



## SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL, Up To 8 GHz

### RF Connectors Technical Data Sheet

**PE45249**

#### Configuration

- SMP Female Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry
- PE-047SR, PE-SR047AL, PE-SR047FL Interface Type
- Solder Attachment

#### Features

- Max. Operating Frequency 8 GHz
- Excellent VSWR of 1.15:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-DTL-45204
- Blind Mate Connector

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE45249 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 SMP female connector operates up to a maximum frequency of 8 GHz and offers excellent VSWR of 1.15:1. 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. Pasternack 8 GHz SMP connectors are designed to offer a low cost alternative where the SMP form factor is desired but the standard SMP frequency range is not needed. The line of 8 GHz SMP connectors is fully compatible with industry standard SMP and GPO® connectors. These SMP connectors offer a low cost high performance blind-mate solution for lower frequency applications. The Male versions of the 8 GHz SMP is available in Full Detent, Limited Detent, and Smooth Bore versions.

Our SMP female right angle connector PE45249 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      |         | 8       | GHz   |
| VSWR            |         |         | 1.15:1  |       |

#### Mechanical Specifications

##### Size

|            |                    |
|------------|--------------------|
| Length     | 0.28 in [7.11 mm]  |
| Width/Dia. | 0.187 in [4.75 mm] |
| Weight     | 0.002 lbs [0.91 g] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL, Up To 8 GHz PE45249](#)



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#### Material Specifications

| Description     | Material         | Plating               |
|-----------------|------------------|-----------------------|
| Contact         | Beryllium Copper | Gold<br>MIL-DTL-45204 |
| Insulation      | PTFE             |                       |
| Outer Conductor | Beryllium Copper | Gold                  |
| Body            | Beryllium Copper | Gold<br>MIL-DTL-45204 |

#### Environmental Specifications

##### Temperature

Operating Range

-55 to +155 deg C

Humidity

MIL-STD-202, Method 106 (except 7b omitted)

Shock

MIL-STD-202, Method 213, Condition I

Vibration

MIL-STD-202, Method 204, Condition D

Salt Spray

MIL-STD-202, Method 101, Condition B

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

#### Plotted and Other Data

Notes:

SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL, Up To 8 GHz 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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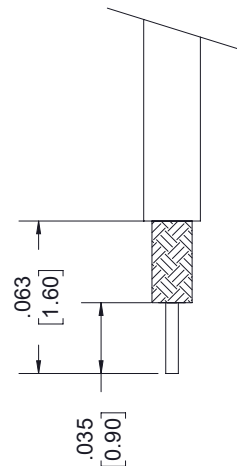
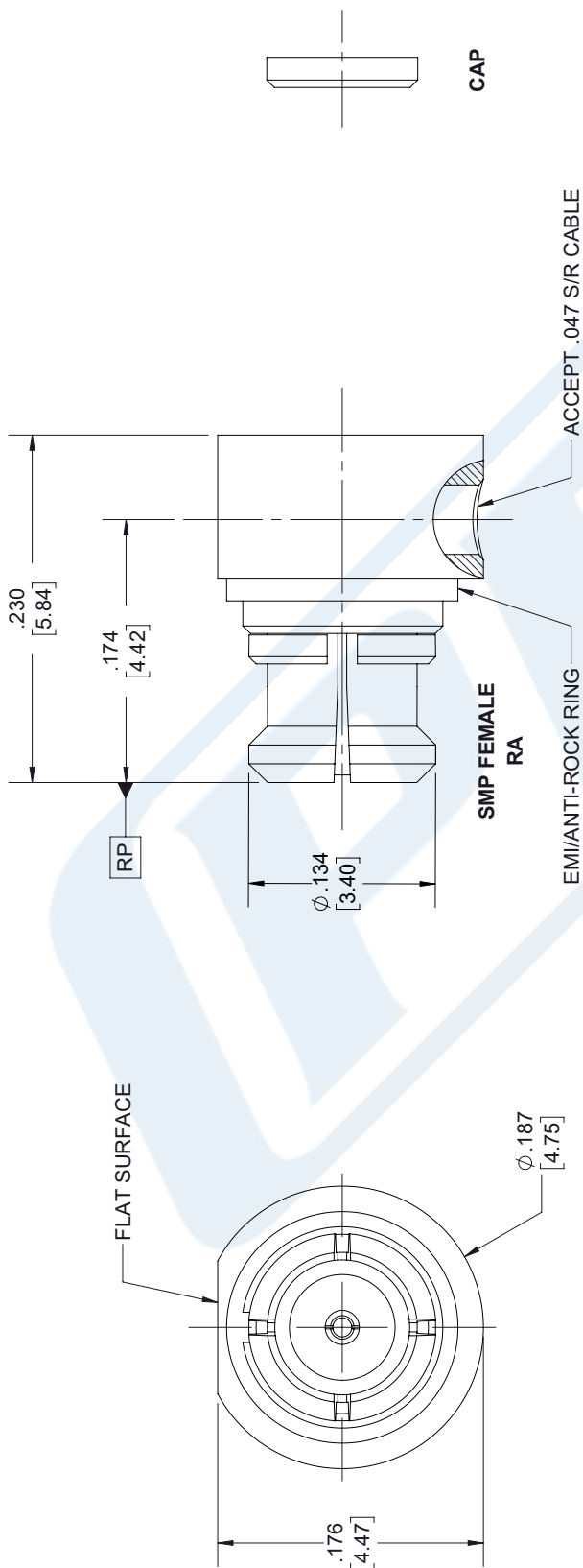
URL: <https://www.pasternack.com/smp-female-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe45249-p.aspx>

