

## RA SMA Male to SSMC Plug Cable RG-316 Coax in 36 Inch

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.) | 0.43 | 0.53 | 0.83 | 1.34 | 1.94 | dB    |

### Mechanical Specifications

#### Cable Assembly

|          |                  |
|----------|------------------|
| Length*  | 36 in [914.4 mm] |
| 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                   |
| Jacket Diameter                      | 0.098 in [2.49 mm]         |



### 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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## 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  $\pm 3/8"$ , 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

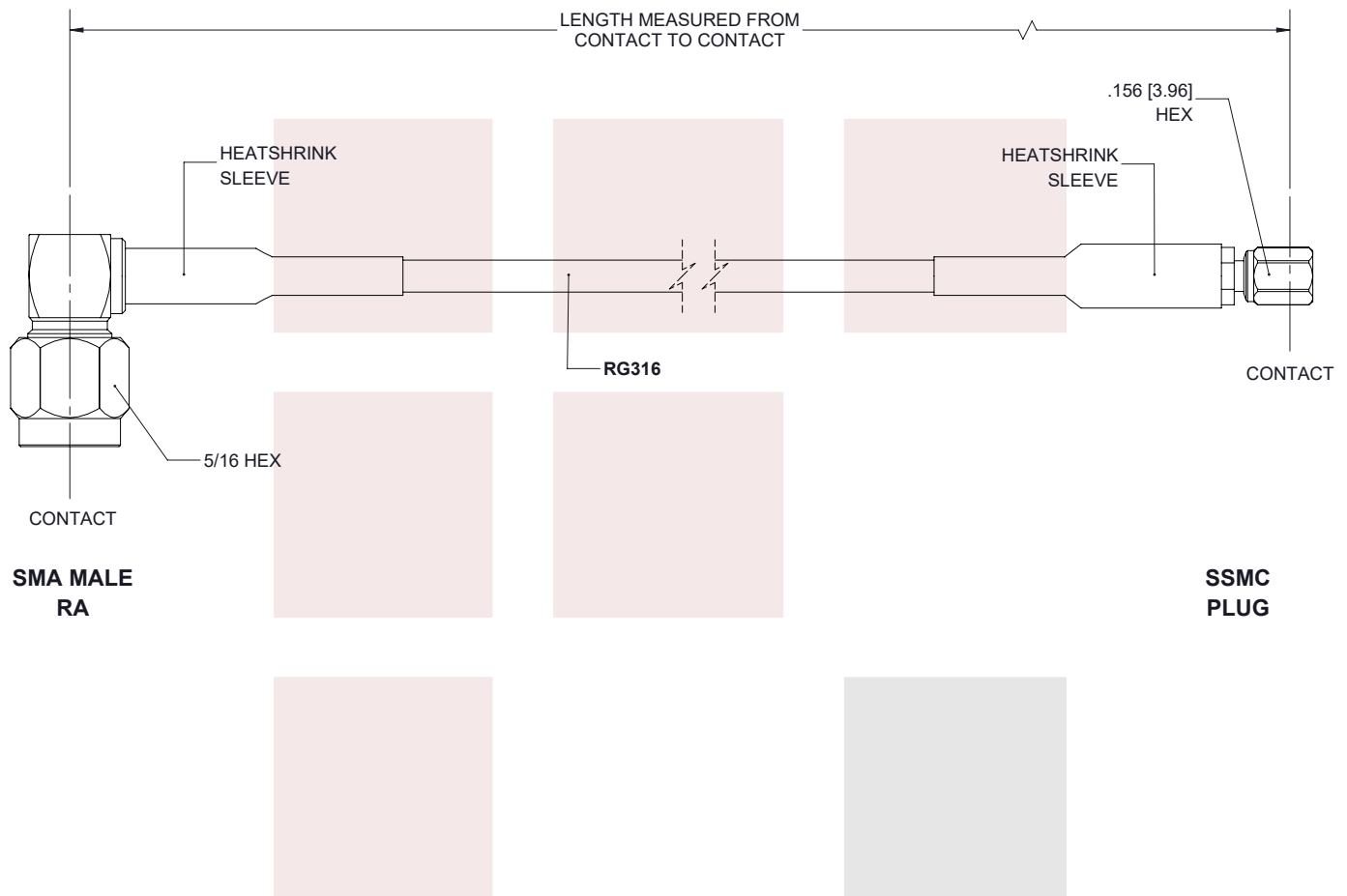
RA SMA Male to SSMC Plug Cable RG-316 Coax in 36 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [RA SMA Male to SSMC Plug Cable RG-316 Coax in 36 Inch FMCA1737-36](#)

URL: <https://www.fairviewmicrowave.com/ra-sma-male-ssmc-plug-cable-rg316-coax-fmca1737-36-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

|                                                                    |          |                                                                                                                                                                                     |        |           |     |        |
|--------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------|-----|--------|
| <b>Fairview Microwave</b><br>RF COMPONENTS ON DEMAND. <i>Done!</i> |          | NOTES:<br>1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.<br>2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.<br>3. DIMENSIONS ARE IN INCHES [mm]. |        |           |     |        |
| TITLE                                                              |          | DWG NO                                                                                                                                                                              |        | CAGE CODE |     |        |
| RA SMA Male to SSMC Plug Cable RG-316 Coax in 36 Inch              |          | FMCA1737                                                                                                                                                                            |        | 3FKR5     |     |        |
| CAD FILE                                                           | 07/09/18 | SHEET                                                                                                                                                                               | 1 OF 1 | SCALE     | N/A | SIZE A |
|                                                                    |          |                                                                                                                                                                                     |        |           |     | 7361   |