

## SMA Male to SMA Female Cable RG405 Type .086 Coax

The SMA male to SMA female cable using RG405 type .086 coax, part number FMCA2948, 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 semi-rigid FM-SR086CU-STR coax. Fairview Microwave's semi-rigid RF cable assemblies are ideal for high performance applications and can be formed, using proper tooling, to the routing pattern required. The FMCA2948 SMA male to SMA female cable assembly operates to 18 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             | Min  | Typ          | Max   | Units        |
|-------------------------|------|--------------|-------|--------------|
| Frequency Range         | DC   |              | 18    | GHz          |
| VSWR                    |      |              | 1.5:1 |              |
| Velocity of Propagation |      | 69.5         |       | %            |
| RF Shielding            | -110 |              |       | dB           |
| Capacitance             |      | 29.4 [96.46] |       | pF/ft [pF/m] |

### Performance by Frequency

| Description           | F1   | F2    | F3    | F4    | F5   | Units |
|-----------------------|------|-------|-------|-------|------|-------|
| Frequency             | 1    | 2     | 4.5   | 9     | 18   | GHz   |
| Insertion Loss (Typ.) | 0.22 | 0.284 | 0.445 | 0.735 | 1.12 | dB/ft |
|                       | 0.72 | 0.93  | 1.46  | 2.41  | 3.67 | 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

Weight 0.026 lbs [11.79 g]

#### Cable

Cable Type FM-SR086CU-STR  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper Clad Steel, Silver  
 Dielectric Type PTFE  
 Number of Shields 1  
 Outer Conductor Material and Plating Copper  
 Repeated Minimum Bend Radius 0.05 in [1.27 mm]



### Configuration:

- SMA Male
- SMA Female
- FM-SR086CU-STR

### Features:

- Max Frequency 18 GHz
- Shielding Effectivity > -110 dB
- 69.5% Phase Velocity

### Applications:

- General Purpose
- Laboratory Use

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**Connectors**

| Description                     | Connector 1                | Connector 2                        |
|---------------------------------|----------------------------|------------------------------------|
| Type                            | SMA Male                   | SMA Female                         |
| Impedance                       | 50 Ohms                    | 50 Ohms                            |
| Contact Material & Plating      | Brass, Gold over Nickel    | Beryllium Copper, Gold over Nickel |
| Dielectric Type                 | PTFE                       | PTFE                               |
| Body Material & Plating         | Brass, Gold over Nickel    | Brass, Gold over Nickel            |
| Coupling Nut Material & Plating | Passivated Stainless Steel |                                    |
| Hex Size                        | 5/16 inch                  |                                    |
| Torque                          | 8 in-lbs 0.9 Nm            |                                    |

Mechanical Specification Notes:  
Maximum length using the straight semi rigid coax is 5ft. For lengths greater than 5ft, please contact us

