

SMA Male Right Angle to SMA Male Right Angle Cable Using RG316 Coax

PE3W02000

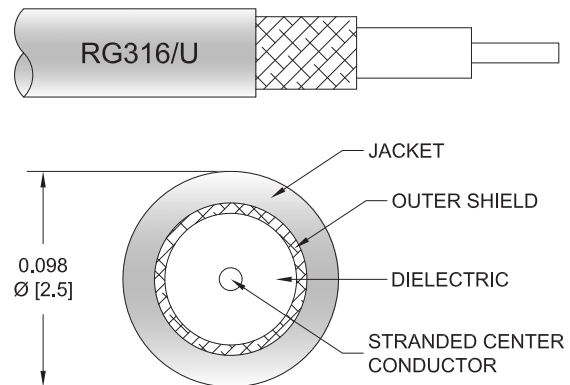


Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: SMA Male Right Angle
- Cable Type: RG316
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- 69% Phase Velocity
- FEP Jacket
- 500 Mating Cycles



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W02000 SMA male right angle to SMA male right angle 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 SMA cable assembly has a male to male gender configuration with 50 ohm flexible RG316 coax. The PE3W02000 SMA male to SMA male cable assembly operates to 3 GHz. The right angle SMA interfaces on the RG316 cable allow for easier connections in tight spaces.

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
VSWR		1.4:1		
Velocity of Propagation		69		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
DC Resistance Inner Conductor		8.41 [27.59]		Ohms/1000ft [Ohms/Km]
Operating Voltage (AC)			250	Vrms
Dielectric Withstanding Voltage (AC)			750	Vrms
Jacket Spark			2,000	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
PE3W02000	Custom Lengths Available	Insertion Loss (Typ.)	0.11	0.16	0.238	0.38	0.58	dB/ft	
			0.37	0.53	0.79	1.25	1.91	dB/m	
PE3W02000-12	12 inch	Insertion Loss (Typ.)	0.21	0.31	0.46	0.68	1.1	dB	0.036
PE3W02000-24	24 inch	Insertion Loss (Typ.)	0.32	0.47	0.69	1.06	1.68	dB	0.047
PE3W02000-36	36 inch	Insertion Loss (Typ.)	0.43	0.63	0.93	1.44	2.26	dB	0.057
PE3W02000-48	48 inch	Insertion Loss (Typ.)	0.54	0.79	1.17	1.82	2.84	dB	0.067
PE3W02000-72	72 inch	Insertion Loss (Typ.)	0.76	1.11	1.65	2.58	4	dB	0.087

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: 0.15 x sqrt(fGHz) dB

Loss due to Connector 2: 0.15 x sqrt(fGHz) dB

Base Weight: 0.036 pounds

Additional Weight per Inch: 0.00084 pounds

Mechanical Specifications

Cable Assembly

Weight 0.036 lbs [16.33 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	0.102 in [2.59 mm]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	SMA Male Right Angle
Specification	MIL-C-39012	MIL-C-39012
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Right Angle
Mating Cycles	500	500
Contact Material and Plating	Brass, Gold over Nickel	Brass, Gold over Nickel
Contact Plating Specification	30 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 µin minimum	100 µin minimum
Hex Size	5/16 in.	5/16 in.
Torque	5 in-lbs 0.57 Nm	5 in-lbs 0.57 Nm

Environmental Specifications

Operating Range Temperature -55 to +165 deg C

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

Plotted and Other Data

Notes:

