

BNC Female Bulkhead to SMA Female Cable Using RG174 Coax



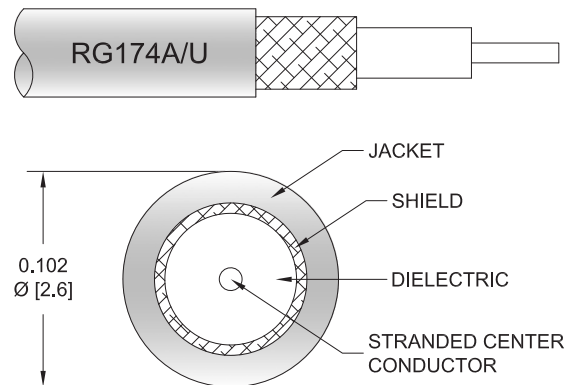
PE37457

Configuration

- Connector 1: BNC Female Bulkhead
- Connector 2: SMA Female
- Cable Type: RG174
- Coax Flex Type: Flexible

Features

- Max Frequency 1 GHz
- 66% Phase Velocity
- PVC Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE37457 BNC female bulkhead to SMA female cable using RG174 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 BNC to SMA cable assembly has a female to female gender configuration with 50 ohm flexible RG174 coax. The PE37457 BNC female to SMA 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.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1	GHz
VSWR			1.4:1	
Velocity of Propagation		66		%
Capacitance		31.08 [101.97]		pF/ft [pF/m]

Specifications by Frequency

BNC Female Bulkhead to SMA Female
Cable Using RG174 Coax



PE37457

Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
			Frequency	100	250	500	1000	
PE37457	Custom Lengths Available	Insertion Loss (Typ.)	0.08	0.14	0.211	0.32	dB/ft	
			0.28	0.45	0.7	1.05	dB/m	
PE37457-12	12 inch	Insertion Loss (Typ.)	0.29	0.34	0.42	0.52	dB	0.061
PE37457-24	24 inch	Insertion Loss (Typ.)	0.37	0.48	0.63	0.84	dB	0.07
PE37457-36	36 inch	Insertion Loss (Typ.)	0.46	0.62	0.84	1.16	dB	0.079
PE37457-48	48 inch	Insertion Loss (Typ.)	0.54	0.75	1.05	1.48	dB	0.088
PE37457-72	72 inch	Insertion Loss (Typ.)	0.71	1.03	1.47	2.12	dB	0.106

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: 0.061 pounds
 Additional Weight per Inch: 0.00075 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter: 0.5 in [12.7 mm]
 Weight: 0.061 lbs [27.67 g]

Cable

Cable Type: RG174
 Impedance: 50 Ohms
 Inner Conductor Type: Stranded
 Inner Conductor Material and Plating: Copper Clad Steel
 Dielectric Type: PE
 Number of Shields: 1
 Shield Layer 1: Tinned Copper Braid
 Jacket Material: PVC, Black
 Jacket Diameter: 0.11 in [2.79 mm]

BNC Female Bulkhead to SMA Female
Cable Using RG174 Coax



PE37457

Connectors

Description	Connector 1	Connector 2
Type	BNC Female Bulkhead	SMA Female
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		100
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	30 µin minimum	
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Nickel
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	

Environmental Specifications

Operating Range Temperature -40 to +80 deg C

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

Plotted and Other Data

Notes:

BNC Female Bulkhead to SMA Female Cable Using RG174 Coax

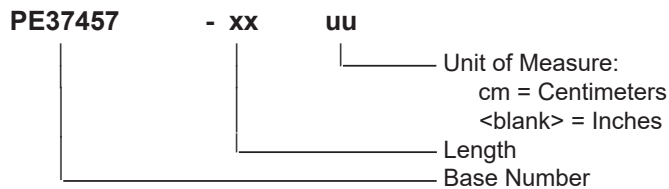


PE37457

Typical Performance Data

How to Order

Part Number Configuration:



Example: PE37457-12 = 12 inches long cable
PE37457-100cm = 100 cm long cable

BNC Female Bulkhead to SMA Female Cable Using RG174 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.

