

SMA Male to RA SMA Male Cable RG-316 Coax

FMCA10070

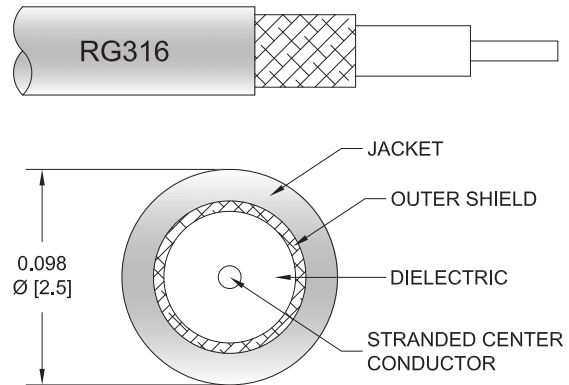


Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male Right Angle
- Cable Type: RG-316
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

The SMA male to RA SMA male cable using RG-316 coax, part number FMCA10070, 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 RG-316 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA10070 SMA male to SMA male cable assembly operates to 3 GHz. The right angle SMA interface on the RG-316 cable allows for easier connections in tight spaces.

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	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Capacitance		32 [104.99]		pF/ft [pF/m]

Specifications by Frequency

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FMCA10070



Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
FMCA10070	Custom Lengths Available	Insertion Loss (Typ.)	0.11	0.16	0.238	0.38	0.58	dB/ft	
			0.37	0.53	0.79	1.25	1.91	dB/m	
FMCA10070-12	12 Inch	Insertion Loss (Typ.)	0.56	0.61	0.69	0.83	1.03	dB	0.028
FMCA10070-24	24 Inch	Insertion Loss (Typ.)	0.67	0.77	0.93	1.21	1.61	dB	0.037
FMCA10070-36	36 Inch	Insertion Loss (Typ.)	0.78	0.93	1.17	1.59	2.19	dB	0.046
FMCA10070-48	48 Inch	Insertion Loss (Typ.)	0.89	1.09	1.41	1.97	2.77	dB	0.055
FMCA10070-72	72 Inch	Insertion Loss (Typ.)	1.11	1.41	1.88	2.73	3.93	dB	0.073

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.25 dB
Loss due to Connector 2:	0.2 dB
Base Weight:	0.028 pounds
Additional Weight per Inch:	0.32917 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.028 lbs [12.7 g]

Cable

Cable Type	RG-316
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	1
Shield Layer 1	Silver Plated Copper Braid
Jacket Material	FEP, Tan
Jacket Diameter	0.098 in [2.49 mm]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male Right Angle
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	15 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	200 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	200 µin minimum	100 µin minimum
Hex Size		5/16 in
Torque		5 in-lbs 0.57 Nm

Environmental Specifications

Operating Range Temperature -40 to +125 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

SMA Male to RA SMA Male Cable RG-316 Coax

FMCA10070



Typical Performance Data

How to Order

Part Number Configuration:

FMCA10070

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: FMCA10070-12 = 12 inches long cable
FMCA10070-100cm = 100 cm long cable

SMA Male to RA SMA Male Cable RG-316 Coax from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA Male to RA SMA Male Cable RG-316 Coax FMCA10070](#)

URL: <https://www.fairviewmicrowave.com/sma-male-to-ra-sma-male-cable-rg-316-coax-fmca10070-p.aspx>

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