

## SMPS Female to SMA Male Cable 18 Inch Length Using PE-P047HF Coax

### PE3C9969-18

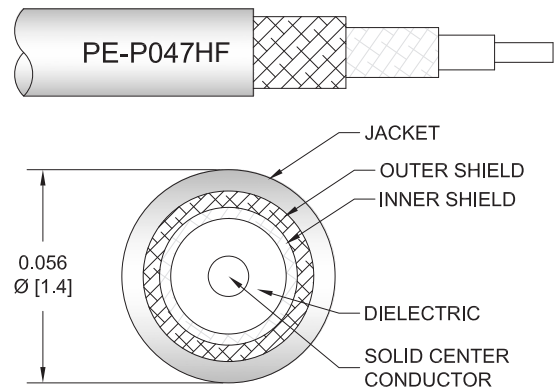


#### Configuration

- Connector 1: SMPS Female
- Connector 2: SMA Male
- Cable Type: PE-P047HF
- Coax Flex Type: Flexible

#### Features

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



#### Applications

- General Purpose
- Laboratory Use
- Scientific research
- High-reliability, high-density for aerospace & defense application
- Ground base station & communication systems, avionics, radar systems

#### Description

Pasternack's PE3C9969-18 SMPS female to SMA male 18 inch cable using PE-P047HF 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 SMPS to SMA cable assembly has a female to male gender configuration with 50 ohm flexible PE-P047HF coax. The PE3C9969-18 SMPS female to SMA male cable assembly operates to 18 GHz. 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			1.5:1	
Velocity of Propagation		70		%
RF Shielding	90			dB
Capacitance		29 [95.14]		pF/ft [pF/m]

#### Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	1000	2000	4500	9000	18000	MHz	
PE3C9969	Custom Lengths Available	Insertion Loss (Typ.)	0.35	0.489	0.764	1.108	1.682	dB/ft	
			1.15	1.61	2.51	3.64	5.52	dB/m	
PE3C9969-6	6 In	Insertion Loss (Typ.)	0.78	1.1	1.66	2.36	3.39	dB	0.015
PE3C9969-12	12 In	Insertion Loss (Typ.)	0.95	1.34	2.04	2.91	4.23	dB	0.017
PE3C9969-18	18 In	Insertion Loss (Typ.)	1.13	1.59	2.42	3.47	5.07	dB	0.019

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.1\*SQRT(FGHz) dB

Loss due to Connector 2: 0.5\*SQRT(FGHz) dB

Base Weight: 0.017 pounds

Additional Weight per Inch: 0.00033 pounds

### Mechanical Specifications

#### Cable Assembly

Length	18 in [457.2 mm]
Width/Diameter	0.5 in [12.7 mm]
Weight	0.01411 lbs [6.4 g]

#### Cable

Cable Type	PE-P047HF
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver Plated Copper Tape
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	FEP, Blue
Jacket Diameter	0.06 in [1.52 mm]
Repeated Minimum Bend Radius	0.1 in [2.54 mm]

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#### Connectors

Description	Connector 1	Connector 2
Type	SMPS Female	SMA Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold over Nickel
Contact Plating Specification	50 µin minimum gold	MIL-G-45204
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Beryllium Copper, Gold	
Outer Conductor Plating Specification	50 µin minimum	
Body Material and Plating	Beryllium Copper, Gold	Brass, Gold
Body Plating Specification	30 µin minimum	MIL-G-45204
Coupling Nut Material and Plating		Passivated Stainless Steel
Coupling Nut Plating Specification		ASTM-A380

#### Environmental Specifications

Operating Range Temperature -55 to +100 deg C

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

#### Plotted and Other Data

Notes:  
Values at 25°C, sea level.

