

Low Loss SMA Female to BNC Female Cable RG174 Coax

The SMA female to BNC female cable using RG174 coax, part number FMC00312, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to BNC cable assembly has a female to female gender configuration with 50 ohm flexible RG174 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00312 SMA female to BNC female 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 RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		1,000	MHz
VSWR			1.4:1	
Velocity of Propagation		66		%
Capacitance	31.08	[101.97]		pF/ft [pF/m]

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	50	100	250	500	1,000	MHz
Insertion Loss (Typ.)	0.04	0.08	0.13	0.21	0.31	dB/ft
	0.13	0.26	0.43	0.69	1.02	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

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]



Configuration:

- SMA Female
- BNC Female
- RG174

Features:

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

Applications:

- General Purpose
- Laboratory Use

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Connectors

Description	Connector 1	Connector 2
Type	SMA Female	BNC Female
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Spec.	50 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating	Brass, Gold	
Outer Cond Plating Spec.	3 µin minimum	
Body Material & Plating		Brass, Nickel
Body Plating Spec.		100 µin minimum
Hex Size	1/4 inch	

Environmental Specifications

Temperature

Operating Range -40 to +80 deg C

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

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMC00312 - xx uu

cm = Centimeters
 <blank> = Inches
 Length

Example: FMC00312-12 = 12 inches long cable
 FMC00312-100cm = 100 cm long cable

Low Loss SMA Female to BNC Female Cable RG174 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss SMA Female to BNC Female Cable RG174 Coax FMC00312](#)

URL: <https://www.fairviewmicrowave.com/low-loss-sma-female-bnc-female-cable-rg174-coax-fmc00312-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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	2/24/2020	S.ELLIS

1/4 HEX

2X HEAT SHRINK SLEEVE

RG174

LENGTH MEASURED FROM CONTACT TO CONTACT

CONTACT

SMA FEMALE

CONTACT

BNC FEMALE

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SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. FMC00312	REV A

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