

## SSMB Plug to SMA Male Cable Using RG316 Coax with HeatShrink

### PE3W03971/HS

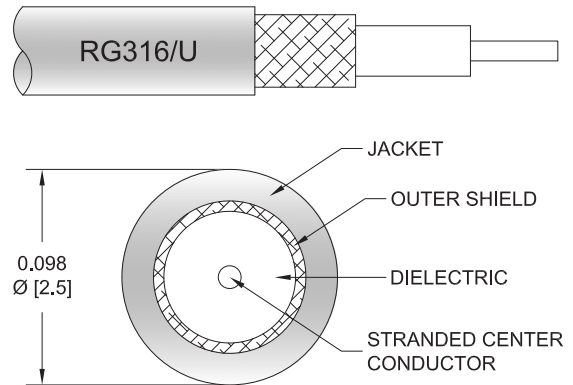


#### Configuration

- Connector 1: SSMB Plug
- Connector 2: SMA Male
- Cable Type: RG316
- Coax Flex Type: Flexible

#### Features

- Max Frequency 3 GHz
- 69% Phase Velocity
- FEP Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W03971/HS SSMB plug to SMA male cable using RG316 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 SSMB to SMA cable assembly has a plug to male gender configuration with 50 ohm flexible RG316 coax. The PE3W03971/HS SSMB plug to SMA male cable assembly operates to 3 GHz.

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		3	GHz
Velocity of Propagation		69		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Jacket Spark			2,000	Vrms

#### Specifications by Frequency

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### PE3W03971/HS

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
PE3W03971/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.11	0.16	0.24	0.38	0.58	dB/ft	
			0.37	0.53	0.79	1.25	1.91	dB/m	
PE3W03971/HS-12	12 inch	Insertion Loss (Typ.)	0.31	0.36	0.44	0.58	0.78	dB	0.029
PE3W03971/HS-24	24 inch	Insertion Loss (Typ.)	0.42	0.52	0.68	0.96	1.36	dB	0.04
PE3W03971/HS-36	36 inch	Insertion Loss (Typ.)	0.53	0.68	0.92	1.34	1.94	dB	0.05
PE3W03971/HS-48	48 inch	Insertion Loss (Typ.)	0.64	0.84	1.16	1.72	2.52	dB	0.06
PE3W03971/HS-72	72 inch	Insertion Loss (Typ.)	0.86	1.16	1.63	2.48	3.68	dB	0.08

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 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.029 pounds
Additional Weight per Inch:	0.00084 pounds

## Mechanical Specifications

### Cable Assembly

Weight	0.029 lbs [13.15 g]
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### Cable

Cable Type	RG316
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	1
Shield Layer 1	Silver Plated Copper Braid
Jacket Material	FEP, Tan
Jacket Diameter	0.102 in [2.59 mm]

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### PE3W03971/HS

#### Connectors

Description	Connector 1	Connector 2
Type	SSMB Plug	SMA Male
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Beryllium Copper, Gold	
Outer Conductor Plating Specification	30 µin minimum	
Body Material and Plating	Brass, Gold	Brass, Gold
Body Plating Specification	30 µin minimum	
Coupling Nut Material and Plating		Brass, Gold
Hex Size		5/16 in
Torque		5 in-lbs 0.57 Nm

#### Environmental Specifications

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

#### Plotted and Other Data

Notes:

## SSMB Plug to SMA Male Cable Using RG316 Coax with HeatShrink



### PE3W03971/HS

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3W03971/HS**

**- xx**

**uu**

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

Length

Base Number

Example: PE3W03971/HS-12 = 12 inches long cable  
PE3W03971/HS-100cm = 100 cm long cable

