

75 Ohm SMC Plug to 75 Ohm BNC Male Cable Using 75 Ohm RG187 Coax



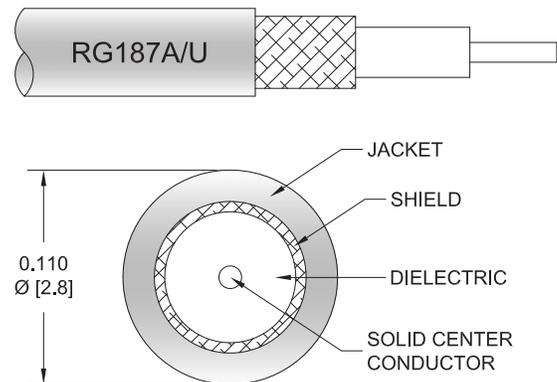
PE3W03170

Configuration

- Connector 1: SMC Plug
- Connector 2: BNC Male
- Cable Type: RG187
- Coax Flex Type: Flexible

Features

- Max Frequency 1 GHz
- 69.5% Phase Velocity
- PTFE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W03170 75 ohm SMC plug to 75 ohm BNC male cable using 75 ohm RG187 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 SMC to BNC cable assembly has a plug to male gender configuration with 75 ohm flexible RG187 coax. The PE3W03170 SMC plug to BNC male cable assembly operates to 1 GHz.

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		1	GHz
VSWR			1.4:1	
Velocity of Propagation		69.5		%
Capacitance		22 [72.18]		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		50	100	250	500	
PE3W03170	Custom Lengths Available	Insertion Loss (Typ.)	0.03	0.05	0.13	0.26	0.525	dB/ft	
			0.09	0.18	0.43	0.86	1.73	dB/m	
PE3W03170-12	12 inch	Insertion Loss (Typ.)	0.23	0.26	0.34	0.47	0.73	dB	0.054
PE3W03170-24	24 inch	Insertion Loss (Typ.)	0.26	0.31	0.47	0.73	1.25	dB	0.065
PE3W03170-36	36 inch	Insertion Loss (Typ.)	0.28	0.36	0.6	0.99	1.78	dB	0.075
PE3W03170-48	48 inch	Insertion Loss (Typ.)	0.31	0.41	0.73	1.25	2.3	dB	0.085
PE3W03170-60	60 inch	Insertion Loss (Typ.)	0.33	0.46	0.86	1.51	2.83	dB	0.095

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: 0.1 dB
 Loss due to Connector 2: 0.1 dB
 Base Weight: 0.054 pounds
 Additional Weight per Inch: 0.00084 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
 Weight 0.054 lbs [24.49 g]

Cable

Cable Type RG187
 Impedance 75 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 PTFE, White
 Jacket Diameter 0.11 in [2.79 mm]

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Connectors

Description	Connector 1	Connector 2
Type	SMC Plug	BNC Male
Impedance	75 Ohms	75 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
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

Environmental Specifications

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

Plotted and Other Data

Notes:

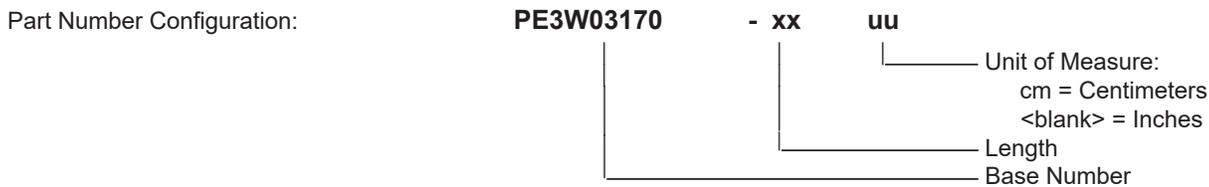
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PE3W03170

Typical Performance Data

How to Order



Example: PE3W03170-12 = 12 inches long cable
 PE3W03170-100cm = 100 cm long cable