## SMPS Female to SMA Male Cable 18 Inch Length Using PE-P047HF Coax

### PE3C9969-18



#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3C9969**

**- xx**

**uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches

Length

Base Number

Example: PE3C9969-12 = 12 inches long cable  
PE3C9969-100cm = 100 cm long cable

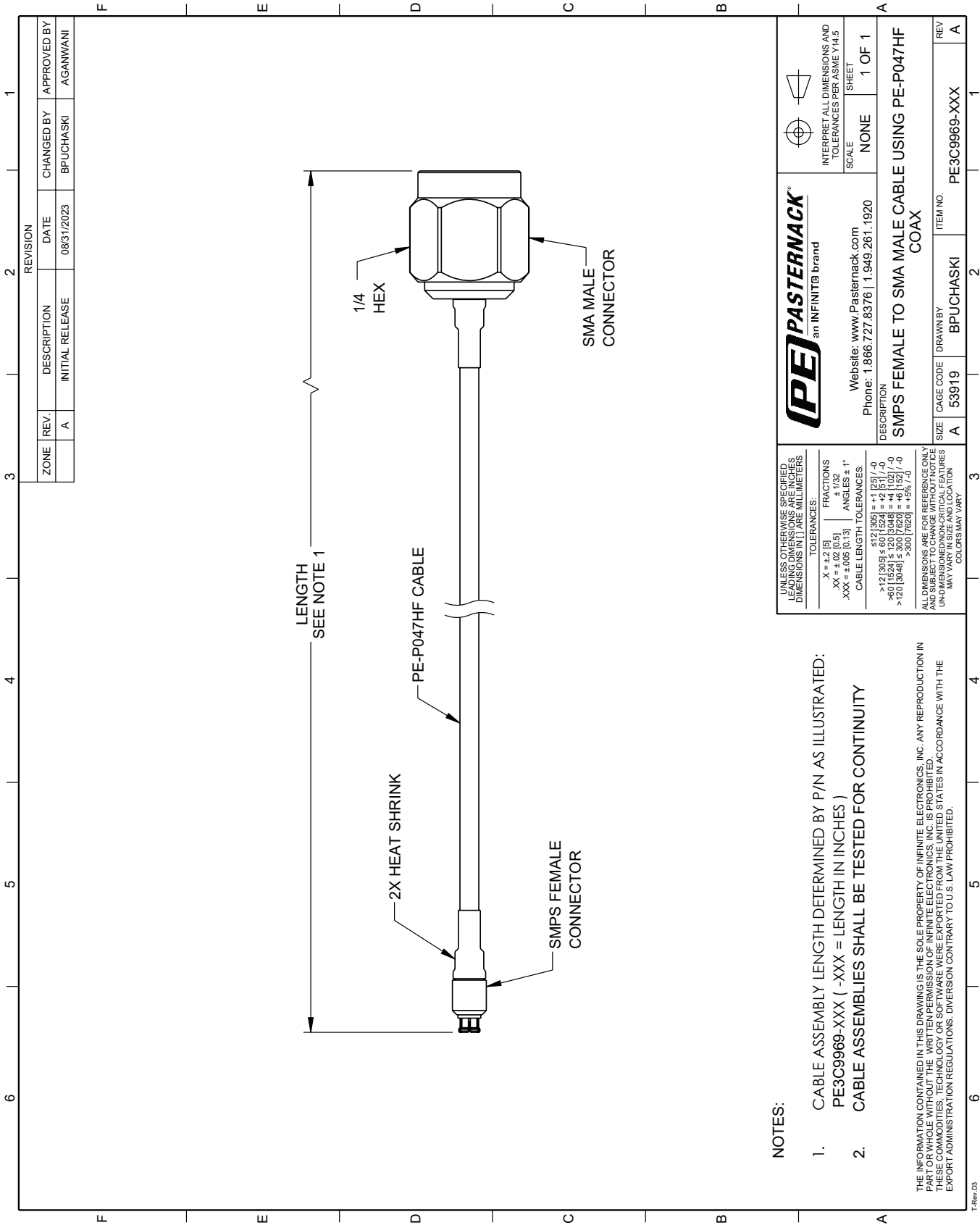
SMPS Female to SMA Male Cable 18 Inch Length Using PE-P047HF Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMPS Female to SMA Male Cable 18 Inch Length Using PE-P047HF Coax PE3C9969-18](#)

URL: <https://www.pasternack.com/smps-female-to-sma-male-cable-18-inch-length-using-pe-p047hf-pe3c9969-18-p.aspx>

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PE3C9969-18 CAD Drawing
SMPS Female to SMA Male Cable 18 Inch Length Using PE-P047HF Coax



UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, UNLESS INDICATED OTHERWISE. DIMENSIONS IN [ ] ARE MILLIMETERS.

TOLENCES:  
X = ±.2 [5]  
XX = ±.02 [0.5]  
XXX = ±.005 [0.13]

FRACTIONS  
± 1/32  
ANGLES ± 1°

CABLE LENGTH TOLERANCES:  
≤ 12 [305] ± .12 [3.05]  
> 12 [305] ≤ 60 [1524] ± .12 [3.05] / -0  
> 60 [1524] ≤ 120 [3048] ± .12 [3.05] / -0  
> 120 [3048] ± .12 [3.05] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

NOTE: 1. CABLE ASSEMBLY LENGTH DETERMINED BY P/N AS ILLUSTRATED: PE3C9969-XXX ( -XXX = LENGTH IN INCHES ) 2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE NONE SHEET 1 OF 1

DESCRIPTION SMPS FEMALE TO SMA MALE CABLE USING PE-P047HF COAX

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	BPUCHASKI	PE3C9969-XXX	A