

## SMA Female to RA SSMA Male Cable RG-316 Coax in 48 Inch

The SMA female to RA SSMA male 48 inch cable using RG-316 coax, part number FMC00369-48, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SSMA cable assembly has a female to male gender configuration with 50 ohm flexible RG316 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00369-48 SMA female to SSMA male cable assembly operates to 3 GHz. The right angle SSMA interface on the RG316 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             | Min | Typ          | Max    | Units        |
|-------------------------|-----|--------------|--------|--------------|
| Frequency Range         | DC  |              | 3      | GHz          |
| VSWR                    |     |              | 1.45:1 |              |
| Velocity of Propagation |     | 69           |        | %            |
| Capacitance             |     | 29.4 [96.46] |        | pF/ft [pF/m] |
| Jacket Spark            |     |              | 2,000  | Vrms         |

### Performance by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.1  | 0.25 | 0.5  | 1    | 3    | GHz   |
| Insertion Loss (Max.) | 0.74 | 0.82 | 0.98 | 1.82 | 2.62 | dB    |

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. Insertion Loss is estimated as 0.1 dB for the SMA connector and 0.2 dB for the SSMA connector.

### Mechanical Specifications

#### Cable Assembly

Length\* 48 in [121.92 cm]

#### 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 0.102 in [2.59 mm]



### Configuration:

- SMA Female
- SSMA Male Right Angle
- RG316

### Features:

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

### Applications:

- General Purpose
- Laboratory Use

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## Connectors

| Description                     | Connector 1            | Connector 2      |
|---------------------------------|------------------------|------------------|
| Type                            | SMA Female             | SSMA Male        |
| Specification                   | MIL-STD-348A           |                  |
| Impedance                       | 50 Ohms                | 50 Ohms          |
| Contact Material & Plating      | Beryllium Copper, Gold | Gold             |
| Contact Plating Spec.           | 50 µin minimum         |                  |
| Dielectric Type                 | PTFE                   | PTFE             |
| Outer Cond Material & Plating   | Brass, Gold            |                  |
| Outer Cond Plating Spec.        | 3 µin minimum          |                  |
| Body Material & Plating         |                        | Brass, Nickel    |
| Coupling Nut Material & Plating |                        | Brass, Nickel    |
| Hex Size                        | 1/4 inch               | 1/4 in           |
| Torque                          |                        | 3 in-lbs 0.34 Nm |

## Environmental Specifications

### Temperature

Operating Range -55 to +155 deg C

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

## Plotted and Other Data

Notes:

- Values at 25°C, sea level.

## How to Order

Part Number Configuration:

**FMC00369 - xx uu**

cm = Centimeters  
 <blank> = Inches

Length

Example: FMC00369-12 = 12 inches long cable  
 FMC00369-100cm = 100 cm long cable

SMA Female to RA SSMA Male Cable RG-316 Coax in 48 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.

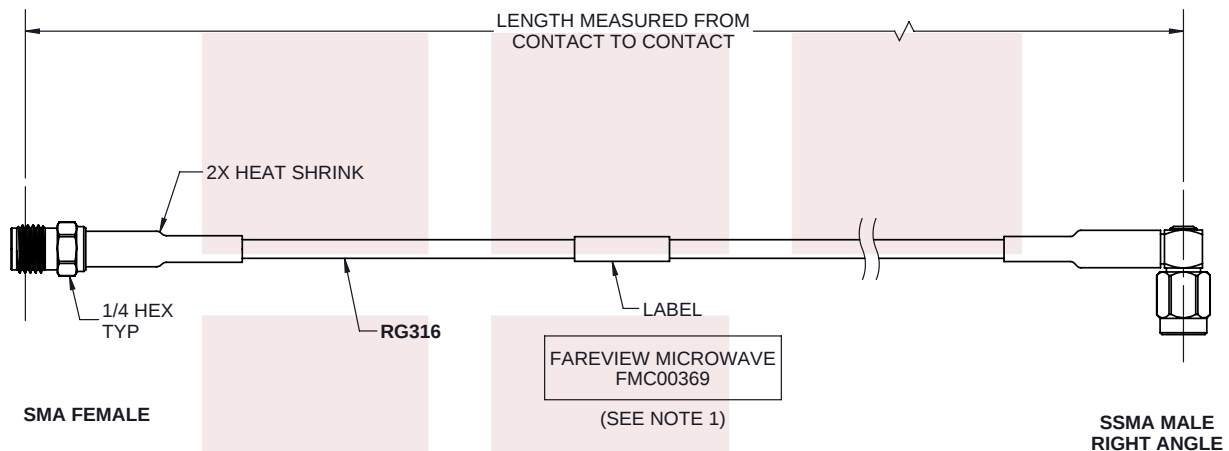
Click the following link to obtain additional part information: [SMA Female to RA SSMA Male Cable RG-316 Coax in 48 Inch FMC00369-48](https://www.fairviewmicrowave.com/sma-female-ra-ssma-male-cable-rg316-coax-fmc00369-48-p.aspx)

URL: <https://www.fairviewmicrowave.com/sma-female-ra-ssma-male-cable-rg316-coax-fmc00369-48-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.



| REVISIONS |                 |          |          |
|-----------|-----------------|----------|----------|
| REV.      | DESCRIPTION     | DATE     | APPROVED |
| A         | INITIAL RELEASE | 09/02/20 | S.ELLIS  |



**NOTES:**

1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED.  
CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH  
END 6.0" FROM THE END OF THE CONNECTOR.

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ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

TITLE

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48 Inch

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

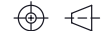
TOLERANCES:

.X = ±.2 [5.08] FRACTIONS  
.XX = ±.02 [.51] ± 1/32  
.XXX = ±.005 [.13] ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0  
12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0  
300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

SCALE N/A

| ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. |           |           |          |     |
|----------------------------------------------|-----------|-----------|----------|-----|
| SIZE                                         | CAGE CODE | DRAWN BY  | ITEM NO. | REV |
| A                                            | 3FKR5     | BPUCHASKI | FMC00369 | A   |

T-Rev.D