

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



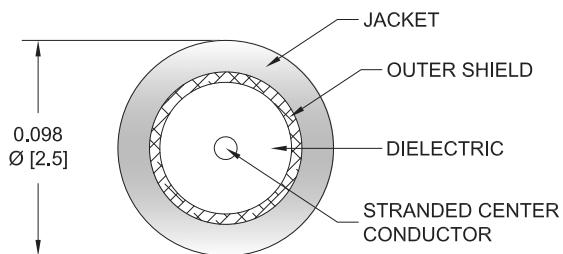
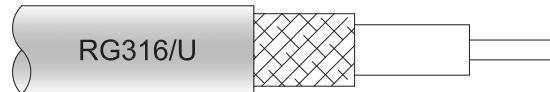
PE3W02000

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

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



PE3W02000

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: $0.15 \times \sqrt{f\text{GHz}}$ dB

Loss due to Connector 2: $0.15 \times \sqrt{f\text{GHz}}$ 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]

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



PE3W02000

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 μ in minimum	30 μ in minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 μ in minimum	100 μ in minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 μ in minimum	100 μ in 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:

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

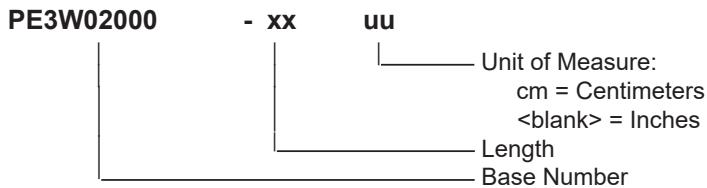


PE3W02000

Typical Performance Data

How to Order

Part Number Configuration:



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](#)

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

PE3W02000 CAD Drawing

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

