

SMA Male to BNC Female Cable Using RG142 Coax

PE3173

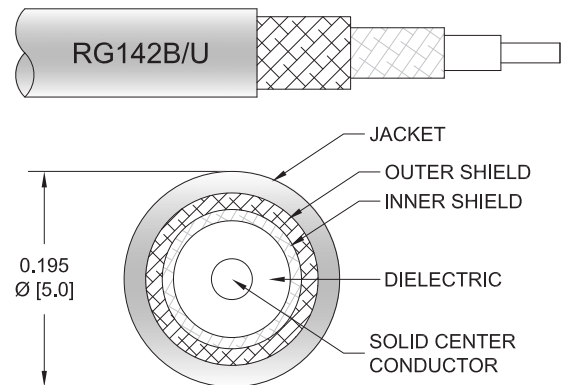


Configuration

- Connector 1: SMA Male
- Connector 2: BNC Female
- Cable Type: RG142
- Coax Flex Type: Flexible

Features

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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3173 SMA male to BNC female 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 male to female gender configuration with 50 ohm flexible RG142 coax. The PE3173 SMA male to BNC female cable assembly operates to 4 GHz. 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		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

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	4000	MHz	
PE3173	Custom Lengths Available	Insertion Loss (Typ.)	0.039	0.059	0.087	0.129	0.28	dB/ft	
			0.13	0.2	0.29	0.43	0.92	dB/m	
PE3173-12	12 inch	Insertion Loss (Typ.)	0.24	0.26	0.29	0.33	0.48	dB	0.084
PE3173-24	24 inch	Insertion Loss (Typ.)	0.28	0.32	0.38	0.46	0.76	dB	0.126
PE3173-36	36 inch	Insertion Loss (Typ.)	0.32	0.38	0.47	0.59	1.04	dB	0.168
PE3173-48	48 inch	Insertion Loss (Typ.)	0.36	0.44	0.55	0.72	1.32	dB	0.21
PE3173-60	60 inch	Insertion Loss (Typ.)	0.4	0.5	0.64	0.85	1.6	dB	0.252

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: 0.084 pounds
 Additional Weight per Inch: 0.0035 pounds

Mechanical Specifications

Cable Assembly

Weight 0.084 lbs [38.1 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	BNC Female
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		500
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 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	
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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Typical Performance Data

How to Order

Part Number Configuration:

PE3173

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

Length

Base Number

Example: PE3173-12 = 12 inches long cable
PE3173-100cm = 100 cm long cable

SMA Male to BNC Female 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.

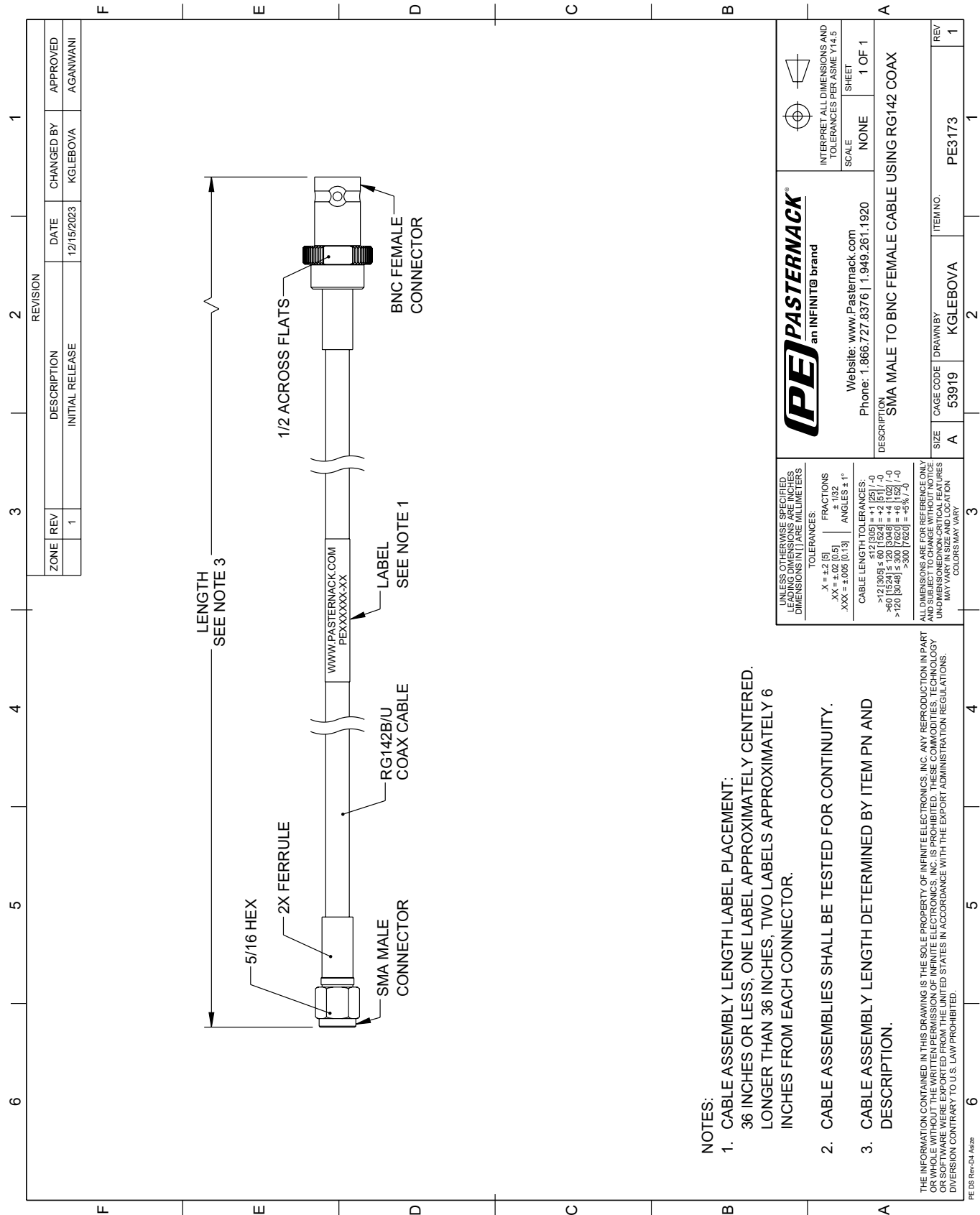
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to BNC Female Cable Using RG142 Coax PE3173](https://www.pasternack.com/sma-male-to-bnc-female-cable-using-rg142-pe3173-p.aspx)

URL: <https://www.pasternack.com/sma-male-to-bnc-female-cable-using-rg142-pe3173-p.aspx>

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PE3173 CAD Drawing

SMA Male to BNC Female Cable Using RG142 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.