

## SMA Female to SMA Female Cable RG-58 Coax in 60 Inch

The SMA female to SMA female 60 inch cable using RG-58 coax, part number FMC00231-60, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a female to female gender configuration with 50 ohm flexible RG58C/U coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00231-60 SMA female to SMA female cable assembly operates to 5 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   |          | 5     | GHz          |
| VSWR                    |      |          | 1.4:1 |              |
| Velocity of Propagation |      | 66       |       | %            |
| Capacitance             | 30.8 | [101.05] |       | pF/ft [pF/m] |
| Operating Voltage (AC)  |      |          | 500   | Vrms         |

### Performance by Frequency

| Description           | F1   | F2  | F3  | F4  | F5  | Units |
|-----------------------|------|-----|-----|-----|-----|-------|
| Frequency             | 0.25 | 0.5 | 1   | 2.5 | 5   | GHz   |
| Insertion Loss (Max.) | 0.55 | 0.7 | 1.2 | 1.8 | 3.2 | 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

|          |                   |
|----------|-------------------|
| Length*  | 60 in [152.4 cm]  |
| Diameter | 0.25 in [6.35 mm] |

#### Cable

|                                      |                     |
|--------------------------------------|---------------------|
| Cable Type                           | RG58C/U             |
| Impedance                            | 50 Ohms             |
| Inner Conductor Type                 | Stranded            |
| Inner Conductor Material and Plating | Copper, Tin         |
| Dielectric Type                      | PE                  |
| Number of Shields                    | 1                   |
| Shield Layer 1                       | Tinned Copper Braid |
| Jacket Material                      | PVC, Black          |
| Jacket Diameter                      | 0.195 in [4.95 mm]  |



### Configuration:

- SMA Female
- SMA Female
- RG58C/U

### Features:

- Max Frequency 5 GHz
- 66% Phase Velocity
- PVC Jacket

### Applications:

- General Purpose
- Laboratory Use

Fairview Microwave  
301 Leora Ln., Suite 100  
Lewisville, TX 75056  
Tel: 1-800-715-4396 / (972) 649-6678  
Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

## Connectors

| Description                | Connector 1            | Connector 2            |
|----------------------------|------------------------|------------------------|
| Type                       | SMA Female             | SMA Female             |
| Impedance                  | 50 Ohms                | 50 Ohms                |
| Contact Material & Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Contact Plating Spec.      | 50μ in. minimum        | 50μ in. minimum        |
| Dielectric Type            | PTFE                   | PTFE                   |
| Body Material & Plating    | Brass, Nickel          | Brass, Nickel          |
| Body Plating Spec.         | 100μ in. minimum       | 100μ in. minimum       |

## 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:

**FMC00231 - xx uu**

cm = Centimeters  
 <blank> = Inches

Length

Example: FMC00231-12 = 12 inches long cable  
 FMC00231-100cm = 100 cm long cable

