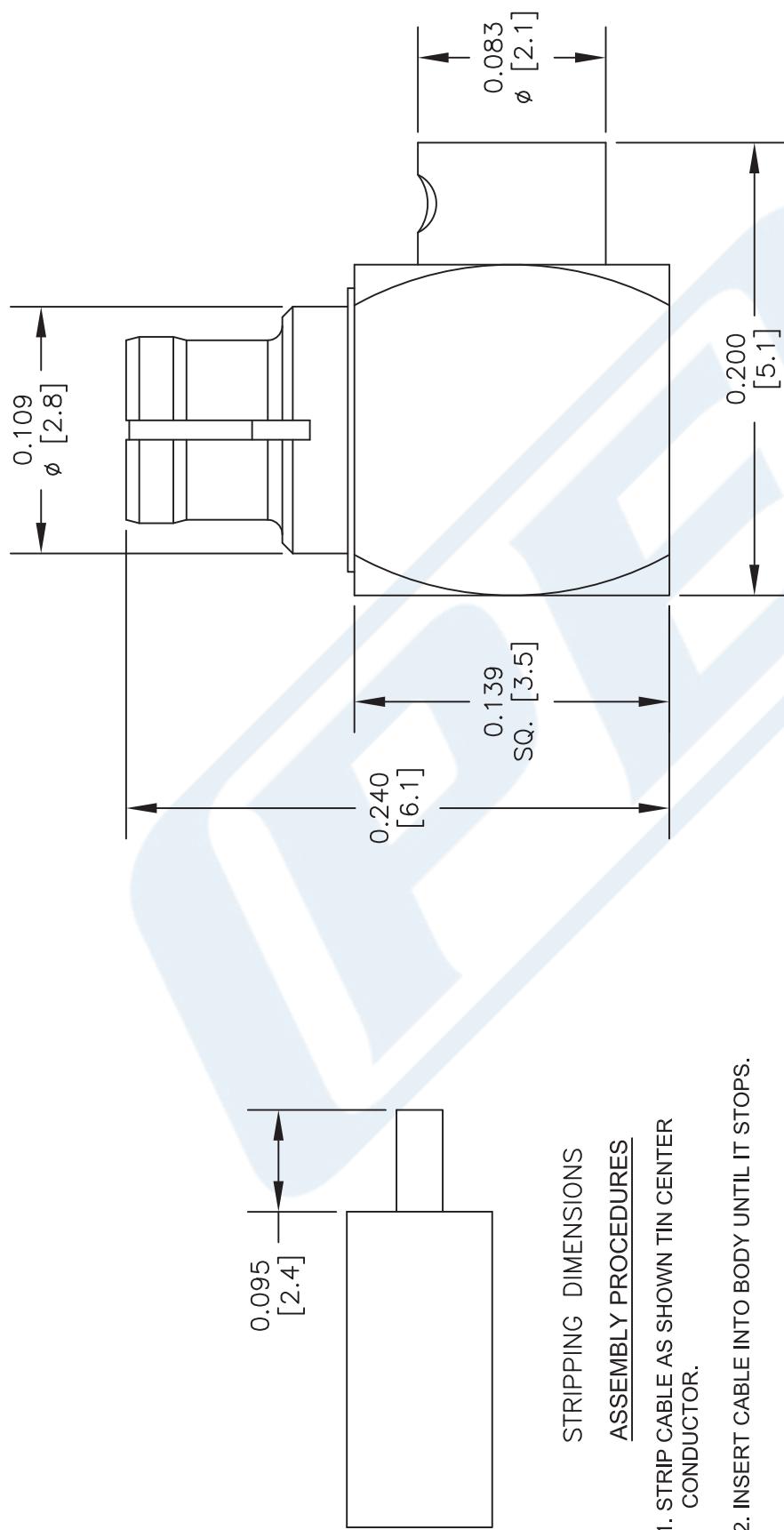
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE44493](#)

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

# PE44493 CAD Drawing

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



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**

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ESTABLISHED 1977

REV. A	FSCM NO.	53919	CAD FILE	081412	SCALE N/A	SIZE A	2233
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## 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	-55 to +125 deg C
Operating Range	1,000 megohms within 5 minutes after removal from
Humidity	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.

