



BNC Female to SMA Male Cable 18 Inch Using RG174 Coax

RF Cable Assemblies Technical Data Sheet

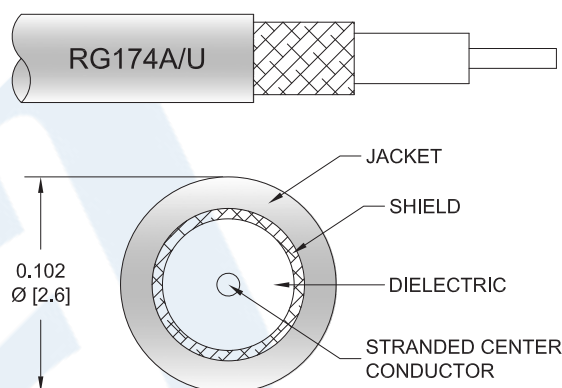
PE3W06305-18

Configuration

- Connector 1: BNC Female
- Connector 2: SMA Male
- Cable Type: RG174

Features

- Max Frequency 1 GHz
- 66% Phase Velocity
- PVC Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W06305-18 BNC female to SMA male 18 inch cable using RG174 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 BNC to SMA cable assembly has a female to male gender configuration with 50 ohm flexible RG174 coax. The PE3W06305-18 BNC female to SMA 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Female to SMA Male Cable 18 Inch Using RG174 Coax PE3W06305-18](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1,000	MHz
VSWR			1.5:1	
Velocity of Propagation		66		%
Capacitance		31.08 [101.97]		pF/ft [pF/m]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	50	100	250	500	1,000	MHz
Insertion Loss (Max.)	0.31	0.33	0.39	0.49	0.68	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss is estimated as 0.1 dB per BNC female and SMA male connector.

Mechanical Specifications

Cable Assembly

Length*	18 in [457.2 mm]
Diameter	0.453 in [11.51 mm]

Cable

Cable Type	RG174
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper Clad Steel
Dielectric Type	PE
Number of Shields	1
Shield Layer 1	Tinned Copper Braid
Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]

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Connectors

Description	Connector 1	Connector 2
Type	BNC Female	SMA Male
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	
Dielectric Type	PTFE	Teflon
Outer Conductor Material and Plating	Brass, Nickel	Copper, Nickel
Body Material and Plating	Brass, Nickel	Stainless Steel
Body Plating Specification	100 µin minimum	
Coupling Nut Material and Plating		Stainless Steel

Environmental Specifications

Temperature

Operating Range

-40 to +80 deg C

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

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration:

PE3W06305

- **xx**

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Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: PE3W06305-12 = 12 inches long cable
PE3W06305-100cm = 100 cm long cable

BNC Female to SMA Male Cable 18 Inch Using RG174 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.

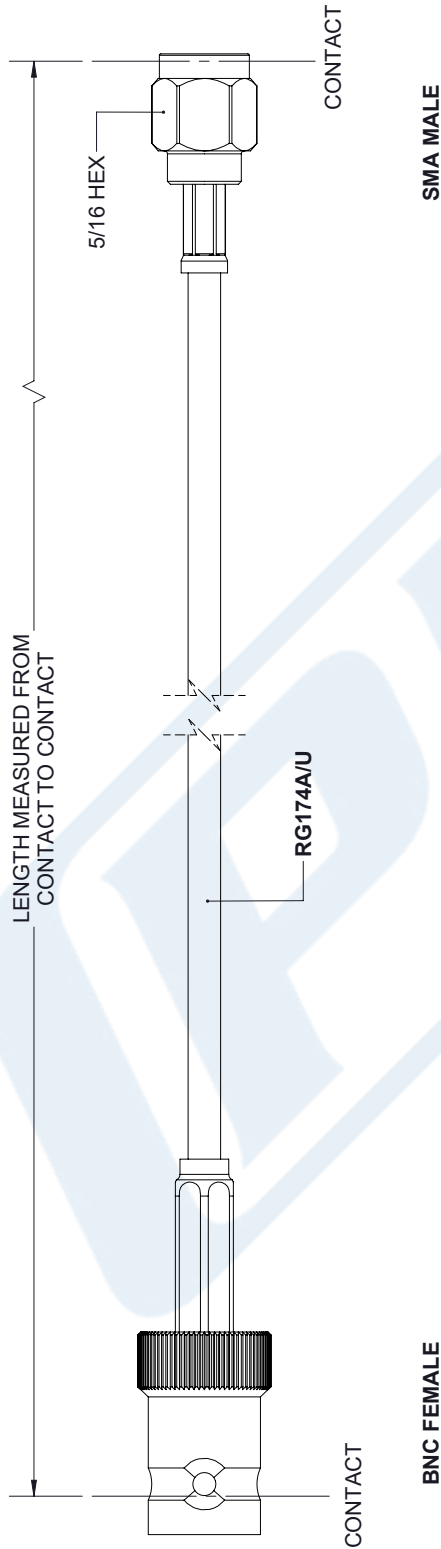
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Female to SMA Male Cable 18 Inch Using RG174 Coax PE3W06305-18](https://www.pasternack.com/bnc-female-sma-male-rg174au-cable-assembly-pe3w06305-18-p.aspx)

URL: <https://www.pasternack.com/bnc-female-sma-male-rg174au-cable-assembly-pe3w06305-18-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.

PE3W06305-18 CAD Drawing
BNC Female to SMA Male Cable 18 Inch Using RG174 Coax

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	1/21/2020	SELLIS



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

TOLERANCES:

.X = ± .2	[5.08]	FRACTIONS
.XX = ± .02	[.51]	± 1/32
.XXX = ± .005	[.13]	ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305]	± .1 [25]	/ -0
12 [305] < L ≤ 60 [1524]	± .2 [51]	/ -0
60 [1524] < L ≤ 120 [3048]	± .4 [102]	/ -0
120 [3048] < L ≤ 300 [7620]	± .6 [152]	/ -0
300 [7620] < L	± .5% L	/ -0

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1
SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	K.DANG	PE3W06305

REV A

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