75 Ohm SMC Plug to 75 Ohm BNC Male Cable Using 75 Ohm RG187 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.

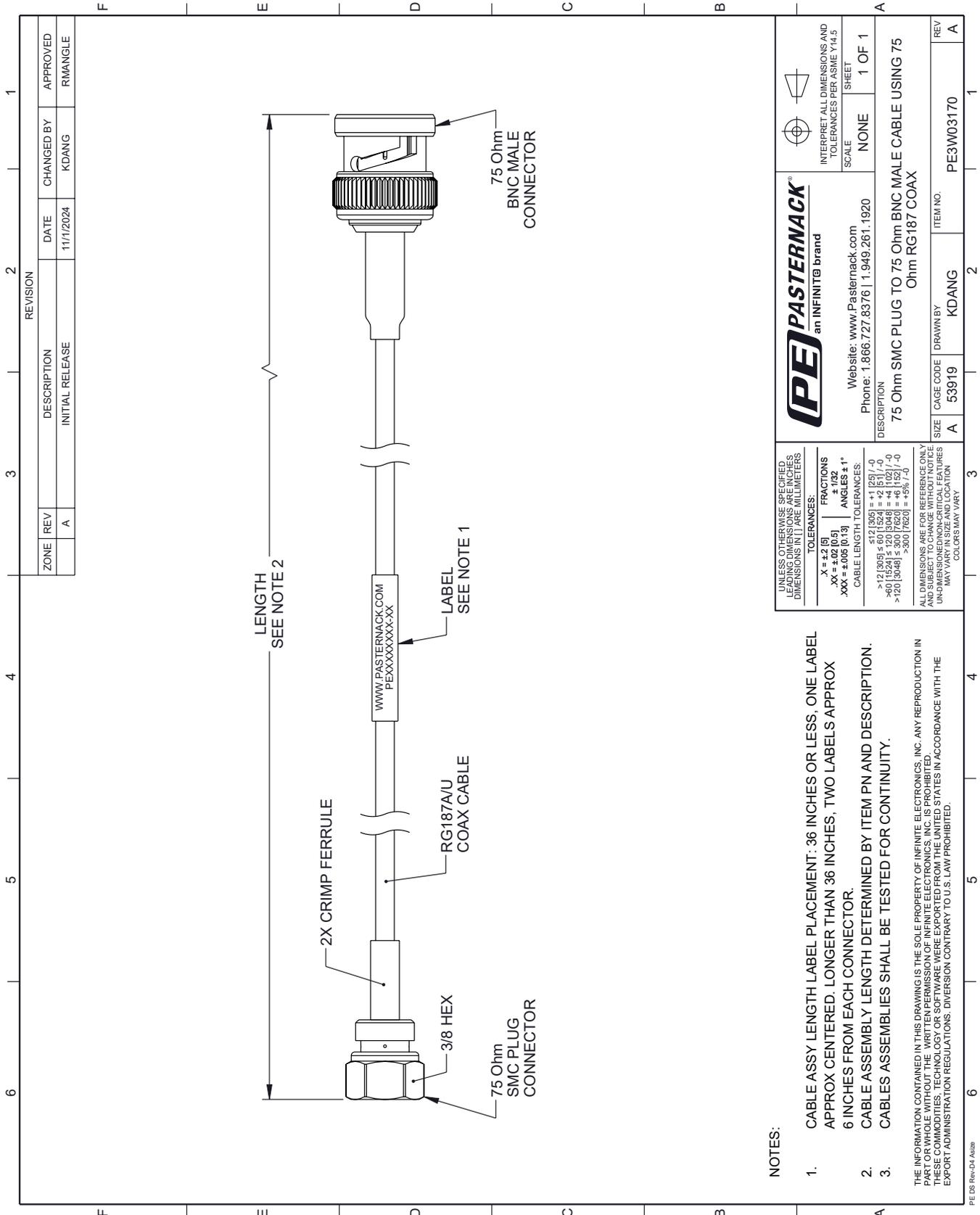
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [75 Ohm SMC Plug to 75 Ohm BNC Male Cable Using 75 Ohm RG187 Coax PE3W03170](https://www.pasternack.com/75-ohm-smc-plug-to-75-ohm-bnc-male-cable-using-rg187-pe3w03170-p.aspx)

URL: <https://www.pasternack.com/75-ohm-smc-plug-to-75-ohm-bnc-male-cable-using-rg187-pe3w03170-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 impliment 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.

PE3W03170 CAD Drawing

75 Ohm SMC Plug to 75 Ohm BNC Male Cable Using 75 Ohm RG187 Coax



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	A	11/1/2024	KDANG	RMANGLE
DESCRIPTION				
INITIAL RELEASE				

PE PASTERNAK
an INFINITE brand

Website: www.Pasternack.com
Phone: 1.866.727.8376 | 1.949.261.1920

DESCRIPTION
75 Ohm SMC PLUG TO 75 Ohm BNC MALE CABLE USING 75 Ohm RG187 COAX

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND TRAILING DIMENSIONS IN MILLIMETERS.

TOLERANCES:
 .X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]

ANGLES ± 1°
 CABLE LENGTH TOLERANCES:
 <12 [305] ±.60 [1524] = ±.2 [51] / -0
 >12 [305] ±.60 [1524] = ±.2 [51] / -0
 >40 [1024] ±.12 [3048] = ±.4 [1027] / -0
 >120 [3048] ±.30 [7620] = ±.93 [237] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE NONE
SHEET 1 OF 1

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	KDANG	PE3W03170	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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