

SMA Male to SMA Female Cable RG-316 Coax

FMCA10071

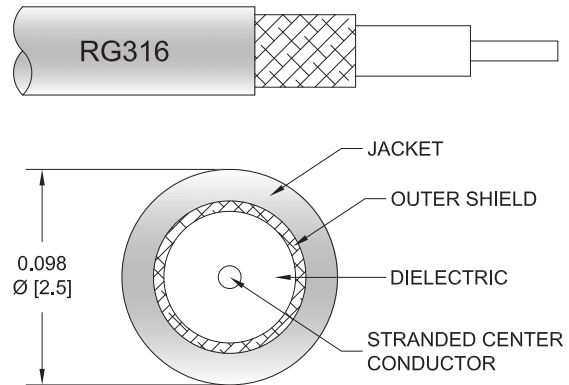


Configuration

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

Features

- Max Frequency 3 GHz
- 69% Phase Velocity
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

The SMA male to SMA female cable using RG-316 coax, part number FMCA10071, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to female 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 FMCA10071 SMA male to SMA female cable assembly operates to 3 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	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		69		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			250	Vrms
Jacket Spark			2,000	Vrms

Specifications by Frequency

SMA Male to SMA Female Cable RG-316 Coax

FMCA10071



Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
FMCA10071	Custom Lengths Available	Insertion Loss (Typ.)	0.11	0.16	0.24	0.38	0.58	dB/ft	
			0.37	0.53	0.79	1.25	1.91	dB/m	
FMCA10071-12	12 Inch	Insertion Loss (Typ.)	0.46	0.51	0.59	0.73	0.93	dB	0.019
FMCA10071-24	24 Inch	Insertion Loss (Typ.)	0.57	0.67	0.83	1.11	1.51	dB	0.028
FMCA10071-36	36 Inch	Insertion Loss (Typ.)	0.68	0.83	1.07	1.49	2.09	dB	0.037
FMCA10071-48	48 Inch	Insertion Loss (Typ.)	0.79	0.99	1.31	1.87	2.67	dB	0.046
FMCA10071-72	72 Inch	Insertion Loss (Typ.)	1.01	1.31	1.78	2.63	3.83	dB	0.064

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:	0.1 dB
Base Weight:	0.019 pounds
Additional Weight per Inch:	0.0265 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.019 lbs [8.62 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	0.102 in [2.59 mm]

SMA Male to SMA Female Cable RG-316 Coax

FMCA10071



Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Female
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		100
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	15 µin minimum	
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Nickel
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	200 µin minimum	
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	200 µin minimum	

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 SMA Female Cable RG-316 Coax

FMCA10071



Typical Performance Data

How to Order

Part Number Configuration:

FMCA10071

- xx

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: FMCA10071-12 = 12 inches long cable
FMCA10071-100cm = 100 cm long cable

SMA Male to SMA Female 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 SMA Female Cable RG-316 Coax FMCA10071](#)

URL: <https://www.fairviewmicrowave.com/sma-male-to-sma-female-cable-rg-316-coax-fmca10071-p.aspx>

The information contained within 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 liability arising out of the use of any part or document.

FMCA10071 CAD Drawing
SMA Male to SMA Female Cable RG-316 Coax

