

## Low Loss SMA Female to BNC Female Cable RG174 Coax in 50 CM

The SMA female to BNC female 50 cm cable using RG174 coax, part number FMC00312-50CM, 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 FMC00312-50CM 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.) | 0.27 | 0.33 | 0.42 | 0.55 | 0.72  | dB    |

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Length\* 19.68 in [499.87 mm]

#### 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 $\mu$ in minimum    | 30 $\mu$ in minimum  |
| Dielectric Type               | PTFE                   | PTFE                 |
| Outer Cond Material & Plating | Brass, Gold            |                      |
| Outer Cond Plating Spec.      | 3 $\mu$ in minimum     |                      |
| Body Material & Plating       |                        | Brass, Nickel        |
| Body Plating Spec.            |                        | 100 $\mu$ in minimum |
| Hex Size                      | 1/4 inch               |                      |

**Environmental Specifications**
**Temperature**

Operating Range -40 to +80 deg C

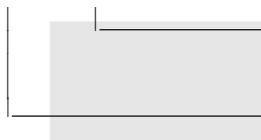
**Compliance Certifications** (see [product page](#) for current document)

**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

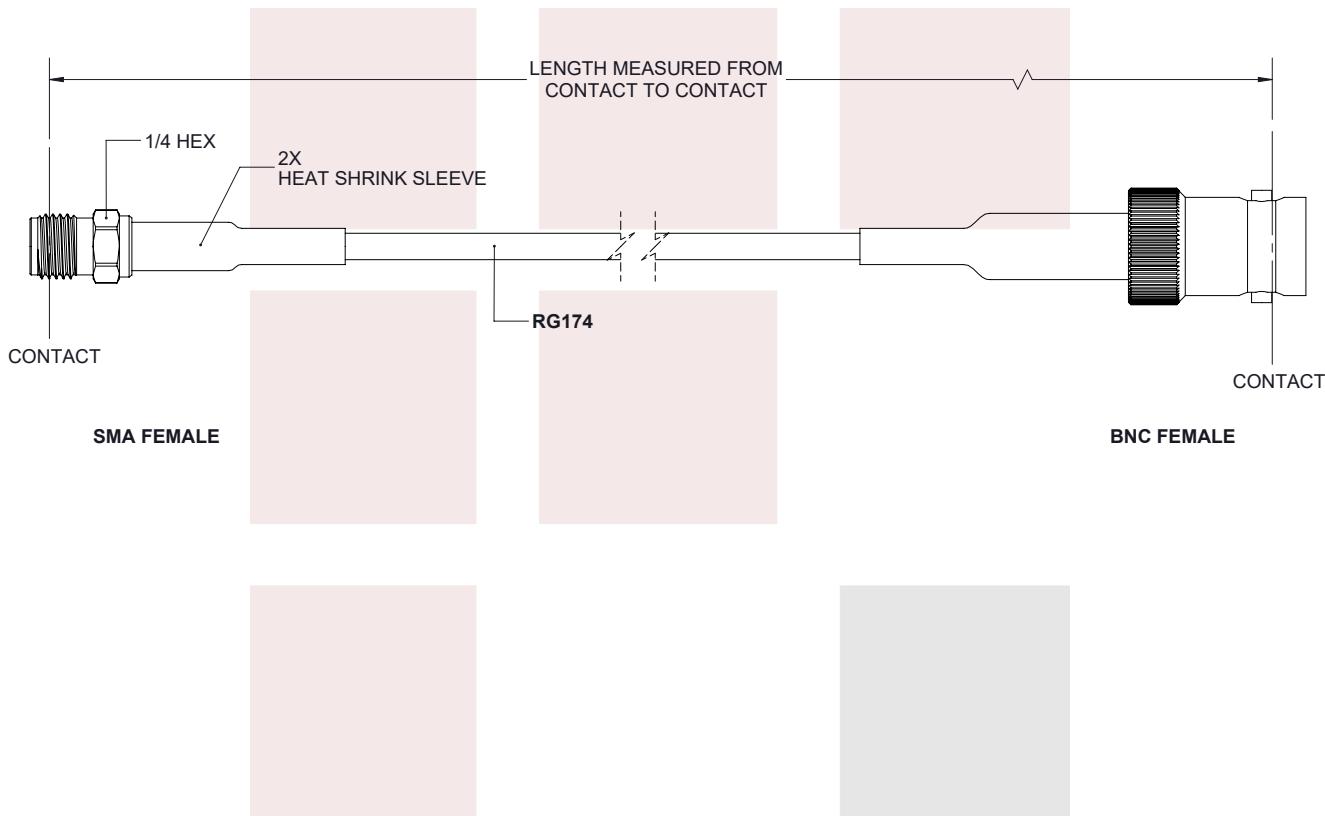
Low Loss SMA Female to BNC Female Cable RG174 Coax in 50 CM from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss SMA Female to BNC Female Cable RG174 Coax in 50 CM FMC00312-50CM](#)

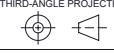
URL: <https://www.fairviewmicrowave.com/low-loss-sma-female-bnc-female-cable-rg174-coax-fmc00312-50cm-p.aspx>

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  |



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| ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.  |  | <b>SCALE</b><br>N/A  |  |
| TITLE<br><br>Low Loss SMA Female to BNC Female Cable RG174<br>Coax in 50 CM   | SIZE A<br>CAGE CODE 3FKR5<br>DRAWN BY K.DANG<br>ITEM NO. FMC00312  | REV A  |  |

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