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

**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMCA2948 - xx uu**

cm = Centimeters  
<blank> = Inches  
Length

Example: FMCA2948-12 = 12 inches long cable  
FMCA2948-100cm = 100 cm long cable

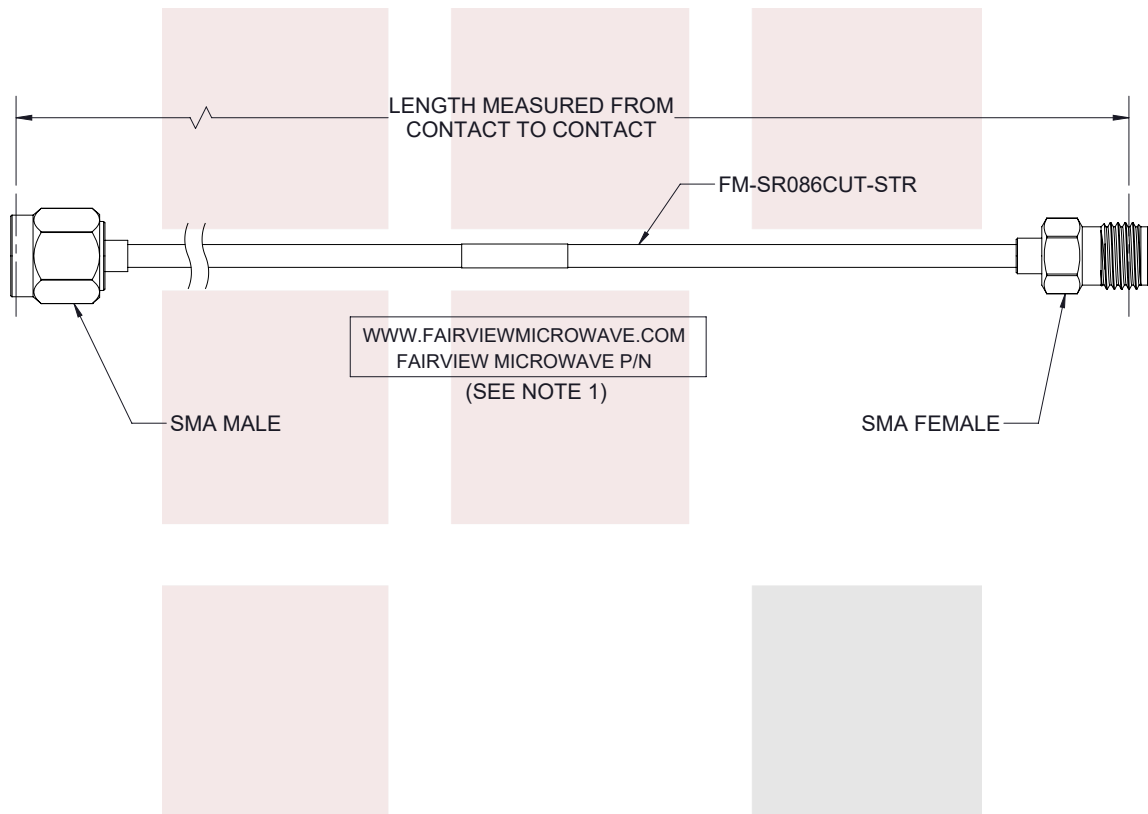
SMA Male to SMA Female Cable RG405 Type .086 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [SMA Male to SMA Female Cable RG405 Type .086 Coax FMCA2948](#)

URL: <https://www.fairviewmicrowave.com/sma-male-to-sma-female-cable-rg405-type-.086-coax-fmca2948-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 | 08/03/22 | AGANWANI |



**NOTES:**

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

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|   |   |                    |  |   |
|---|---|--------------------|--|---|
| <p><b>Fairview Microwave</b><br/>an INFINIT<sup>®</sup> brand</p> | UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES<br>DIMENSIONS IN [ ] ARE MILLIMETERS |                    | THIRD-ANGLE PROJECTION<br>   |   |
|   | TOLERANCES:   |                    | CABLE LENGTH (L) TOLERANCES:   |   |
| TITLE<br><br>SMA Male to SMA Female Cable RG405 Type .086 Coax    | .X = ±.2 [ .51]   | FRACTIONS ± 1/32   | L ≤ 12 [305] = +1 [25] / -0  | THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.<br>SHEET 1 OF 1 |
|   | .XX = ±.02 [ .51]   | ANGLES ± 1°        | 12 [305] < L ≤ 60 [1524] = +2 [51] / -0<br>60 [1524] < L ≤ 120 [3048] = +4 [102] / -0<br>120 [3048] < L ≤ 300 [7620] = +6 [152] / -0<br>300 [7620] < L = +5%L / -0 |   |
| ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.                      |   |                    |  | SCALE N/A   |
| SIZE A  | CAGE CODE 3FKR5   | DRAWN BY PSRINIVAS | ITEM NO. FMCA2948  | REV A   |

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