

## SMB Jack to BNC Male Cable Using RG178 Coax

### PE3W00702

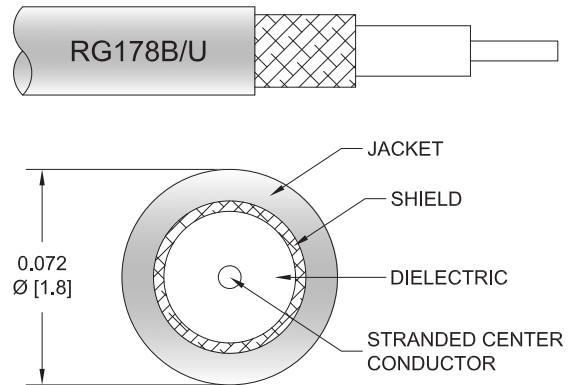


#### Configuration

- Connector 1: SMB Jack
- Connector 2: BNC Male
- Cable Type: RG178
- Coax Flex Type: Flexible

#### Features

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



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W00702 SMB jack to BNC male cable using RG178 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 SMB to BNC cable assembly has a jack to male gender configuration with 50 ohm flexible RG178 coax. The PE3W00702 SMB jack 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		1,000	MHz
VSWR			1.4:1	
Velocity of Propagation		69.5		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]

#### Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
		Frequency	100	250	500	1000	MHz	
PE3W00702	Custom Lengths Available	Insertion Loss (Typ.)	0.14	0.21	0.305	0.444	dB/ft	
			0.46	0.69	1.01	1.46	dB/m	
PE3W00702-6	6 inch	Insertion Loss (Typ.)	0.27	0.31	0.36	0.43	dB	0.047
PE3W00702-9	9 inch	Insertion Loss (Typ.)	0.31	0.36	0.43	0.54	dB	0.048
PE3W00702-12	12 inch	Insertion Loss (Typ.)	0.34	0.41	0.51	0.65	dB	0.049
PE3W00702-24	24 inch	Insertion Loss (Typ.)	0.48	0.62	0.81	1.09	dB	0.055
PE3W00702-36	36 inch	Insertion Loss (Typ.)	0.62	0.83	1.12	1.54	dB	0.06

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:	0.049 pounds
Additional Weight per Inch:	0.00042 pounds

## Mechanical Specifications

### Cable Assembly

Weight	0.049 lbs [22.23 g]
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### Cable

Cable Type	RG178
Impedance	50 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	FEP, Tan
Jacket Diameter	0.072 in [1.83 mm]
Repeated Minimum Bend Radius	0.393 in [9.98 mm]

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### Connectors

Description	Connector 1	Connector 2
Type	SMB Jack	BNC Male
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Gold	Brass, Gold
Contact Plating Specification		30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification		100 µin minimum
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		100 µin minimum

### 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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**PE3W00702**

## Typical Performance Data

## How to Order

Part Number Configuration:

**PE3W00702**

- XX

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

- Length

- Base Number

Example: PE3W00702-12 = 12 inches long cable  
PE3W00702-100cm = 100 cm long cable

SMB Jack to BNC Male Cable Using RG178 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.