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](#)

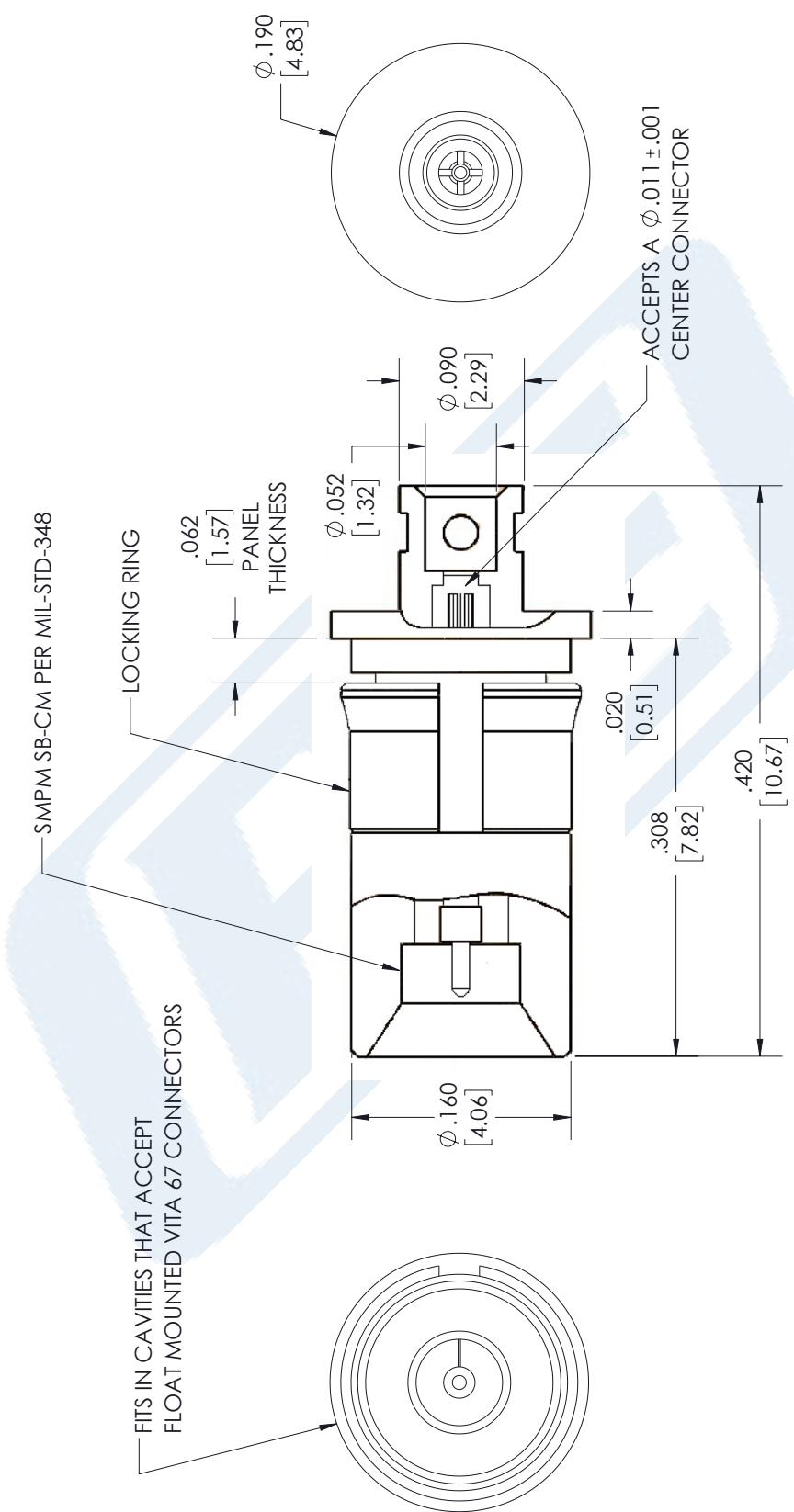
URL: <https://www.pasternack.com/mini-smp-male-pe-p047-pe-p047ll-pe-sr047fl-connector-pe45539-p.aspx>

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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	



THIRD ANGLE PROJECTION	
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SHEET 1 OF 1	SCALE N/A
SIZE A	ITEM NO. PE45539
REV. A	

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

FRACTIONS  
 $X = \pm 2$  [5.08]    $\frac{1}{32}$   
 $XX = \pm .02$  [.51]    $\pm 1/32$   
 $XXX = \pm .005$  [.13]    $\pm .001$   
 CABLE LENGTH (L) TOLERANCES:  
 $L \leq 12$  [305]  $+1/-0$   
 $12$  [305]  $< L \leq 60$  [1524]  $+2/-1$   
 $60$  [1524]  $< L \leq 120$  [3048]  $+4/-1$   
 $120$  [3048]  $< L \leq 300$  [7620]  $+6/-1$   
 $300$  [7620]  $< L = 450$  [L]  $-0$   
 ALL DIMENSIONS SHOWN  
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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**

