

RA SMA Male to RA SMA Male Cable RG223 Coax

The RA SMA male to RA SMA male cable using RG223 coax, part number FMC00229, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to male gender configuration with 50 ohm flexible RG223 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00229 SMA male to SMA male cable assembly operates to 4 GHz. The right angle SMA interfaces on the RG223 cable allow for easier connections in tight spaces. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness.

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 | | 4 | 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 | 0.1 | 0.25 | 0.5 | 1 | 4 | GHz |
| Insertion Loss (Typ.) | 0.039 | 0.06 | 0.09 | 0.134 | 0.291 | dB |
| | 0.13 | 0.2 | 0.3 | 0.44 | 0.95 | |

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as $0.1 * \sqrt{FGHz}$ dB per connector.

Mechanical Specifications

Cable Assembly

Length* 0 in [0 mm]
 Weight 0.063 lbs [28.58 g]

Cable

Cable Type RG223
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper, Silver
 Dielectric Type PE
 Number of Shields 2
 Shield Layer 1 Silver Plated Copper Braid



Configuration:

- SMA Male Right Angle
- SMA Male Right Angle
- RG223

Features:

- Max Frequency 4 GHz
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

Applications:

- General Purpose
- Laboratory Use

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sales@fairviewmicrowave.com

Shield Layer 2 Silver Plated Copper Braid
 Jacket Material PVC, Black
 Jacket Diameter 0.209 in [5.31 mm]

Repeated Minimum Bend Radius 1 in [25.4 mm]

Connectors

| Description | Connector 1 | Connector 2 |
|---------------------------------|----------------|----------------|
| Type | SMA Male | SMA Male |
| Specification | MIL-STD-348A | MIL-STD-348A |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material & Plating | Brass, Gold | Brass, Gold |
| Contact Plating Spec. | 50 µin minimum | 50 µin minimum |
| Dielectric Type | PTFE | PTFE |
| Body Material & Plating | Brass, Gold | Brass, Gold |
| Body Plating Spec. | 3 µin minimum | 3 µin minimum |
| Coupling Nut Material & Plating | Brass, Gold | Brass, Gold |
| Coupling Nut Plating Spec. | 3 µin minimum | 3 µin minimum |
| Hex Size | 5/16 inch | 5/16 inch |

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:

FMC00229 - xx uu

cm = Centimeters
 <blank> = Inches

Length

Example: FMC00229-12 = 12 inches long cable
 FMC00229-100cm = 100 cm long cable

RA SMA Male to RA SMA Male Cable RG223 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

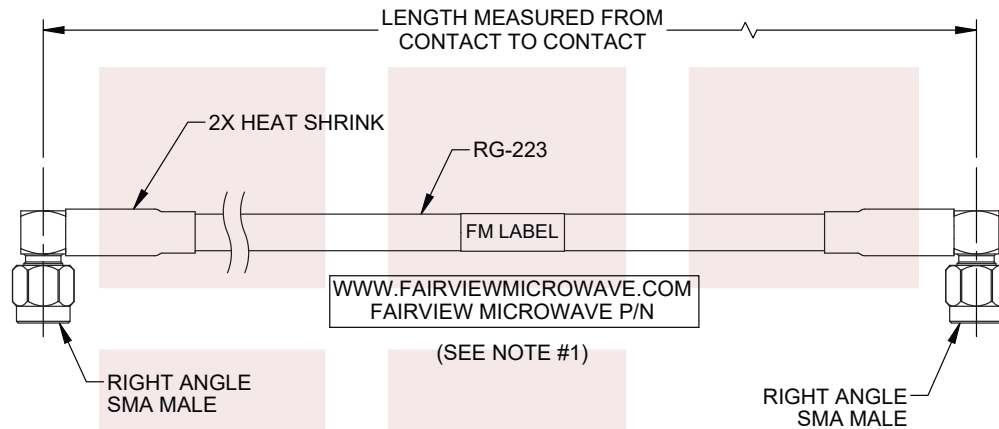
Click the following link to obtain additional part information: [RA SMA Male to RA SMA Male Cable RG223 Coax FMC00229](#)

URL: <https://www.fairviewmicrowave.com/ra-sma-male-to-ra-sma-male-cable-rg223-coax-fmc00229-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 | 11/11/2021 | SRAUTUS |



- 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.

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|---|---|---|---------------------------------------|-----------|-----------------------------|------------------|--------|---|--------------------|-------------|--|--|--|---|--|--|----------------------------|--|
| <p>Fairview Microwave an INFINIT[®] brand</p> | <p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> <p><u>TOLERANCES:</u> <u>CABLE LENGTH (L) TOLERANCES:</u></p> <table border="0"> <tr> <td>.X = ±.2 [5.08]</td> <td>FRACTIONS</td> <td>L ≤ 12 [305] = +1 [25] / -0</td> </tr> <tr> <td>.XX = ±.02 [.51]</td> <td>± 1/32</td> <td>12 [305] < L ≤ 60 [1524] = +2 [51] / -0</td> </tr> <tr> <td>.XXX = ±.005 [.13]</td> <td>ANGLES ± 1°</td> <td>60 [1524] < L ≤ 120 [3048] = +4 [102] / -0</td> </tr> <tr> <td></td> <td></td> <td>120 [3048] < L ≤ 300 [7620] = +6 [152] / -0</td> </tr> <tr> <td></td> <td></td> <td>300 [7620] < L = +5%L / -0</td> </tr> </table> | | .X = ±.2 [5.08] | FRACTIONS | L ≤ 12 [305] = +1 [25] / -0 | .XX = ±.02 [.51] | ± 1/32 | 12 [305] < L ≤ 60 [1524] = +2 [51] / -0 | .XXX = ±.005 [.13] | ANGLES ± 1° | 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0 | | | 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 | | | 300 [7620] < L = +5%L / -0 | <p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.</p> |
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| <p>TITLE</p> <p>RA SMA Male to RA SMA Male Cable RG223 Coax</p> | <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p> | | <p>SHEET 1 OF 1</p> <p>SCALE N/A</p> | | | | | | | | | | | | | | | |
| <p>SIZE A</p> | <p>CAGE CODE 3FKR5</p> | <p>DRAWN BY DMAY</p> | <p>ITEM NO. FMC00229</p> <p>REV A</p> | | | | | | | | | | | | | | | |

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