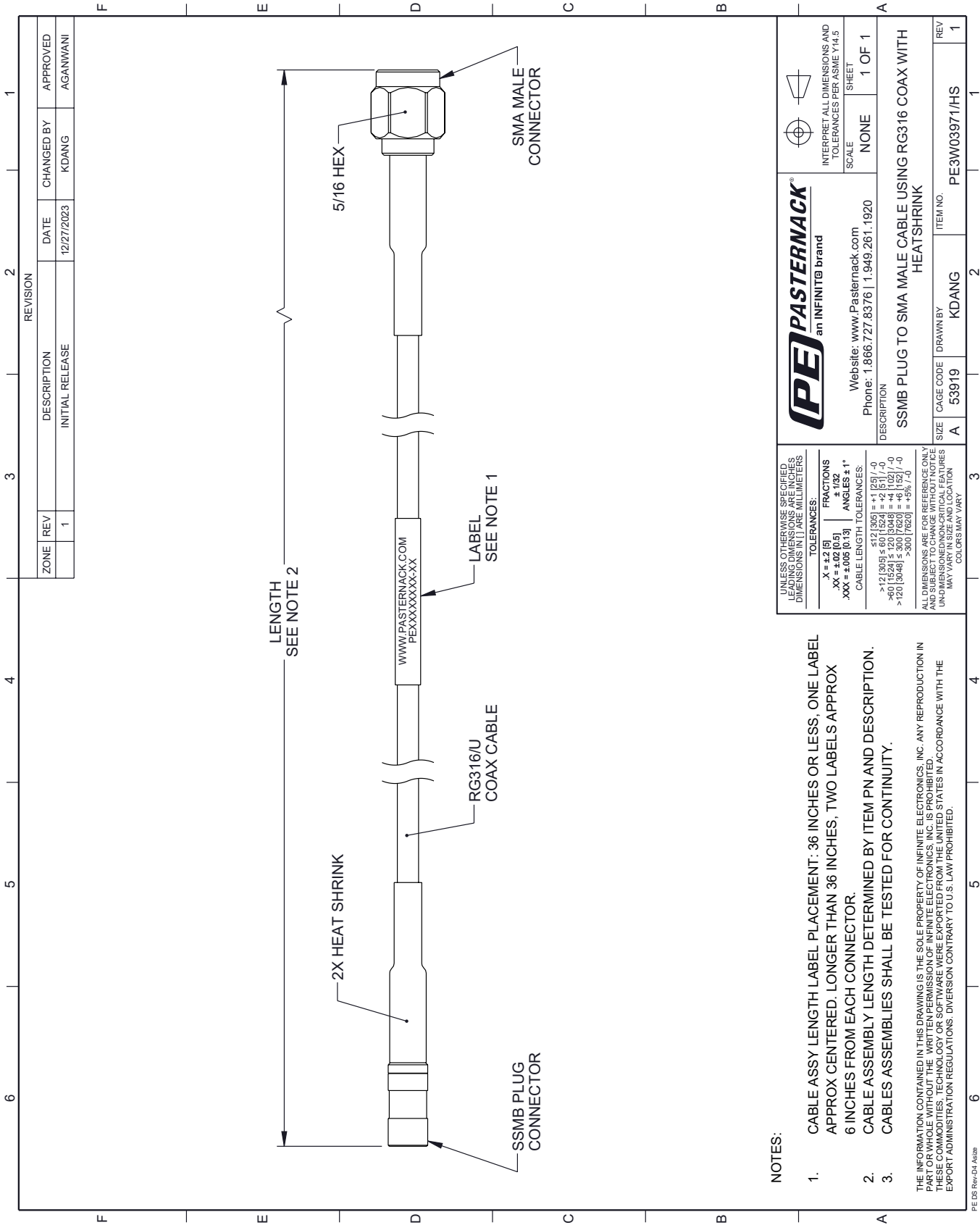
SSMB Plug to SMA Male Cable Using RG316 Coax with HeatShrink from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMB Plug to SMA Male Cable Using RG316 Coax with HeatShrink PE3W03971/HS](#)

URL: <https://www.pasternack.com/ssmb-plug-to-sma-male-cable-using-rg316-with-heatshrink-pe3w03971-hs-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3W03971/HS CAD Drawing
SSMB Plug to SMA Male Cable Using RG316 Coax with HeatShrink



<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <table><tr><td>.X = ±.2 [5]</td><td>FRACTIONS ± 1/32</td></tr><tr><td>.XX = ±.02 [0.5]</td><td>ANGLES ± 1°</td></tr><tr><td>.XXX = ±.005 [0.13]</td><td></td></tr></table> <p>CABLE LENGTH TOLERANCES:</p> <table><tr><td>≤ 12 [305]</td><td>±.1 [2.5]</td></tr><tr><td>&gt; 12 [305] ≤ 60 [1524]</td><td>±.2 [5.1]</td></tr><tr><td>&gt; 60 [1524] ≤ 120 [3048]</td><td>±.4 [10.2]</td></tr><tr><td>&gt; 120 [3048] ≤ 300 [7620]</td><td>±.6 [15.2]</td></tr><tr><td>&gt; 300 [7620]</td><td>±.9 [22.9]</td></tr></table>		.X = ±.2 [5]	FRACTIONS ± 1/32	.XX = ±.02 [0.5]	ANGLES ± 1°	.XXX = ±.005 [0.13]		≤ 12 [305]	±.1 [2.5]	> 12 [305] ≤ 60 [1524]	±.2 [5.1]	> 60 [1524] ≤ 120 [3048]	±.4 [10.2]	> 120 [3048] ≤ 300 [7620]	±.6 [15.2]	> 300 [7620]	±.9 [22.9]
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<p>ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS FOR NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>																	
<p>NOTE: 1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR. 2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION. 3. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.</p>																	
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