

SMA Male to SMB Plug Cable Using RG316 Coax

RF Cable Assemblies Technical Data Sheet

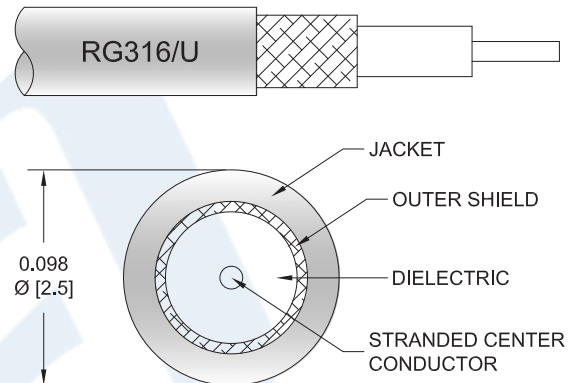
PE3W03969

Configuration

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

Features

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



Applications

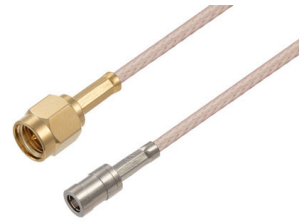
- General Purpose
- Laboratory Use

Description

Pasternack's PE3W03969 SMA male to SMB plug 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 SMA to SMB cable assembly has a male to plug gender configuration with 50 ohm flexible RG316 coax. The PE3W03969 SMA male to SMB plug 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SMB Plug Cable Using RG316 Coax PE3W03969](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		69		%
Jacket Spark			2,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.11	0.16	0.238	0.38	0.58	dB/ft
	0.36	0.52	0.78	1.25	1.9	

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

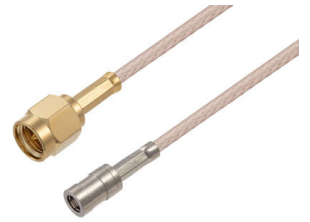
Cable Assembly

Weight 0.033 lbs [14.97 g]

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 0.098 in [2.49 mm]

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Connectors

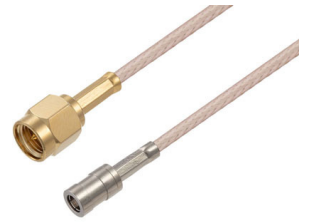
Description	Connector 1	Connector 2
Type	SMA Male	SMB Plug
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification		30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Gold	Brass, Nickel
Body Plating Specification		100 µin minimum
Coupling Nut Material and Plating	Brass, Gold	Brass, Nickel
Coupling Nut Plating Specification		100 µin minimum
Hex Size	5/16 in	
Torque	5 in-lbs [0.57 Nm]	

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

Plotted and Other Data

Notes:

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RF Cable Assemblies Technical Data Sheet

PE3W03969

How to Order

Part Number Configuration:

PE3W03969

- **xx**

uu

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

Example: PE3W03969-12 = 12 inches long cable
PE3W03969-100cm = 100 cm long cable

SMA Male to SMB Plug Cable Using RG316 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.

