



### **RF Cable Assemblies Technical Data Sheet**

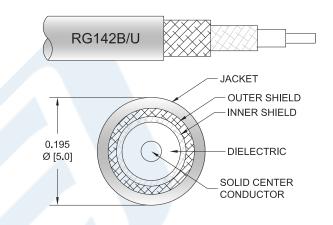
#### PE3W12237

## Configuration

- Connector 1: SMA Female BulkheadConnector 2: BNC Male Right Angle
- Cable Type: RG142

#### **Features**

- Max Frequency 4 GHz
- 70% Phase Velocity
- · Double Shielded
- FEP Jacket



# **Applications**

· General Purpose

· Laboratory Use

#### Description

Pasternack's PE3W12237 SMA female bulkhead to BNC male right angle cable using RG142 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 female to male gender configuration with 50 ohm flexible RG142 coax. The PE3W12237 SMA female to BNC male cable assembly operates to 4 GHz. The right angle BNC interface on the RG142 cable allows for easier connections in tight spaces. Our RF cable assembly with SMA 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. 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SMA Female Bulkhead to BNC Male Right Angle Cable Using RG142 Coax PE3W12237

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 **Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451





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#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	GHz
VSWR			1.4:1	
Velocity of Propagation		70		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			500	Vrms

#### **Specifications by Frequency**

	094003					
Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	4	GHz
Insertion Loss (Typ.)	0.039 0.13	0.054 0.18	0.079 0.26	0.13 0.43	0.299 0.98	dB/ft dB/m

**Electrical Specification Notes:** 

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB for the SMA female connector and 0.2 dB for the BNC male connector.

#### **Mechanical Specifications**

#### **Cable Assembly**

Weight 0.109 lbs [49.44 g]

Cable

Cable Type RG142
Impedance 50 Ohms
Inner Conductor Type Solid

Inner Conductor Material and Plating Copper Clad Steel, Silver

Dielectric Type PTF
Number of Shields 2

Shield Layer 1 Silver Plated Copper Braid Shield Layer 2 Silver Plated Copper Braid

Jacket MaterialFEP, TanJacket Diameter0.195 in [4.95 mm]

Repeated Minimum Bend Radius 1 in [25.4 mm]

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#### **Connectors**

Description	Connector 1	Connector 2	
Туре	SMA Female Bulkhead	BNC Male Right Angle	
Specification	MIL-STD-348A MIL-STD-348		
Impedance	50 Ohms 50 Ohms		
Contact Material and Plating	Beryllium Copper, Gold Brass, Go		
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	
Coupling Nut Plating Specification		100 μin minimum	

### **Environmental Specifications**

Temperature

Operating Range

-55 to +165 deg C

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:

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#### **RF Cable Assemblies Technical Data Sheet**

PE3W12237

#### **How to Order**



Example: PE3W12237-12 = 12 inches long cable PE3W12237-100cm = 100 cm long cable

SMA Female Bulkhead to BNC Male Right Angle Cable Using RG142 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: https://www.pasternack.com/sma-female-bulkhead-to-bnc-male-cable-using-rg142-pe3w12237-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.

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**PE3W12237 CAD Drawing**SMA Female Bulkhead to BNC Male Right Angle Cable Using RG142 Coax