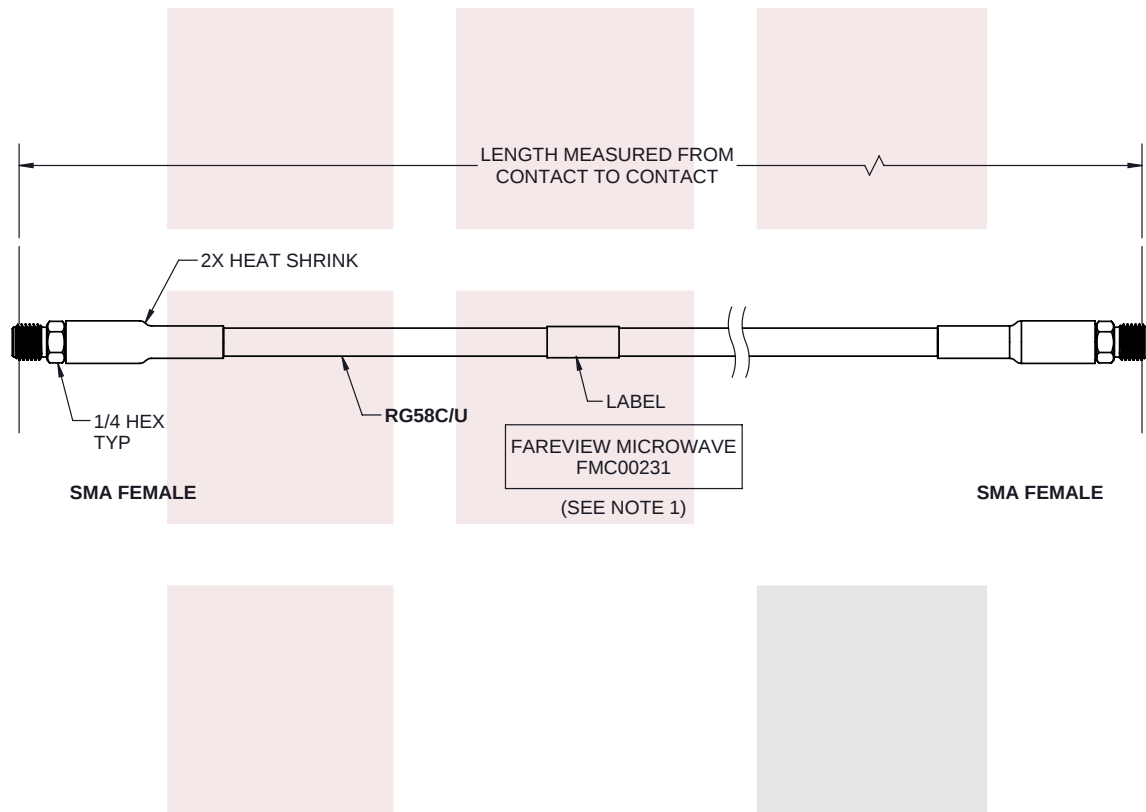
SMA Female to SMA Female Cable RG-58 Coax in 60 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [SMA Female to SMA Female Cable RG-58 Coax in 60 Inch FMC00231-60](#)

URL: <https://www.fairviewmicrowave.com/sma-female-sma-female-cable-rg58-coax-fmc00231-60-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 | 09/03/20 | SELLIS   |



**NOTES:**

1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED.  
CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH  
END 6.0" FROM THE END OF THE CONNECTOR.

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.

|                                                                 |                    |                                                                                                       |                      |                                                                                                                                            |  |
|-----------------------------------------------------------------|--------------------|-------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p><b>Fairview Microwave</b><br/>an INFINITE brand</p>          |                    | <p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES<br/>DIMENSIONS IN [ ] ARE MILLIMETERS</p> |                      | <p>THIRD-ANGLE PROJECTION</p>                                                                                                              |  |
| <p>TITLE</p>                                                    |                    | <p>TOLERANCES:</p>                                                                                    |                      | <p>THE INFORMATION AND<br/>DESIGN IN THIS DOCUMENT<br/>IS THE PROPERTY OF<br/>FAIRVIEW MICROWAVE CORPORATION.<br/>ALL RIGHTS RESERVED.</p> |  |
| <p>SMA Female to SMA Female Cable RG-58 Coax in 60<br/>Inch</p> |                    | <p>CABLE LENGTH (L) TOLERANCES:</p>                                                                   |                      | <p>SHEET 1 OF 1</p>                                                                                                                        |  |
|                                                                 |                    | <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>                                                   |                      | <p>SCALE N/A</p>                                                                                                                           |  |
| SIZE<br>A                                                       | CAGE CODE<br>3FKR5 | DRAWN BY<br>BPUCHASKI                                                                                 | ITEM NO.<br>FMC00231 | REV<br>A                                                                                                                                   |  |

T-Rev.D