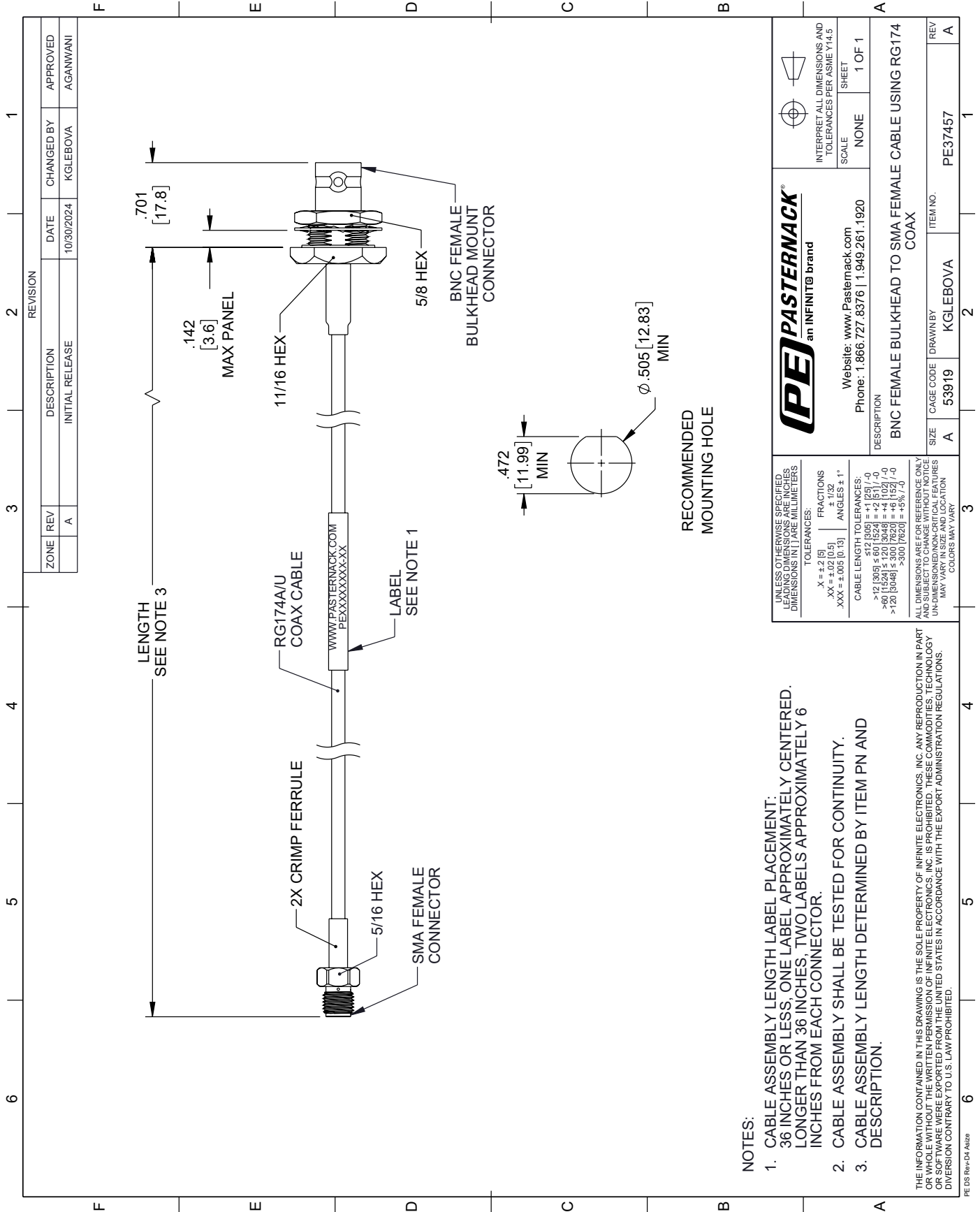
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Female Bulkhead to SMA Female Cable Using RG174 Coax PE37457](#)

URL: <https://www.pasternack.com/bnc-female-bulkhead-to-sma-female-cable-using-rg174-pe37457-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.

PE37457 CAD Drawing

BNC Female Bulkhead to SMA Female Cable Using RG174 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 ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

PE DS Rev-04 A1822

REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	10/30/2024	KGLEBOVA	AGANWANI

PASTERNAK an INFINIT® brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE NONE SHEET 1 OF 1
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		DESCRIPTION BNC FEMALE BULKHEAD TO SMA FEMALE CABLE USING RG174 COAX
UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN PARENS ARE IN MILLIMETERS TOLERANCES: .X = ±.2 [5] FRACTIONS .XX = ±.02 [0.5] ANGLES ± 1° .XXX = ±.005 [0.13]	CABLE LENGTH TOLERANCES: >12 [305] ≤ 60 [1524] = +1 [25] / -0 >60 [1524] ≤ 120 [3048] = +4 [102] / -0 >120 [3048] ≤ 300 [7620] = +5 [127] / -0 >300 [7620] = +5 [127] / -0	ALL DIMENSIONS ARE FOR REFERENCE ONLY UNLESS OTHERWISE SPECIFIED. DIMENSIONS ON CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY
SIZE A CAGE CODE 53919 DRAWN BY KGLEBOVA ITEM NO. PE37457	REV A	1