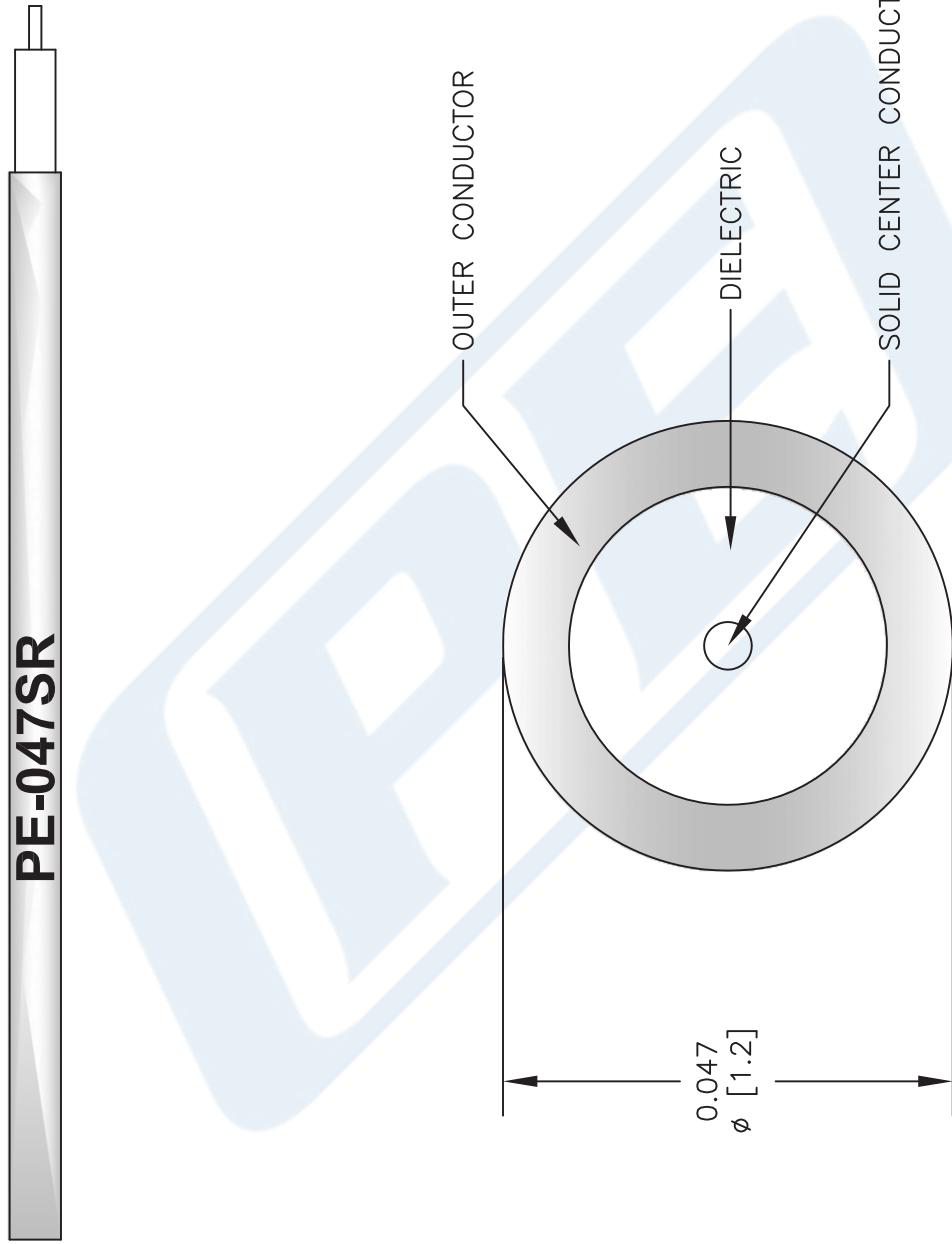
Notes:  
• Values at +25 °C, sea level

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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	<b>FSCM NO.</b> 53919 <b>CAD FILE</b> 073113 <b>SCALE</b> N/A <b>SIZE</b> A <b>2233</b>	