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# PE45249 CAD Drawing

SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL, Up To 8 GHz

| REVISIONS |                     |          |          |
|-----------|---------------------|----------|----------|
| REV.      | DESCRIPTION         | DATE     | APPROVED |
| 1.1       | PCR PE45249 2019049 | 04/23/19 | J.GARCIA |

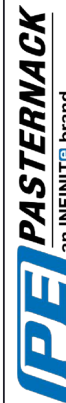


## STRIPPING DIMENSIONS

### NOTES:

- CABLE ATTACHMENT:
  - OUTER: SOLDER.
  - INNER: SOLDER.

|                                                                                                     |                 |
|-----------------------------------------------------------------------------------------------------|-----------------|
| UNLESS OTHERWISE SPECIFIED<br>LEADING DIMENSIONS ARE IN INCHES<br>DIMENSIONS IN [ ] ARE MILLIMETERS |                 |
| TOLERANCES:                                                                                         | FRACTIONS       |
| X $\pm$ .2                                                                                          | [5.08]          |
| XX $\pm$ .01                                                                                        | [.25]           |
| XXX $\pm$ .005                                                                                      | [.13]           |
| ALL DIMENSIONS SHOWN<br>ARE FOR REFERENCE ONLY.                                                     | ANGLES $\pm$ 1° |
| THIRD-ANGLE PROJECTION                                                                              |                 |



Pasternack Enterprises, Inc.  
P.O. Box 16759, Irvine, CA 92623.  
Phone: 1.949.261.1920 | 1.866.727.8376  
Fax: 1.949.261.7451  
www.pasternack.com | e-mail: sales@pasternack.com

|      |       |          |             |     |
|------|-------|----------|-------------|-----|
| SIZE | CAGE  | DRAWN BY | PART NUMBER | REV |
| A    | 53919 | K.DANG   | PE45249     | 1.1 |

|                                                                                                                        |        |
|------------------------------------------------------------------------------------------------------------------------|--------|
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| SHEET                                                                                                                  | 1 OF 1 |
| SCALE                                                                                                                  | N/A    |

