

## Low Loss SMA Male to RA N Male Cable RG-223 Coax

The SMA male to RA type N male cable using RG-223 coax, part number FMC00331, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to type N 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 FMC00331 SMA male to type N male cable assembly operates to 12.4 GHz. The right angle type N interface on the RG223 cable allows 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		12.4	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	0.4	1	3	5	11	GHz
Insertion Loss (Typ.)	0.08	0.13	0.24	0.33	0.54	dB/ft
	0.26	0.43	0.79	1.08	1.77	dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB for the straight connector and 0.2 dB for the right angle connector

### Mechanical Specifications

#### Cable Assembly

Diameter 1.29 in [32.77 mm]

#### 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
- N Male Right Angle
- RG223

### Features:

- Max Frequency 12.4 GHz
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

### Applications:

- General Purpose
- Laboratory Use

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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]
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### Connectors

Description	Connector 1	Connector 2
Type	SMA Male	N Male
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material & Plating	Brass, Gold	Brass, Gold
Contact Plating Spec.	50 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Gold	Brass, Nickel
Body Plating Spec.	3 µin minimum	100 µin minimum
Coupling Nut Material & Plating	Brass, Gold	Brass, Nickel
Coupling Nut Plating Spec.	3 µin minimum	
Hex Size	5/16 inch	
Torque	3 in-lbs 0.34 Nm	

### Environmental Specifications

#### Temperature

Operating Range	-20 to +80 deg C
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### Compliance Certifications (see [product page](#) for current document)

### Plotted and Other Data

Notes:

### How to Order

Part Number Configuration:

**FMC00331 - xx uu**

cm = Centimeters  
 <blank> = Inches  
 Length

Example: FMC00331-12 = 12 inches long cable  
 FMC00331-100cm = 100 cm long cable

Low Loss SMA Male to RA N Male Cable RG-223 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 Male to RA N Male Cable RG-223 Coax FMC00331](#)

URL: <https://www.fairviewmicrowave.com/low-loss-sma-male-ra-n-male-cable-rg223-coax-fmc00331-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

5/16 HEX

2X HEAT SHRINK SLEEVE

LENGTH MEASURED FROM CONTACT TO CONTACT

RG223

CONTACT

SMA MALE

CONTACT

N MALE RA

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<div><div><div></div><div></div><div></div><div></div></div><div><div>Fairview Microwave</div><div>an INFINITE brand</div></div></div>		UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS		THIRD-ANGLE PROJECTION  THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.	
TITLE Low Loss SMA Male to RA N Male Cable RG-223 Coax		TOLERANCES: .X = ±.2 [5.08] FRACTIONS ± 1/32 .XX = ±.02 [.51] ANGLES ± 1° .XXX = ±.005 [.13]		CABLE LENGTH (L) TOLERANCES: L ≤ 12 [305] = +1 [25] / -0 12 [305] < L ≤ 60 [1524] = +2 [51] / -0 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 300 [7620] < L = +5%L / -0	
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.				SHEET 1 OF 1	
SIZE A CAGE CODE 3FKR5 DRAWN BY K.DANG ITEM NO. FMC00331				SCALE N/A	
				REV A	

T-Rev.D