

SMA Male Right Angle to HN Male Cable Using RG223 Coax



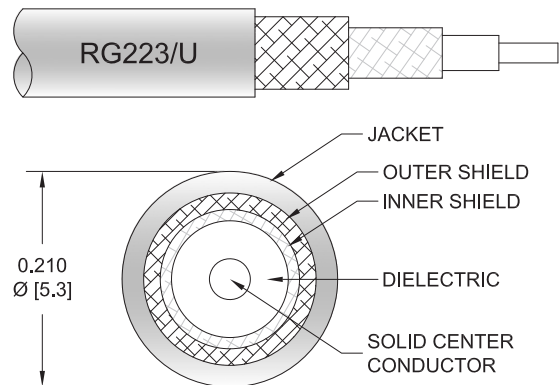
PE3W18503

Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: HN Male
- Cable Type: RG223
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W18503 SMA male right angle to HN male cable using RG223 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 HN cable assembly has a male to male gender configuration with 50 ohm flexible RG223 coax. The PE3W18503 SMA male to HN male cable assembly operates to 3 GHz. The right angle SMA interface on the RG223 cable allows 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		66		%
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Operating Voltage (AC)			500	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	
PE3W18503	Custom Lengths Available	Insertion Loss (Typ.)	0.02	0.06	0.09	0.13	0.248	dB/ft	
			0.07	0.19	0.3	0.44	0.82	dB/m	
PE3W18503-12	12 inch	Insertion Loss (Typ.)	0.32	0.36	0.39	0.44	0.55	dB	0.147
PE3W18503-24	24 inch	Insertion Loss (Typ.)	0.34	0.42	0.48	0.57	0.8	dB	0.179
PE3W18503-36	36 inch	Insertion Loss (Typ.)	0.36	0.47	0.57	0.71	1.05	dB	0.21
PE3W18503-60	60 inch	Insertion Loss (Typ.)	0.4	0.58	0.75	0.97	1.54	dB	0.272
PE3W18503-72	72 inch	Insertion Loss (Typ.)	0.42	0.64	0.84	1.11	1.79	dB	0.303

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:	0.1 dB
Base Weight:	0.147 pounds
Additional Weight per Inch:	0.00259 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.147 lbs [66.68 g]

Cable

Cable Type	RG223
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	PVC, Black
Jacket Diameter	0.209 in [5.31 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	HN Male
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 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	16-May inch	
Torque	3 in-lbs 0.34 Nm	

Environmental Specifications

Operating Range Temperature -40 to +80 deg C

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

Plotted and Other Data

Notes:

SMA Male Right Angle to HN Male Cable Using RG223 Coax



PE3W18503

Typical Performance Data

How to Order

Part Number Configuration:

PE3W18503

- xx

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W18503-12 = 12 inches long cable
PE3W18503-100cm = 100 cm long cable

SMA Male Right Angle to HN Male Cable Using RG223 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.

