

## RA SMA Male to SSMC Plug Cable RG-316 Coax

Fairview Microwave's SSMC cable assemblies are part of our full line of RF components available for same-day shipping. These SSMC cable assemblies are designed to connect SSMC system components and test connections, delivering signal frequencies as high as 12.4 GHz. Our family of SSMC cables can also be used to connect SSMC ports on data acquisition systems, A/D modules or SSMC coax patch panels. If none of our standard options fit your application, you can specify your own custom SSMC cable assembly using Fairview's online RF Cable Designer.

Our SSMC cable assembly datasheet specifications and drawing with dimensions are shown below in this PDF. Fairview Microwave's broad catalog of RF, microwave and millimeter wave cable assemblies allow designers to configure and customize their signal connections however they like. Whether the need is to provide SSMC cabling for a data acquisition system, or simply create a custom cable assembly configuration, Pasternack has the right cable assemblies for the job. Fairview Microwave can also expertly build your custom cable assemblies for you and ship same day.

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		3	GHz
VSWR			1.5:1	
Velocity of Propagation		69		%
Operating Voltage (AC)			250	Vrms

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.05	0.1	0.4	1	3	GHz
Insertion Loss (Typ.)	0.08	0.11	0.21	0.38	0.58	dB/ft
	0.26	0.36	0.69	1.25	1.9	dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Diameter 0.315 in [8 mm]

#### Cable

Cable Type RG316  
 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



### Configuration:

- SMA Male Right Angle
- SSMC Plug
- RG316

### Features:

- Max Frequency 3 GHz
- 69% Phase Velocity
- FEP Jacket
- SSMC Cable Assembly Max. Operating Frequency of 3 GHz
- Small SSMC cable connection form factor (50% smaller than SMA, radially)
- Reliable threaded coupling
- In stock and ready to ship

### Applications:

- General Purpose
- Laboratory Use
- SSMC Cable General Purpose Test
- Data Acquisition Systems
- A/D Conversion Systems
- Ultra Wideband Digital Receivers
- Software defined radio (SDR)

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Jacket Diameter 0.098 in [2.49 mm]

**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male	SSMC Plug
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material & Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Spec.	50 µin minimum	MIL-G-45204
Dielectric Type	PTFE	Teflon
Body Material & Plating	Brass, Nickel	Beryllium Copper, Gold
Body Plating Spec.	100 µin minimum	MIL-G-45204
Coupling Nut Material & Plating	Brass, Nickel	Beryllium Copper, Gold
Coupling Nut Plating Spec.	100 µin minimum	MIL-G-45206
Hex Size	5/16 inch	
Torque	3 in-lbs [0.34 Nm]	1.75 in-lbs [0.2 Nm]

**Mechanical Specification Notes:**

\*All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.

**Environmental Specifications**  
**Temperature**

Operating Range -55 to +165 deg C

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

**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMCA1737 - xx uu**

cm = Centimeters  
 <blank> = Inches  
 Length

Example: FMCA1737-12 = 12 inches long cable  
 FMCA1737-100cm = 100 cm long cable

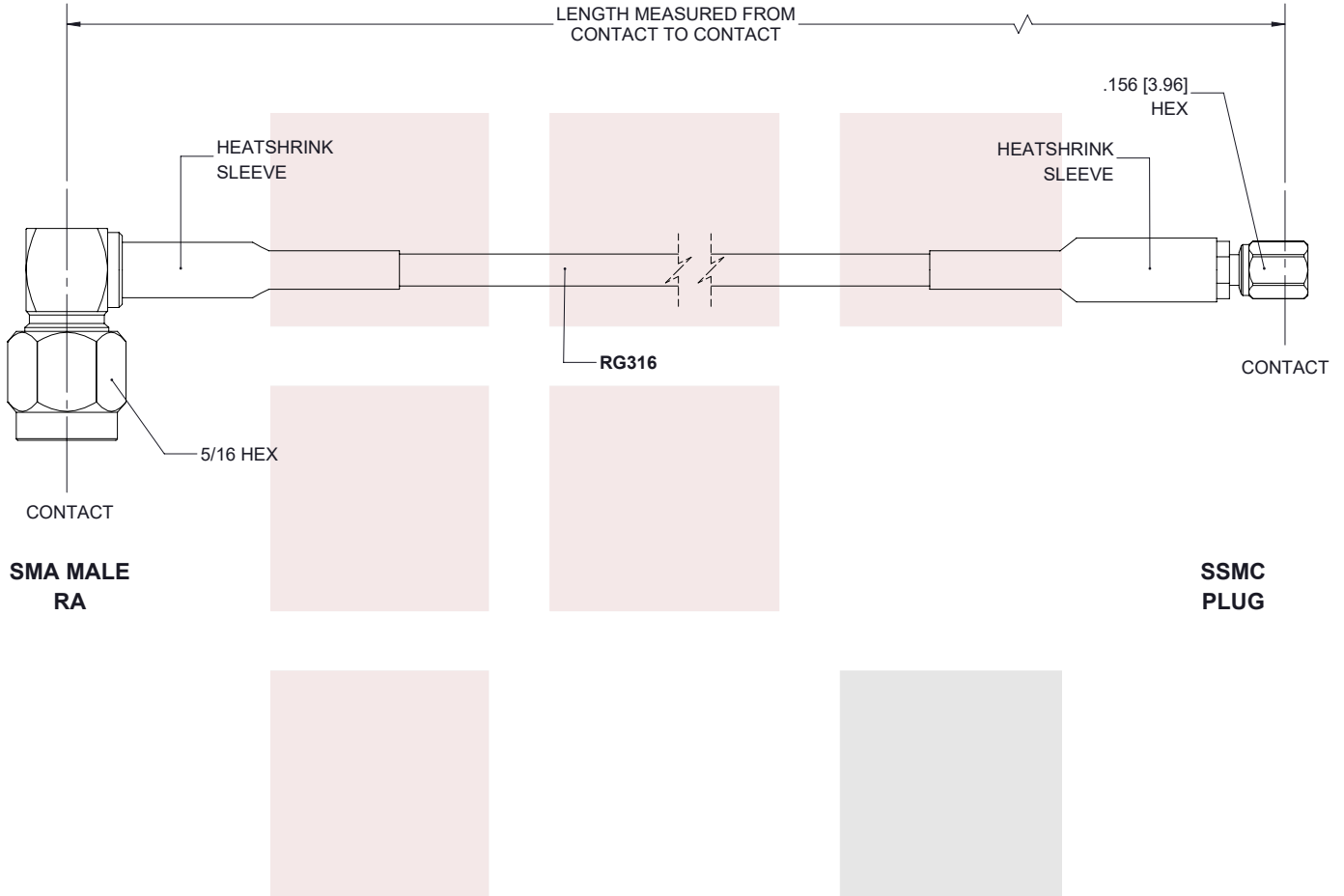
RA SMA Male to SSMC Plug Cable RG-316 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [RA SMA Male to SSMC Plug Cable RG-316 Coax FMCA1737](#)

URL: <https://www.fairviewmicrowave.com/ra-sma-male-ssmc-plug-cable-rg316-coax-fmca1737-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.





STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

		NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].			
TITLE RA SMA Male to SSMC Plug Cable RG-316 Coax		DWG NO FMCA1737		CAGE CODE 3FKR5	
CAD FILE	07/09/18	SHEET	1 OF 1	SCALE	N/A
		SIZE	A		7361