

SMA Male Right Angle to SMA Male Right Angle Cable Using RG316-DS Coax with 180 Deg. Clock



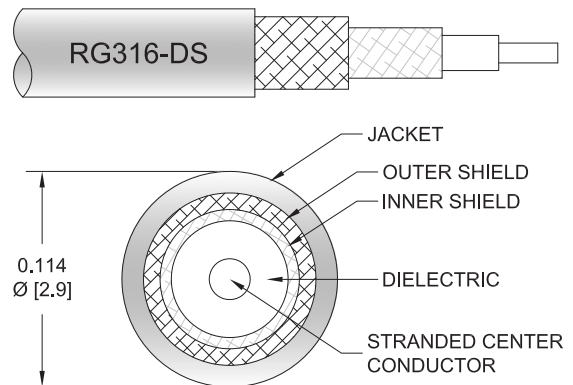
PE3987/PH180

Configuration

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

Features

- Max Frequency 3 GHz
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3987/PH180 SMA male right angle to SMA male right angle cable using RG316-DS 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-DS coax. The PE3987/PH180 SMA male to SMA male cable assembly operates to 3 GHz. The right angle SMA interfaces on the RG316-DS cable allow for easier connections in tight spaces. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness.

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		70		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			335	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	
PE3987/PH180	Custom Lengths Available	Insertion Loss (Typ.)	0.08	0.13	0.194	0.29	0.535	dB/ft	
			0.27	0.42	0.64	0.96	1.76	dB/m	
PE3987/PH180-6	6 inch	Insertion Loss (Typ.)	0.45	0.47	0.5	0.55	0.67	dB	0.041
PE3987/PH180-12	12 inch	Insertion Loss (Typ.)	0.49	0.53	0.6	0.69	0.94	dB	0.048
PE3987/PH180-24	24 inch	Insertion Loss (Typ.)	0.57	0.66	0.79	0.98	1.47	dB	0.063
PE3987/PH180-36	36 inch	Insertion Loss (Typ.)	0.65	0.79	0.99	1.27	2.01	dB	0.077
PE3987/PH180-48	48 inch	Insertion Loss (Typ.)	0.73	0.92	1.18	1.56	2.54	dB	0.091

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:	0.2 dB
Loss due to Connector 2:	0.2 dB
Base Weight:	0.048 pounds
Additional Weight per Inch:	0.00117 pounds

Mechanical Specifications

Cable Assembly

Weight	0.048 lbs [21.77 g]
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Cable

Cable Type	RG316-DS
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	FEP, Tan
Jacket Diameter	0.114 in [2.9 mm]
Repeated Minimum Bend Radius	0.6 in [15.24 mm]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	SMA Male Right Angle
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Right Angle
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 µin minimum	50 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 inch	5/16 inch
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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PE3987/PH180

Typical Performance Data

How to Order

Part Number Configuration: **PE3987/PH180** **- xx** **uu**

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

Length
Base Number

Example: PE3987/PH180-12 = 12 inches long cable
PE3987/PH180-100cm = 100 cm long cable

SMA Male Right Angle to SMA Male Right Angle Cable Using RG316-DS Coax with 180 Deg. Clock 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-DS Coax with 180 Deg. Clock PE3987/PH180](https://www.pasternack.com/sma-male-right-angle-to-sma-male-cable-using-rg316-ds-with-180-deg.-clock-pe3987-ph180-p.aspx)

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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.

PE3987/PH180 CAD Drawing

SMA Male Right Angle to SMA Male Right Angle Cable Using RG316-DS Coax with 180 Deg. Clock

