



SMP Female Right Angle to SMP Female Right Angle  
Cable 48 Inch Length Using PE-P047 Coax

RF Cable Assemblies Technical Data Sheet

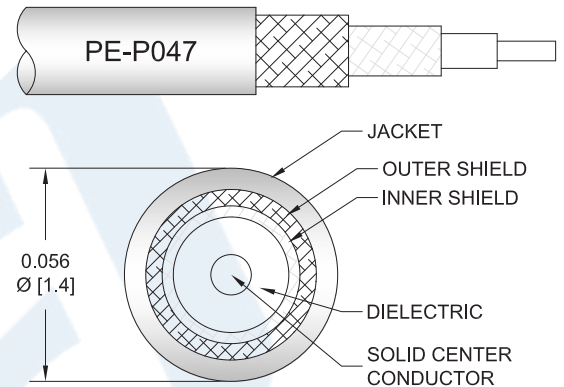
PE3C4969-48

**Configuration**

- Connector 1: SMP Female Right Angle
- Connector 2: SMP Female Right Angle
- Cable Type: PE-P047

**Features**

- Max Frequency 18 GHz
- Shielding Effectivity > 90 dB
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



**Applications**

- General Purpose
- Laboratory Use

**Description**

Pasternack's PE3C4969-48 SMP female right angle to SMP female right angle 48 inch cable using PE-P047 coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack SMP to SMP cable assembly has a female to female gender configuration with 50 ohm flexible PE-P047 coax. The PE3C4969-48 SMP female to SMP female cable assembly operates to 18 GHz. The right angle SMP interfaces on the PE-P047 cable allow for easier connections in tight spaces. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 dB.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

**Electrical Specifications**

| Description             | Minimum | Typical    | Maximum | Units        |
|-------------------------|---------|------------|---------|--------------|
| Frequency Range         | DC      |            | 18      | GHz          |
| VSWR                    |         |            | 1.45:1  |              |
| Velocity of Propagation |         | 70         |         | %            |
| RF Shielding            | 90      |            |         | dB           |
| Capacitance             |         | 29 [95.14] |         | pF/ft [pF/m] |

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 to SMP Female Right Angle Cable 48 Inch Length Using PE-P047 Coax PE3C4969-48](#)



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**Specifications by Frequency**

| Description           | F1   | F2   | F3   | F4  | F5  | Units |
|-----------------------|------|------|------|-----|-----|-------|
| Frequency             | 1    | 2    | 4.5  | 9   | 18  | GHz   |
| Insertion Loss (Max.) | 1.24 | 1.62 | 2.28 | 3.2 | 4.6 | dB    |

**Electrical Specification Notes:**

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.4dB of connector loss.

**Mechanical Specifications**

**Cable Assembly**

Length\* 48 in [121.92 cm]  
Diameter 0.136 in [3.45 mm]

**Cable**

Cable Type PE-P047  
Impedance 50 Ohms  
Inner Conductor Type Solid  
Inner Conductor Material and Plating Copper, Silver  
Dielectric Type FEP  
Number of Shields 2  
Shield Layer 1 Silver Plated Copper Tape  
Shield Layer 2 Silver Plated Copper Braid  
Jacket Material FEP, Blue  
Jacket Diameter 0.056 in [1.42 mm]

One Time Minimum Bend Radius 0.2 in [5.08 mm]  
Repeated Minimum Bend Radius 0.4 in [10.16 mm]

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**Connectors**

| Description                   | Connector 1            | Connector 2            |
|-------------------------------|------------------------|------------------------|
| Type                          | SMP Female Right Angle | SMP Female Right Angle |
| Specification                 | MIL-STD-348            | MIL-STD-348            |
| Impedance                     | 50 Ohms                | 50 Ohms                |
| Contact Material and Plating  | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Contact Plating Specification | MIL-G-45204            | MIL-G-45204            |
| Dielectric Type               | PTFE                   | PTFE                   |
| Body Material and Plating     | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Body Plating Specification    | MIL-G-45204            | MIL-G-45204            |

Mechanical Specification Notes:

\*All cable assemblies have a length tolerance of 1.5% or  $\pm 3/8$ ", whichever is greater.

**Environmental Specifications**

**Temperature**

Operating Range -55 to +125 deg C

**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: [SMP Female Right Angle to SMP Female Right Angle Cable 48 Inch Length Using PE-P047 Coax PE3C4969-48](#)