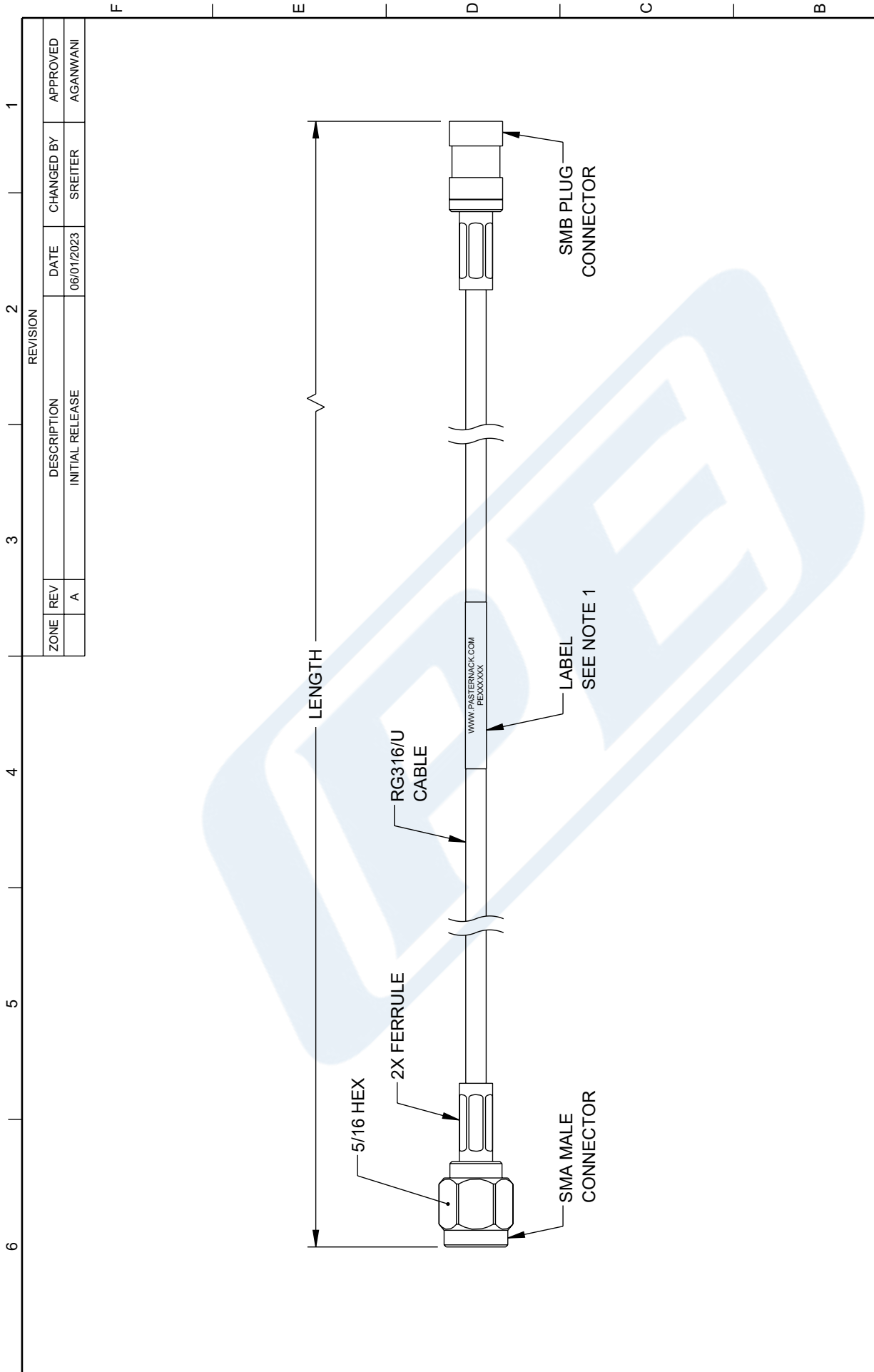
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

PE3W03969 CAD Drawing

SMA Male to SMB Plug Cable Using RG316 Coax



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	06/01/2023	SREITER	AGANWANI

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

X = ±.2 [.5] FRACTIONS ±.1/32

.XX = ±.02 [.5] ANGLES ± 1°

.XXX = ±.005 [.13] CABLE LENGTH TOLERANCES:

≤12 [305] = +1 [25] / -0

>12 [305] ≤ 60 [1524] = +2 [51] / -0

>60 [1524] ≤ 120 [3048] = +4 [102] / -0

>120 [3048] ≤ 300 [7620] = +6 [152] / -0

>300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.

PE PASTERNAK
an INFINIT® brand

Website: www.Pasternack.com
Phone: 1.866.727.8376 | 1.949.261.1920

DESCRIPTION
SMA MALE TO SMB PLUG CABLE USING RG316 COAX

SCALE: NONE SHEET: 1 OF 1

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	SREITER	PE3W03969

NOTES:

- CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCH OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCH, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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