

SMA Female to SMB Plug Cable Using RG174 Coax

PE3175

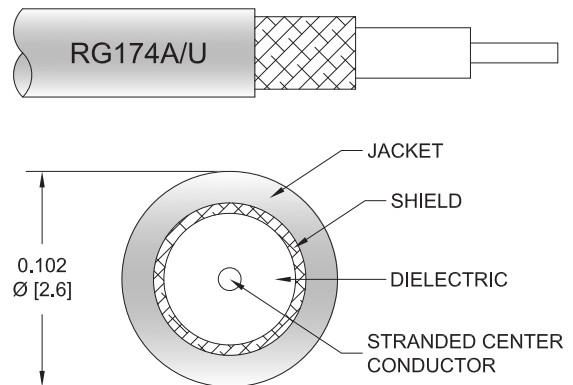


Configuration

- Connector 1: SMA Female
- Connector 2: SMB Plug
- 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 PE3175 SMA female to SMB plug 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 SMA to SMB cable assembly has a female to plug gender configuration with 50 ohm flexible RG174 coax. The PE3175 SMA female to SMB plug cable assembly operates to 1 GHz.

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		1,000	MHz
VSWR			1.4:1	
Velocity of Propagation		66		%
Capacitance		31.08 [101.97]		pF/ft [pF/m]

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
		Frequency	100	250	500	1000	MHz	
PE3175	Custom Lengths Available	Insertion Loss (Typ.)	0.08	0.14	0.21	0.32	dB/ft	
			0.28	0.45	0.7	1.05	dB/m	
PE3175-12	12 inch	Insertion Loss (Typ.)	0.29	0.34	0.42	0.52	dB	0.028
PE3175-24	24 inch	Insertion Loss (Typ.)	0.37	0.48	0.63	0.84	dB	0.037
PE3175-36	36 inch	Insertion Loss (Typ.)	0.46	0.62	0.84	1.16	dB	0.046
PE3175-48	48 inch	Insertion Loss (Typ.)	0.54	0.75	1.05	1.48	dB	0.055
PE3175-72	72 inch	Insertion Loss (Typ.)	0.71	1.03	1.47	2.12	dB	0.073

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: 0.028 pounds
 Additional Weight per Inch: 0.00075 pounds

Mechanical Specifications

Cable Assembly

Weight 0.028 lbs [12.7 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]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Female	SMB Plug
Specification	MIL-STD-348	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	100	
Contact Material and Plating	Beryllium Copper, 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
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut 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:
Values at 25°C, sea level.

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Typical Performance Data

How to Order

Part Number Configuration:

PE3175 **- xx** **uu**

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

Length
Base Number

Example: PE3175-12 = 12 inches long cable
 PE3175-100cm = 100 cm long cable

SMA Female to SMB Plug 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: [SMA Female to SMB Plug Cable Using RG174 Coax PE3175](#)

URL: <https://www.pasternack.com/sma-female-to-smb-plug-cable-using-rg174-pe3175-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.

PE3175 CAD Drawing
SMA Female to SMB Plug Cable Using RG174 Coax