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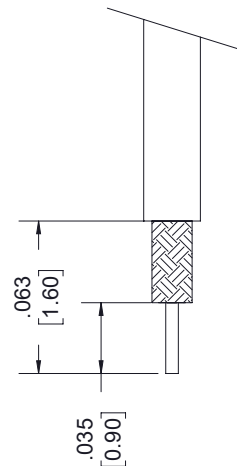
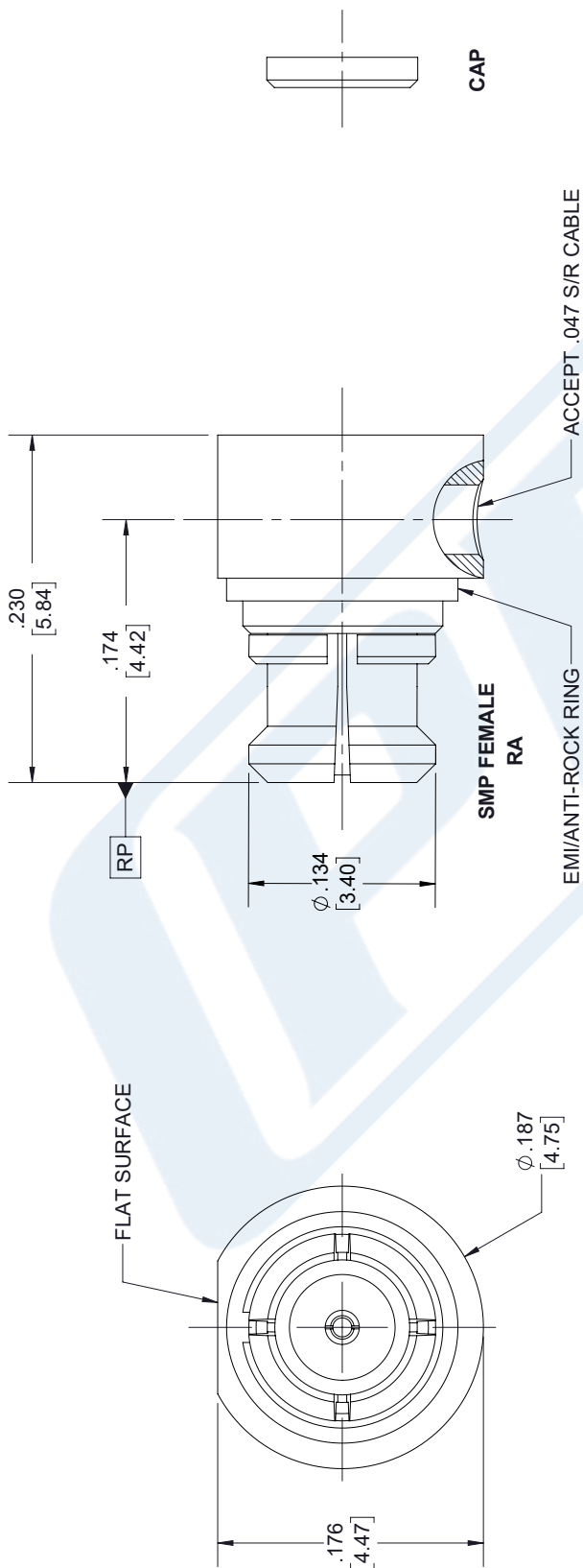
URL: <https://www.pasternack.com/smp-female-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe45249-p.aspx>

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|                                                                                                     |             |
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| TOLERANCES:                                                                                         | FRACTIONS   |
| X±.2 [5.08]                                                                                         | ±.132       |
| XX±.01 [.25]                                                                                        | ±.132       |
| XXX±.005 [.13]                                                                                      | ANGLES ± 1° |
| ALL DIMENSIONS SHOWN<br>ARE FOR REFERENCE ONLY.                                                     |             |
| THIRD-ANGLE PROJECTION                                                                              |             |

|                                                                                                                                                                                         |         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| <b>PE PASTERNAK</b><br>an INFINITI brand                                                                                                                                                |         |
| Pasternack Enterprises, Inc.<br>P.O. Box 16759, Irvine, CA 92623.<br>Phone: 1.949.261.1920   1.866.727.8376<br>Fax: 1.949.261.7451<br>www.pasternack.com   e-mail: sales@pasternack.com |         |
| SIZE                                                                                                                                                                                    | A       |
| CAGE                                                                                                                                                                                    | 53919   |
| DRAWN BY                                                                                                                                                                                | K.DANG  |
| PART NUMBER                                                                                                                                                                             | PE45249 |
| REV                                                                                                                                                                                     | 1.1     |

|                                                                                                                        |        |
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| SHEET                                                                                                                  | 1 OF 1 |
| SCALE                                                                                                                  | N/A    |

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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 |
|------------------------|-------------|

