

N Female Bulkhead to SMA Male Cable RG-316 Coax

FMCA10069

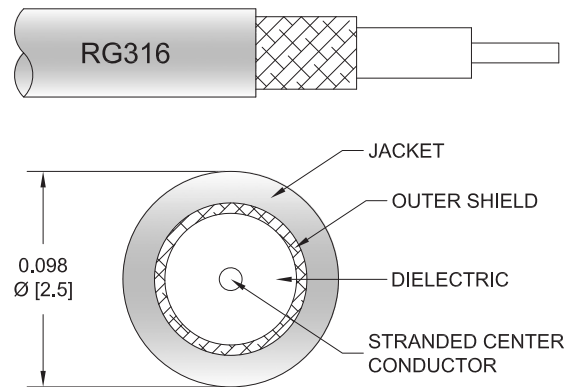


Configuration

- Connector 1: N Female Bulkhead
- Connector 2: SMA Male
- 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 type N female bulkhead to SMA male cable using RG-316 coax, part number FMCA10069, from Fairview Microwave is in-stock and ships same day. This Fairview type N to SMA cable assembly has a female 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 FMCA10069 type N female to SMA male cable assembly operates to 3 GHz. Our RF cable assembly with type N bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

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)			375	Vrms
Jacket Spark			2,000	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
FMCA10069	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	
FMCA10069-12	12 Inch	Insertion Loss (Typ.)	0.46	0.51	0.59	0.73	0.93	dB	0.027
FMCA10069-24	24 Inch	Insertion Loss (Typ.)	0.57	0.67	0.83	1.11	1.51	dB	0.036
FMCA10069-36	36 Inch	Insertion Loss (Typ.)	0.68	0.83	1.07	1.49	2.09	dB	0.045
FMCA10069-48	48 Inch	Insertion Loss (Typ.)	0.79	0.99	1.31	1.87	2.67	dB	0.054
FMCA10069-72	72 Inch	Insertion Loss (Typ.)	1.01	1.31	1.78	2.63	3.83	dB	0.072

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:	0.1 dB
Loss due to Connector 2:	0.25 dB
Base Weight:	0.027 pounds
Additional Weight per Inch:	0.32917 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.027 lbs [12.25 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]

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Connectors

Description	Connector 1	Connector 2
Type	N Female Bulkhead	SMA Male
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	15 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	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:

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Typical Performance Data

How to Order

Part Number Configuration: **FMCA10069** **- xx** **uu**

Unit of Measure:
cm = Centimeters
<blank> = Inches

Length
Base Number

Example: FMCA10069-12 = 12 inches long cable
FMCA10069-100cm = 100 cm long cable

N Female Bulkhead to 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: [N Female Bulkhead to SMA Male Cable RG-316 Coax FMCA10069](#)

URL: <https://www.fairviewmicrowave.com/n-female-bulkhead-to-sma-male-cable-rg-316-coax-fmca10069-p.aspx>

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FMCA10069 CAD Drawing
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