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PE3W02000

Typical Performance Data

How to Order

Part Number Configuration: **PE3W02000** **- xx** **uu**

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

Length

Base Number

Example: PE3W02000-12 = 12 inches long cable
PE3W02000-100cm = 100 cm long cable

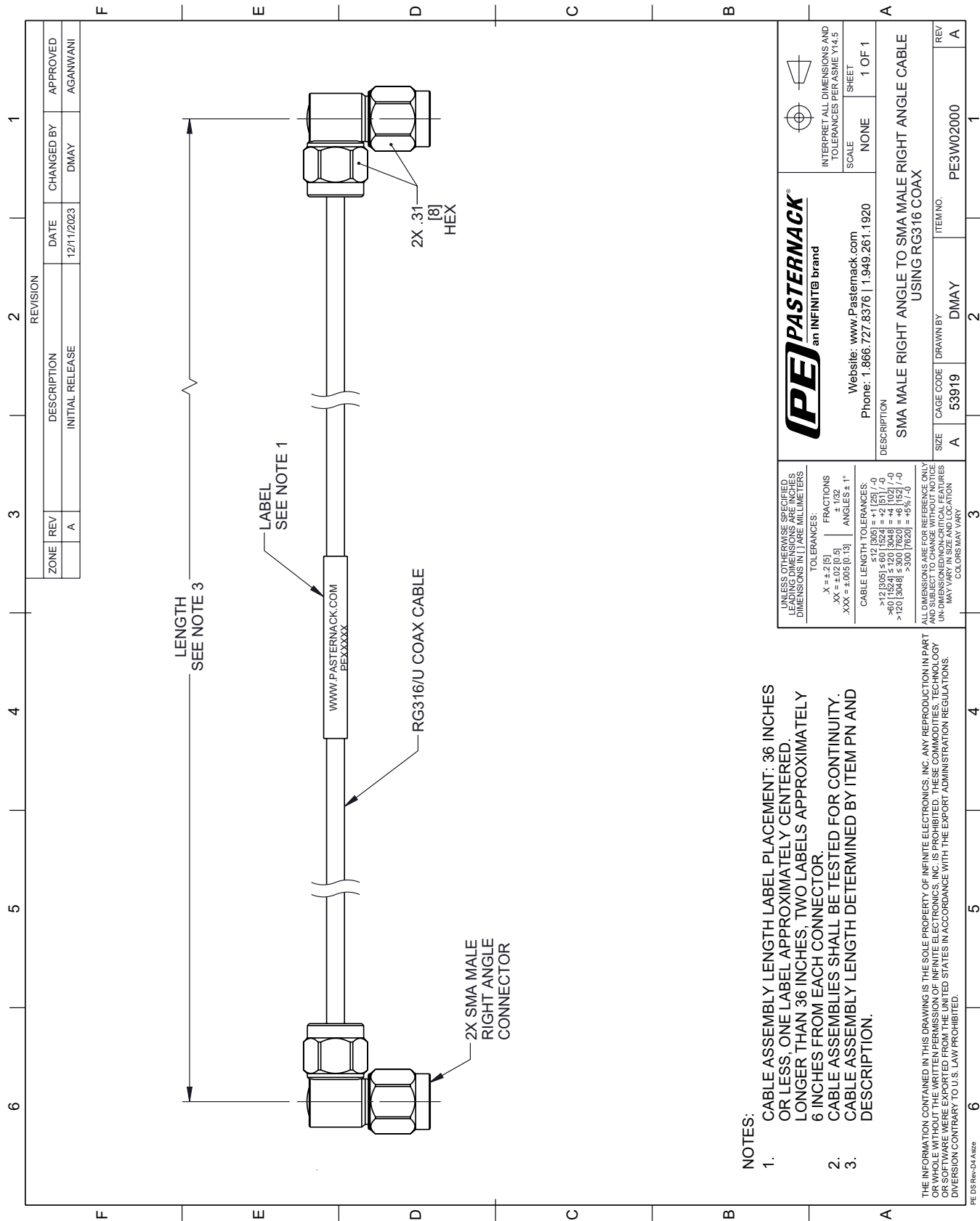
SMA Male Right Angle to SMA Male Right Angle Cable Using RG316 Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Right Angle to SMA Male Right Angle Cable Using RG316 Coax PE3W02000](https://www.pasternack.com/sma-male-right-angle-to-sma-male-right-angle-cable-using-rg316-pe3w02000-p.aspx)

URL: <https://www.pasternack.com/sma-male-right-angle-to-sma-male-cable-using-rg316-pe3w02000-p.aspx>

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PE3W02000 CAD Drawing
SMA Male Right Angle to SMA Male Right Angle Cable Using RG316 Coax



- 1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
- 2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
- 3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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