



SMA Male to BNC Female Bulkhead Cable Using RG178 Coax

RF Cable Assemblies Technical Data Sheet

PE3W10233

Configuration

- Connector 1: SMA Male
- Connector 2: BNC Female Bulkhead
- Cable Type: RG178

Features

- Max Frequency 1 GHz
- 70% Phase Velocity
- FEP Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W10233 SMA male to BNC female bulkhead 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 SMA to BNC cable assembly has a male to female gender configuration with 50 ohm flexible RG178 coax. The PE3W10233 SMA male to BNC female cable assembly operates to 1 GHz. Our RF cable assembly with BNC bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

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 to BNC Female Bulkhead Cable Using RG178 Coax PE3W10233](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1,000	MHz
VSWR			1.4:1	
Velocity of Propagation		70		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	50	100	250	500	1,000	MHz
Insertion Loss (Typ.)	0.069	0.138	0.208	0.305	0.444	dB/ft
	0.23	0.45	0.68	1	1.46	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

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	0.4 in [10.16 mm]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	BNC Female Bulkhead
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Phosphor Bronze, Gold
Contact Plating Specification	50 µin minimum	
Dielectric Type	PTFE	POM
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	
Hex Size	5/16 inch	
Torque	3 in-lbs [0.34 Nm]	

Environmental Specifications

Temperature

Operating Range

-40 to +85 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:

PE3W10233

- **xx**

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

Example: PE3W10233-12 = 12 inches long cable
PE3W10233-100cm = 100 cm long cable

SMA Male to BNC Female Bulkhead 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.

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URL:

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.

PE3W10233 CAD Drawing
SMA Male to BNC Female Bulkhead Cable Using RG178 Coax