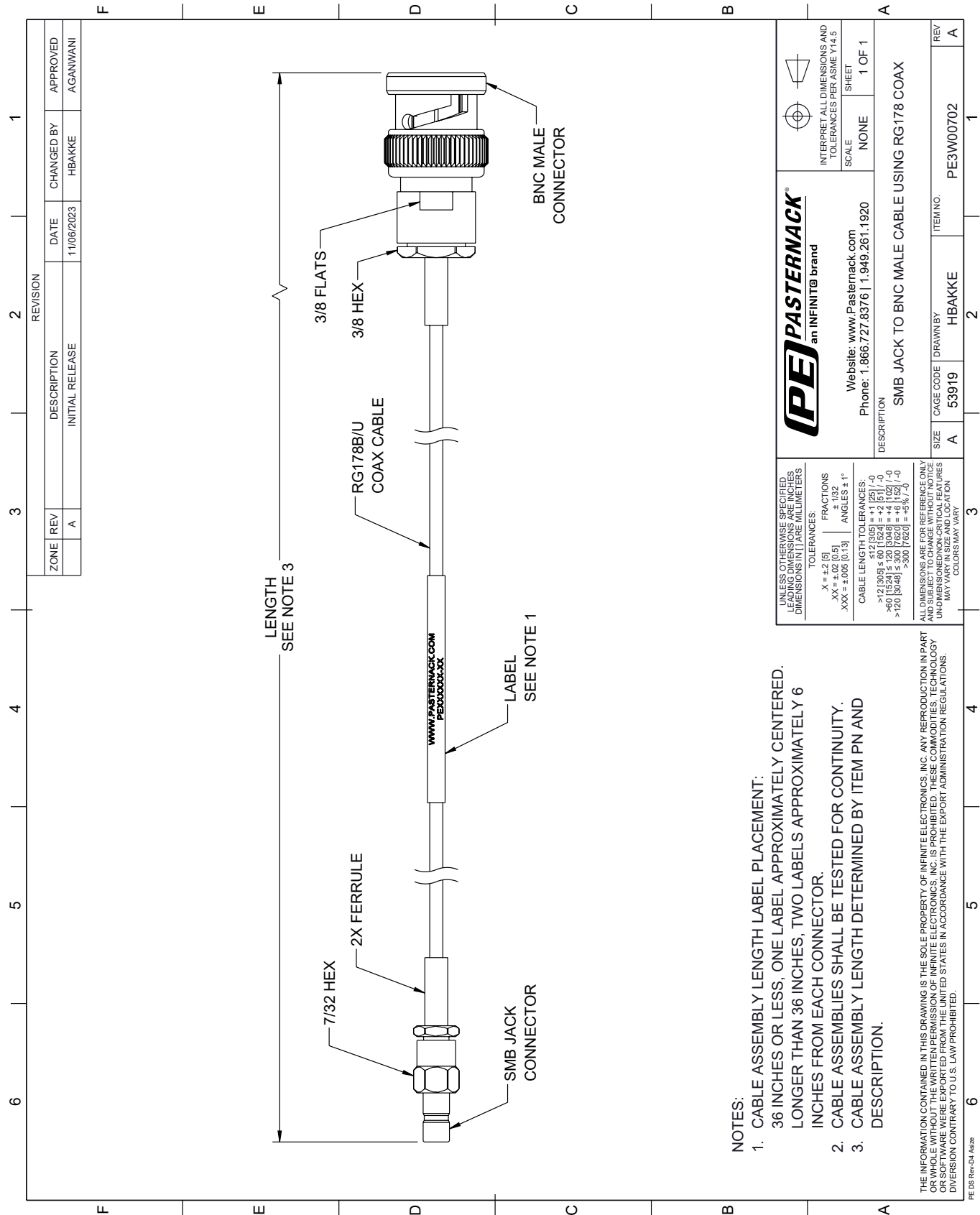
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMB Jack to BNC Male Cable Using RG178 Coax PE3W00702](#)

URL: <https://www.pasternack.com/smb-jack-to-bnc-male-cable-using-rg178-pe3w00702-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 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.

PE3W00702 CAD Drawing

SMB Jack to BNC Male Cable Using RG178 Coax



- 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.
  - 3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

<div>UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.</div> <div>TOLERANCES: X = ±.2 [5] .XX = ±.02 [0.5] .XXX = ±.005 [0.13] ANGLES ± 1°</div> <div>FRACTIONS ± 1/32</div> <div>CABLE LENGTH TOLERANCES: &gt;12 [305] ≤ 60 [1524] = ±.1 [25] / -0 &gt;60 [1524] ≤ 120 [3048] = ±.1 [25] / -0 &gt;120 [3048] ≤ 300 [7620] = ±.1 [25] / -0 &gt;300 [7620] = ±.1 [25] / -0</div> <div>ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS OF CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</div>		<div><b>PE PASTERNAK</b> an INFINITE® brand</div> <div>Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920</div> <div>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</div> <div>SCALE: NONE SHEET: 1 OF 1</div>	
DESCRIPTION SMB JACK TO BNC MALE CABLE USING RG178 COAX		SIZE A	CAGE CODE 53919
DRAWN BY HBAKKE		ITEM NO. PE3W00702	REV A