



SMA Male Right Angle to SMA Male Right Angle Cable Using RG316-DS Coax with HeatShrink

RF Cable Assemblies Technical Data Sheet

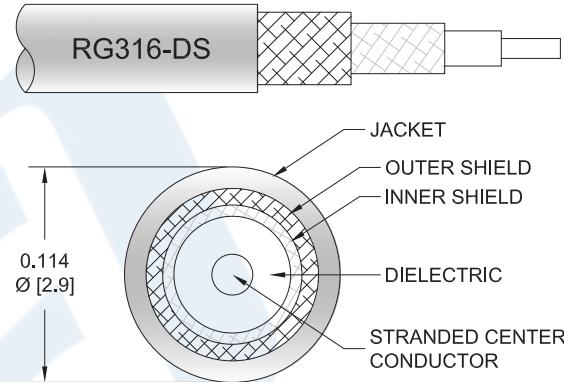
PE3987/HS

Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: SMA Male Right Angle
- Cable Type: RG316-DS
- Coax Cable Group: 8
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- Shielding Effectivity > 85 dB
- 69.5% Phase Velocity
- Double Shielded
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3987/HS 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/HS 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 of better than 85 dB.

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 Right Angle to SMA Male Right Angle Cable Using RG316-DS Coax with Heat-Shrink PE3987/HS](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		69.5		%
RF Shielding	85			dB
Capacitance		28.96 [95.01]		pF/ft [pF/m]
DC Resistance Inner Conductor		83.82 [275]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		5.33 [17.49]		Ω/1000ft [Ω/Km]
Operating Voltage (AC)			335	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.082	0.128	0.194	0.29	0.535	dB/ft
	0.27	0.42	0.64	0.95	1.76	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB per connector.

Mechanical Specifications

Cable Assembly

Weight 0.048 lbs [21.77 g]

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]
One Time Minimum Bend Radius	0.59 in [14.99 mm]
Repeated Minimum Bend Radius	1.57 in [39.88 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
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 μ in minimum	50 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 inch	5/16 inch
Torque	3 in-lbs [0.34 Nm]	3 in-lbs [0.34 Nm]

Environmental Specifications

Temperature

Operating Range

-55 to +165 deg C

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

Plotted and Other Data

Notes:

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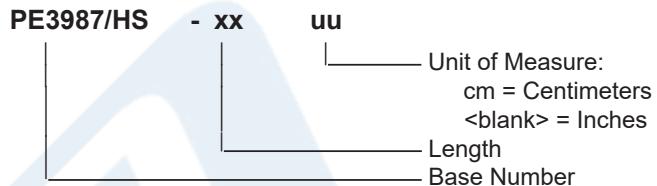


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PE3987/HS

How to Order

Part Number Configuration:



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

SMA Male Right Angle to SMA Male Right Angle Cable Using RG316-DS 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.

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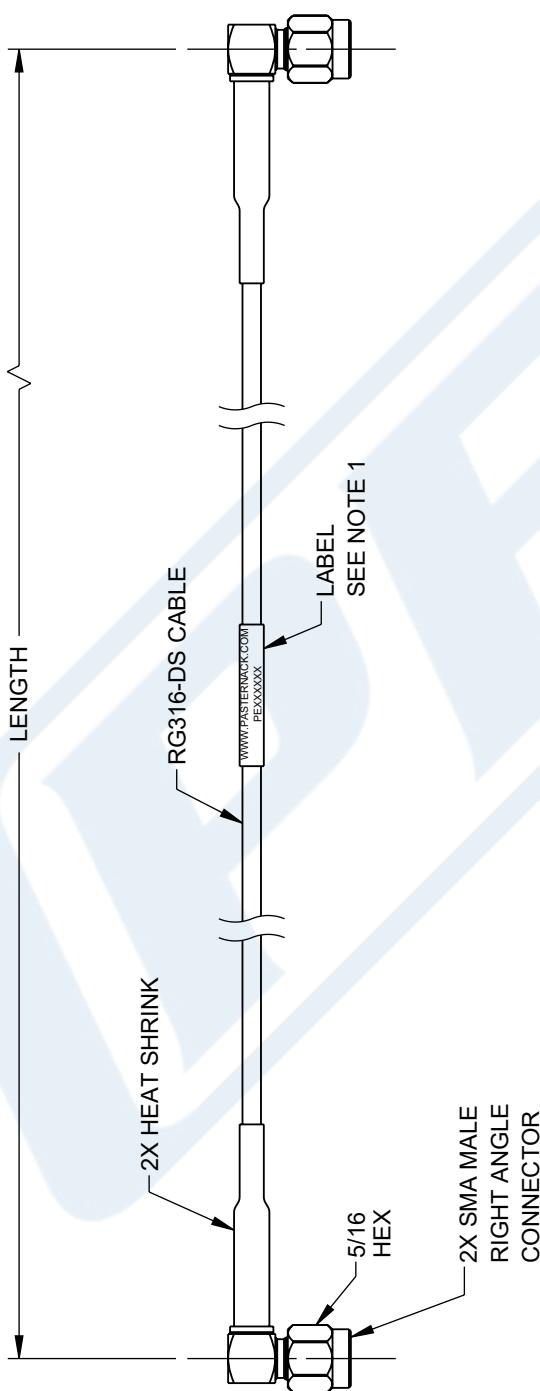
URL: <https://www.pasternack.com/sma-male-right-angle-to-sma-male-cable-using-rg316-ds-with-heatshrink-pe3987-hs-p.aspx>

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.

PE3987/HS CAD Drawing

SMA Male Right Angle to SMA Male Right Angle Cable Using RG316-DS Coax with HeatShrink

ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED BY
	A	INITIAL RELEASE	05/22/2023	BPUCHASKI	AGANWANI



NOTES:

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

NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 26 INCHES INCLUDES TWO LABELS APPROXIMATELY 6 INCHES

THAN 36 INCHES, TWO LABELS APPROXIMATELY 8 INCHES FROM EACH CONNECTOR.
CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY

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 PASTERNAK® an INFINITI® brand			
UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS		INTERFER ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
TOLERANCES: ± 0.2 [5] ± 0.02 [5] ± 0.005 [1.3]	FRACTIONS $\pm 1/32$ ANGLES $\pm 1^\circ$	SCALE NONE	SHEET 1 OF 1
CABLE LENGTH TOLERANCES: ± 12 [305] ≤ 60 [1524] ± 1 [25] / -0 >60 [1524] ± 120 [3048] ± 4 [102] / -0 >120 [3048] ± 300 [7620] ± 6 [152] / -0 >300 [7620] ± 5 % / -0		DESCRIPTION SMA Male Right Angle to SMA Male Right Angle Cable Using RG316-DS Coax with HeatShrink	ITEM NO. PE3987/HS
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.	SIZE A	CAGE CODE 53919	DRAWN BY BPUCHASKI