Fairview Microwave
an INFINITE brand

FMC00180-12
DATA SHEET

RA SMA Male to N Male Cable RG-223 Coax with Heat Shrink in 12 inch length

The RA SMA male to type N male 12 inch cable using RG223 coax, part number FMC00180-12, 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 FMC00180-12 SMA male to type N male cable assembly operates to 4 GHz. The right angle SMA 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.

Configuration:

- SMA Male Right Angle
- N Male
- RG223

Features:

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

Applications:

- General Purpose
- Laboratory Use

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.)	0.11	0.16	0.24	0.34	0.7	dB

Electrical Specification Notes:
The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1*SQRT(FGHz) dB per connector.

Mechanical Specifications

Cable Assembly

Length*	12 in [304.8 mm]
Weight	0.13 lbs [58.97 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

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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]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	N Male
Specification	MIL-STD-348A	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material & Plating	Brass, Gold	Brass, Gold
Contact Plating Spec.	50 µin minimum	ASTM B488
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Gold	Brass, Nickel
Body Plating Spec.	3 µin minimum	QQ-N-290
Coupling Nut Material & Plating	Brass, Gold	Brass, Nickel
Coupling Nut Plating Spec.	3 µin minimum	QQ-N-290
Hex Size	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:

How to Order

Part Number Configuration: **FMC00180 - xx uu**

- uu: cm = Centimeters; <blank> = Inches
- xx: Length

Example: FMC00180-12 = 12 inches long cable
FMC00180-100cm = 100 cm long cable

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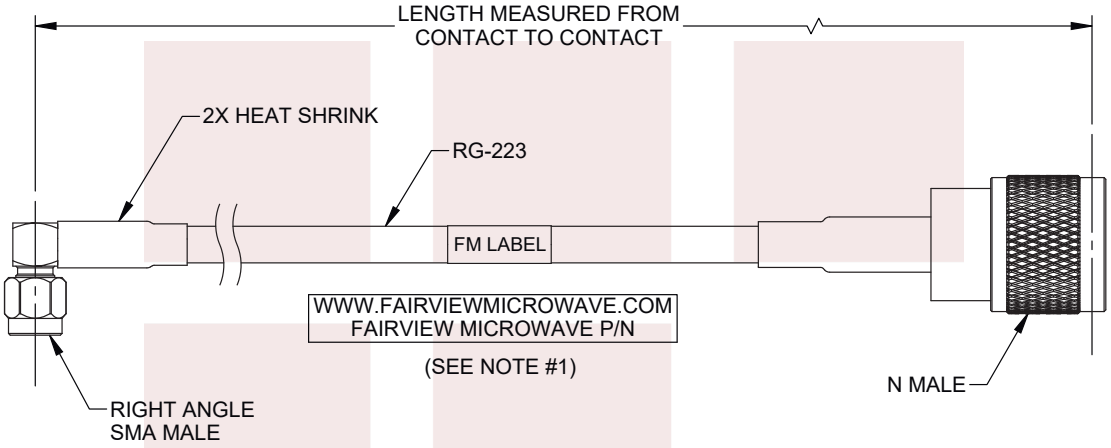
RA SMA Male to N Male Cable RG-223 Coax with Heat Shrink in 12 inch length from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: RA SMA Male to N Male Cable RG-223 Coax with Heat Shrink in 12 inch length FMC00180-12

URL: https://www.fairviewmicrowave.com/ra-sma-male-to-n-male-cable-rg223-coax-in-12-inch-fmc00180-12-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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TITLE

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

.X = ±.2 [5.08] FRACTIONS
.XX = ±.02 [.51] ± 1/32
.XXX = ±.005 [.13] ANGLES ± 1°

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

THIRD-ANGLE PROJECTION

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ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	DMAY	FMC00180	A

T-Rev.D

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