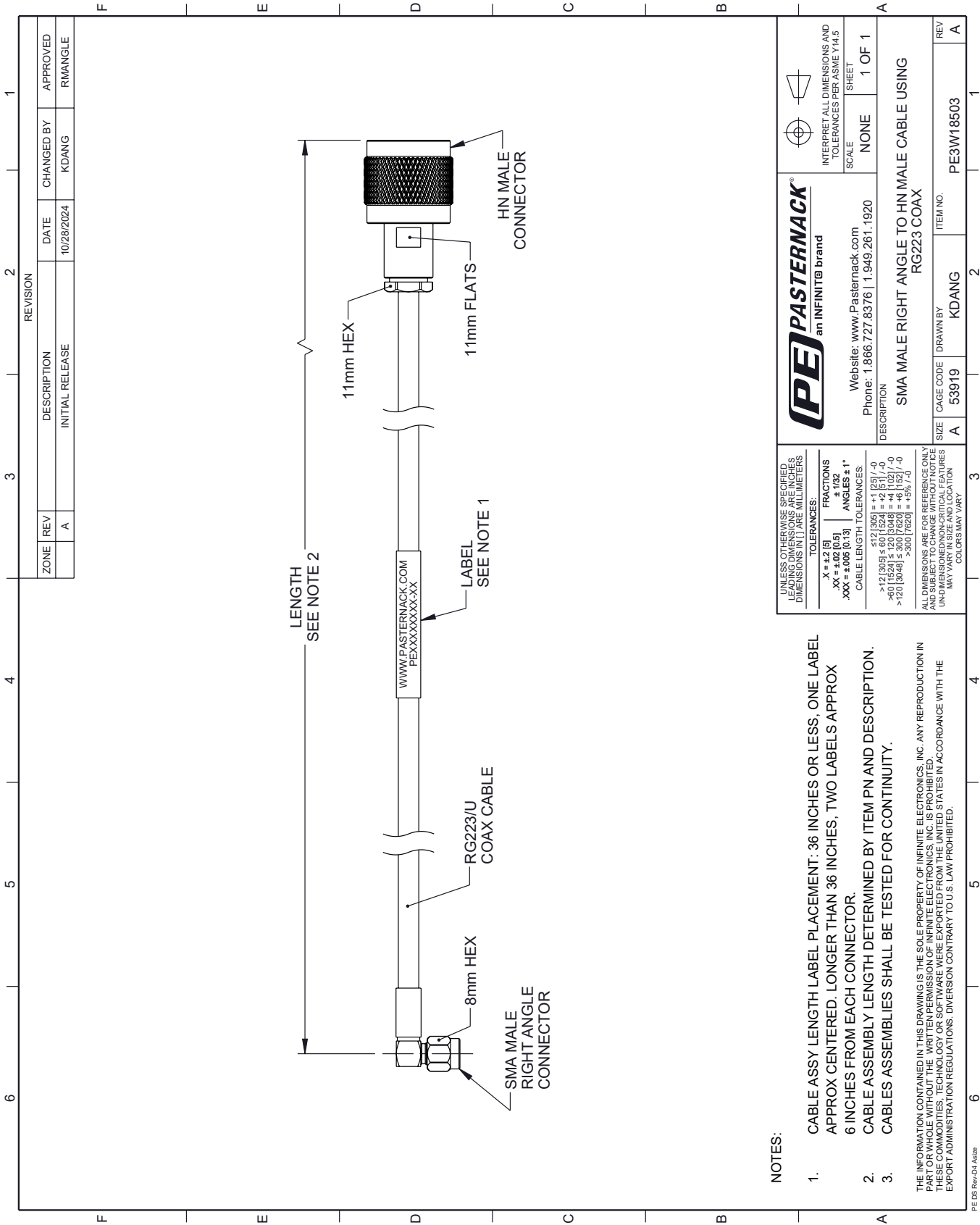
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Right Angle to HN Male Cable Using RG223 Coax PE3W18503](https://www.pasternack.com/sma-male-right-angle-to-hn-male-cable-using-rg223-pe3w18503-p.aspx)

URL: <https://www.pasternack.com/sma-male-right-angle-to-hn-male-cable-using-rg223-pe3w18503-p.aspx>

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PE3W18503 CAD Drawing

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

TOLERANCES:	
.X = ±.2 [5]	FRACTIONS ± 1/32
.XX = ±.02 [0.5]	ANGLES ± 1°
.XXX = ±.005 [0.13]	

CABLE LENGTH TOLERANCES:

≤ 12 [305]	±.12 [3.05]
> 12 [305] ≤ 60 [1524]	±.12 [3.05]
> 60 [1524] ≤ 120 [3048]	±.12 [3.05]
> 120 [3048] ≤ 300 [7620]	±.12 [3.05]
> 300 [7620]	±.12 [3.05]

ALL DIMENSIONS ARE FOR REFERENCE ONLY
DIMENSIONS FOR MANUFACTURING
UNLESS OTHERWISE SPECIFIED
DIMENSIONS MAY VARY

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE NONE

SHEET 1 OF 1

DESCRIPTION
SMA MALE RIGHT ANGLE TO HN MALE CABLE USING RG223 COAX

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	KDANG	PE3W18503	A

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

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