**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:

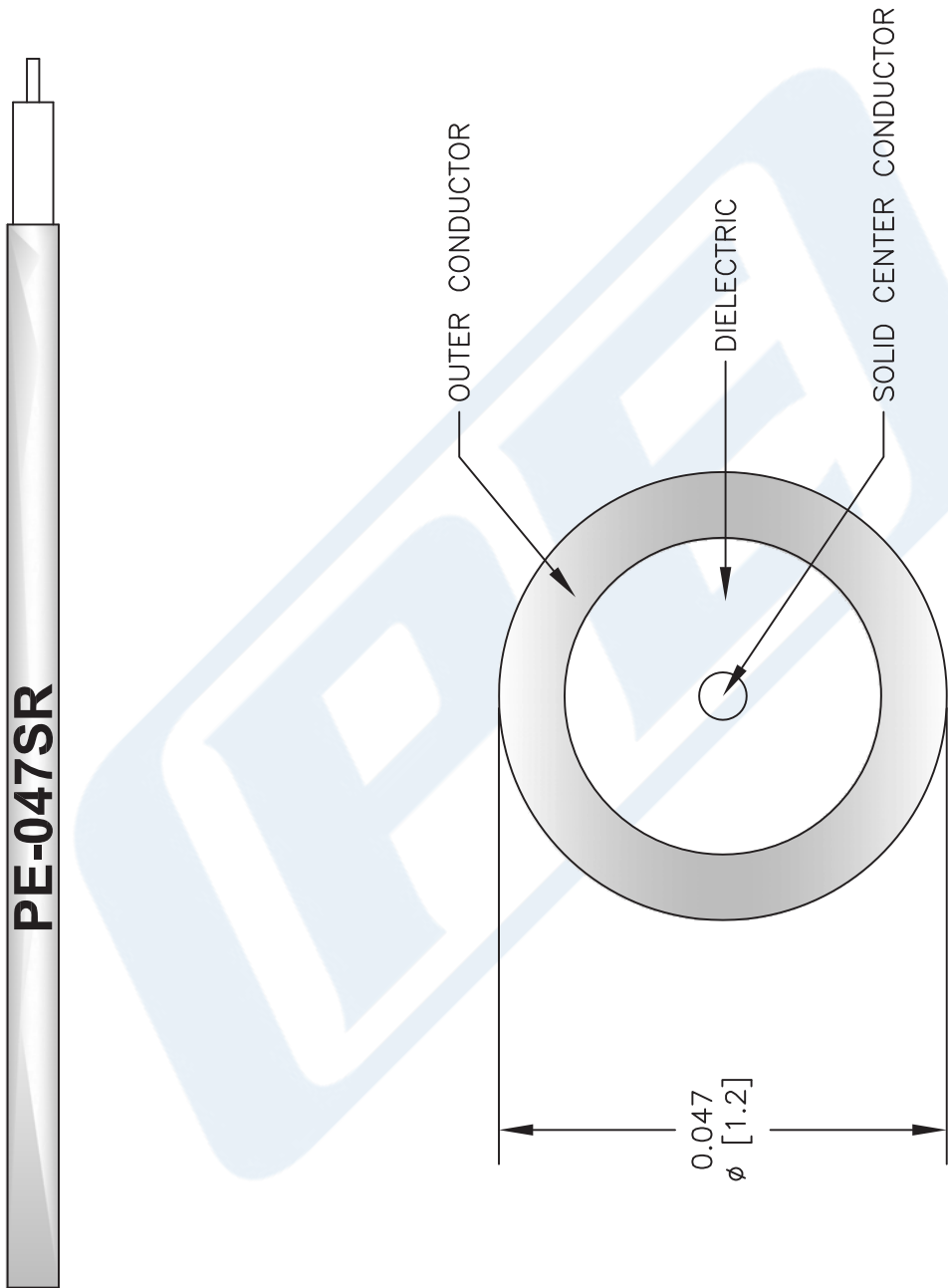
- Values at +25 °C, sea level

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NOTES:  
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2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
3. DIMENSIONS ARE IN INCHES [mm].

|           |          |       |          |        |
|-----------|----------|-------|----------|--------|
| DWG TITLE | PE-047SR |       |          |        |
|           | FSCM NO. | 53919 | CAD FILE | 073113 |
|           |          |       | SCALE    | N/A    |
|           |          |       | SIZE     | A      |
|           |          |       |          | 2233   |



PASTERNAK®

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