

SMA Male Right Angle to N Female Bulkhead Cable Using RG142 Coax



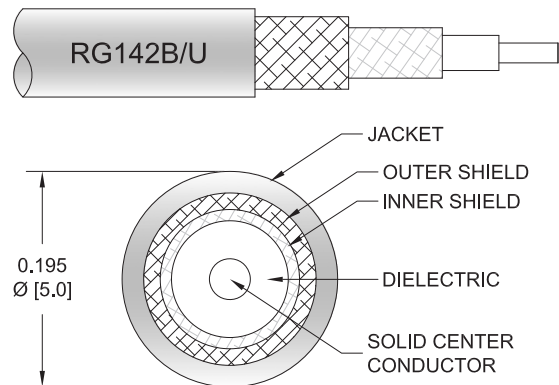
PE3197

Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: N Female Bulkhead
- Cable Type: RG142
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3197 SMA male right angle to type N female bulkhead 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 type N cable assembly has a male to female gender configuration with 50 ohm flexible RG142 coax. The PE3197 SMA male to type N female cable assembly operates to 6 GHz. The right angle SMA interface on the RG142 cable allows for easier connections in tight spaces. Our RF cable assembly with type N 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.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	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

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3197	Custom Lengths Available	Insertion Loss (Typ.)	0.059	0.087	0.129	0.212	0.385	dB/ft	
			0.2	0.29	0.43	0.7	1.27	dB/m	
PE3197-12	12 inch	Insertion Loss (Typ.)	0.36	0.39	0.43	0.52	0.69	dB	0.148
PE3197-24	24 inch	Insertion Loss (Typ.)	0.42	0.48	0.56	0.73	1.07	dB	0.19
PE3197-36	36 inch	Insertion Loss (Typ.)	0.48	0.57	0.69	0.94	1.46	dB	0.232
PE3197-48	48 inch	Insertion Loss (Typ.)	0.54	0.65	0.82	1.15	1.84	dB	0.274
PE3197-60	60 inch	Insertion Loss (Typ.)	0.6	0.74	0.95	1.36	2.23	dB	0.316

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: 0.2 dB
 Loss due to Connector 2: 0.1 dB
 Base Weight: 0.148 pounds
 Additional Weight per Inch: 0.0035 pounds

Mechanical Specifications

Cable Assembly

Weight 0.148 lbs [67.13 g]

Cable

Cable Type RG142
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper Clad Steel, Silver
 Dielectric Type PTFE
 Number of Shields 2
 Shield Layer 1 Silver Plated Copper Braid
 Shield Layer 2 Silver Plated Copper Braid
 Jacket Material FEP, Tan
 Jacket Diameter 0.195 in [4.95 mm]
 Repeated Minimum Bend Radius 1 in [25.4 mm]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	N Female Bulkhead
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Nickel
Outer Conductor Plating Specification		100 µin minimum
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	
Hex Size	5/16 inch	
Torque	3 in-lbs 0.34 Nm	

Environmental Specifications

Operating Range Temperature -55 to +165 deg C

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

Plotted and Other Data

Notes:
Values at 25°C, sea level.

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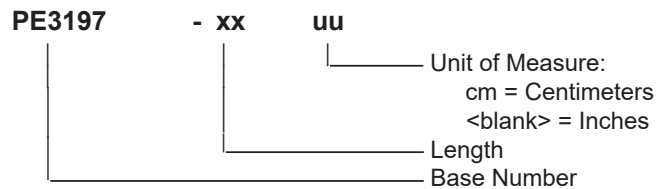


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Typical Performance Data

How to Order

Part Number Configuration:



Example: PE3197-12 = 12 inches long cable
PE3197-100cm = 100 cm long cable

SMA Male Right Angle to N Female Bulkhead 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Right Angle to N Female Bulkhead Cable Using RG142 Coax PE3197](#)

URL: <https://www.pasternack.com/sma-male-right-angle-to-n-female-bulkhead-cable-using-rg142-pe3197-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.

PE3197 CAD Drawing

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