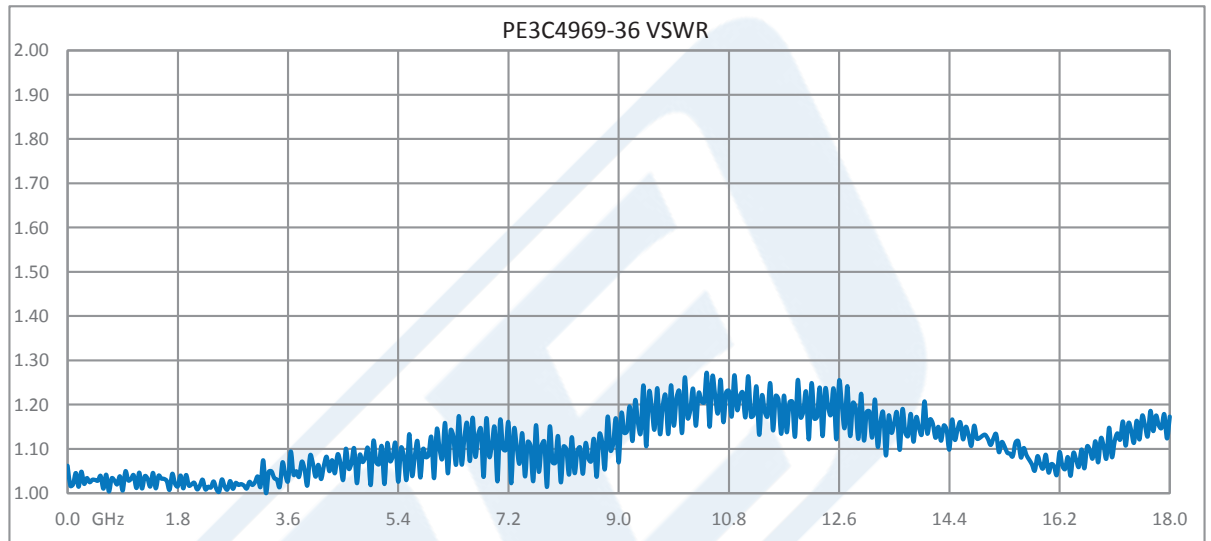


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Typical Performance Data



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**How to Order**

Part Number Configuration:

**PE3C4969**

- **xx**

**uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches  
Length  
Base Number

Example: PE3C4969-12 = 12 inches long cable  
PE3C4969-100cm = 100 cm long cable

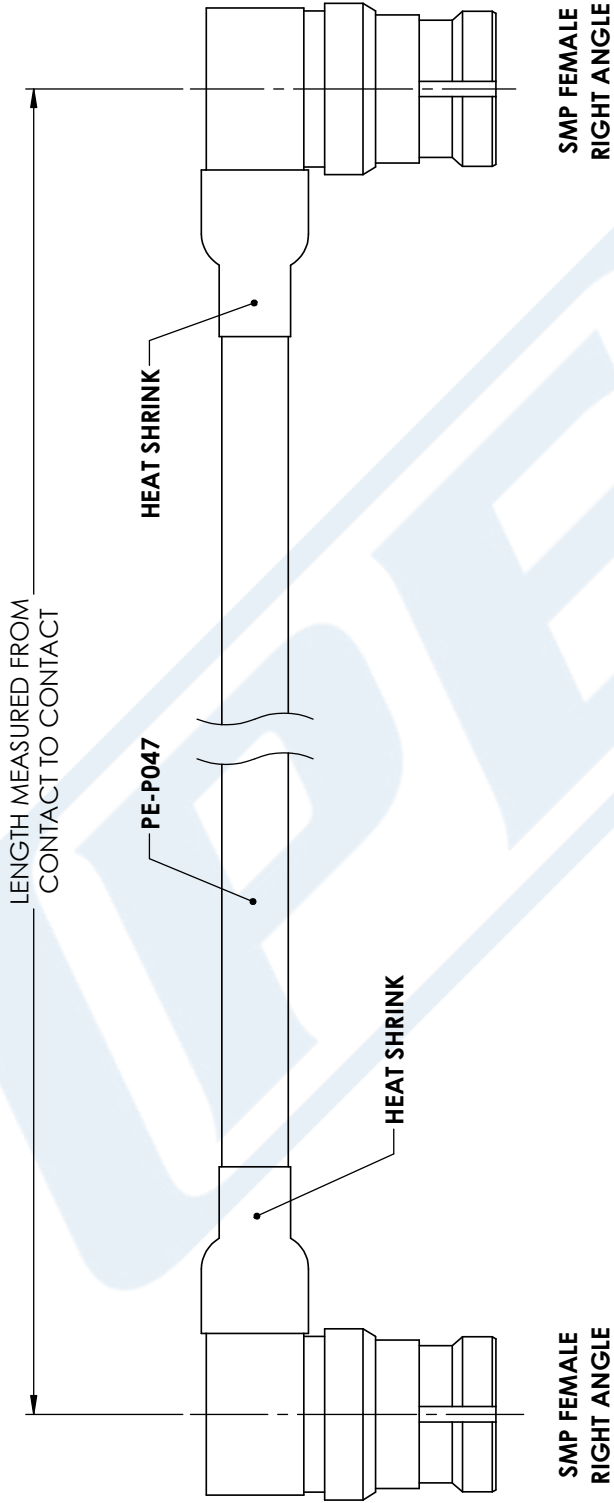
SMP Female Right Angle to SMP Female Right Angle Cable 48 Inch Length Using PE-P047 Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female Right Angle to SMP Female Right Angle Cable 48 Inch Length Using PE-P047 Coax PE3C4969-48](https://www.pasternack.com/smp-female-smp-female-pe-p047-cable-assembly-pe3c4969-48-p.aspx)

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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.

**PE3C4969-48 CAD Drawing**  
 SMP Female Right Angle to SMP Female Right Angle  
 Cable 48 Inch Length Using PE-P047 Coax



**STANDARD TOLERANCES**

.X ±0.2  
 .XX ±0.01  
 .XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



Pasternack Enterprises, Inc.  
 P.O. Box 16759 | Irvine | CA | 92623  
**Phone:** (949) 261-1920 | **Fax:** (949) 261-7451  
**Website:** www.pasternack.com | **E-Mail:** sales@pasternack.com

DWG TITLE

PE3C4969

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 10/16/18

SCALE N/A

SIZE A

CN2245