

## FMC00020-60 DATA SHEET

# SMA Male to SMA Female Cable RG174 Coax in 60 Inch

The SMA male to SMA female 60 inch cable using RG174 coax, part number FMC00020-60, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male 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 FMC00020-60 SMA male to SMA 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 | Тур                    | Max   | Units        |
|-------------------------|-----|------------------------|-------|--------------|
| Frequency Range         | DC  |                        | 1,000 | MHz          |
| VSWR                    |     |                        | 1.4:1 |              |
| Velocity of Propagation |     | 66                     |       | %            |
| Capacitance             | 3   | 31.08 [10 <sup>-</sup> | 1.97] | pF/ft [pF/m] |

#### **Performance by Frequency**

| Description           | F1   | F2   | F3   | F4    | F5 | Units |
|-----------------------|------|------|------|-------|----|-------|
| Frequency             | 100  | 250  | 500  | 1,000 |    | MHz   |
| Insertion Loss (Max.) | 0.62 | 0.81 | 1.15 | 1.8   |    | dB    |

**Electrical Specification Notes:** 

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. Insertion Loss is estimated as 0.1 dB per connector.

#### **Mechanical Specifications**

#### **Cable Assembly**

Jacket Diameter

Length\* 60 in [152.4 cm]

## Cable

Cable Type
Impedance
Inner Conductor Type
Inner Conductor Material and Plating
Dielectric Type
Number of Shields
Shield Layer 1
Jacket Material

RG174 50 Ohms Stranded Copper Clad Steel PE 1

Tinned Copper Braid

PVC, Black 0.11 in [2.79 mm]



## **Configuration:**

- SMA Male
- SMA 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           |  |
|-----------------------------|--------------------|-----------------------|--|
| Туре                        | SMA Male           | SMA Female            |  |
| Specification               | MIL-STD-348A       | MIL-STD-348A          |  |
| Impedance                   | 50 Ohms            | 50 Ohms               |  |
| Contact Material & Plating  | Brass, Gold        | Beryllium Copper, Gol |  |
| Contact Plating Spec.       | 50 µin minimum     | 50 µin minimum        |  |
| Dielectric Type             | PTFE               | PTFE                  |  |
| Outer Cond Material & Plati | ng                 | Brass, Gold           |  |
| Outer Cond Plating Spec.    |                    | 3 µin minimum         |  |
| Body Material & Plating     | Brass, Nickel      |                       |  |
| Body Plating Spec.          | 100 µin minimum    |                       |  |
| Coupling Nut Material & Pla | ting Brass, Nickel |                       |  |
| Coupling Nut Plating Spec.  | 100 μin minimum    |                       |  |
| Hex Size                    | 5/16 inch          | 1/4 inch              |  |
| Torque                      | 3 in-lbs 0.34 Nm   |                       |  |

**Environmental Specifications** 

**Temperature** 

Operating Range

-40 to +80 deg C

**Compliance Certifications** (see product page for current document)

## **Plotted and Other Data**

Notes:

• Values at 25°C, sea level.

## **How to Order**

Part Number Configuration:

FMC00020 - xx uu | cm = Centimeters | cblank > = Inches | Length

Example: FMC00020-12 = 12 inches long cable

FMC00020-100cm = 100 cm long cable





SMA Male to SMA Female Cable RG174 Coax in 60 Inch 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: SMA Male to SMA Female Cable RG174 Coax in 60 Inch FMC00020-60

URL: https://www.fairviewmicrowave.com/sma-male-sma-female-cable-rg174-coax-fmc00020-60-p.aspx







