

## SMA Male to SMA Male Cable RG401 Type .250 Coax in 50 CM

The SMA male to SMA male 50 cm cable using RG401 type .250 coax, part number FMCA3115-50CM, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to male gender configuration with 50 ohm semi-rigid FM-SR250CU-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 FMCA3115-50CM SMA male to SMA male cable assembly operates to 12 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  |              | 12    | GHz          |
| VSWR                                 |     |              | 1.5:1 |              |
| Velocity of Propagation              |     | 69.5         |       | %            |
| Capacitance                          |     | 29.6 [97.11] |       | pF/ft [pF/m] |
| Operating Voltage (AC)               |     |              | 500   | Vrms         |
| Dielectric Withstanding Voltage (AC) |     |              | 1,500 | Vrms         |

### Performance by Frequency

| Description           | F1   | F2  | F3   | F4  | F5 | Units |
|-----------------------|------|-----|------|-----|----|-------|
| Frequency             | 1    | 2.5 | 5    | 12  |    | GHz   |
| Insertion Loss (Typ.) | 0.33 | 0.4 | 0.51 | 0.8 |    | dB    |

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Length\* 19.68 in [499.87 mm]  
Weight 0.197 lbs [89.36 g]

#### Cable

Cable Type FM-SR250CU-STR  
Impedance 50 Ohms  
Inner Conductor Type Solid  
Inner Conductor Material and Plating Copper, Silver  
Dielectric Type PTFE  
Number of Shields 1  
Outer Conductor Material and Plating Copper



### Configuration:

- SMA Male
- SMA Male
- FM-SR250CU-STR

### Features:

- Max Frequency 12 GHz
- 69.5% Phase Velocity

### Applications:

- General Purpose
- Laboratory Use

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Repeated Minimum Bend Radius                      0.5 in [12.7 mm]

**Connectors**

| Description                     | Connector 1      | Connector 2      |
|---------------------------------|------------------|------------------|
| Type                            | SMA Male         | SMA Male         |
| Specification                   | MIL-STD-348      | MIL-STD-348      |
| Impedance                       | 50 Ohms          | 50 Ohms          |
| Contact Material & Plating      | Gold             | Gold             |
| Contact Plating Spec.           | MIL-G-45204      | MIL-G-45204      |
| Dielectric Type                 | PTFE             | PTFE             |
| Body Material & Plating         | Brass, Gold      | Brass, Gold      |
| Body Plating Spec.              | MIL-G-45204      | MIL-G-45204      |
| Coupling Nut Material & Plating | Brass, Nickel    | Brass, Nickel    |
| Coupling Nut Plating Spec.      | QQ-N-290         | QQ-N-290         |
| Hex Size                        | 5/16 inch        | 5/16 inch        |
| Torque                          | 3 in-lbs 0.34 Nm | 3 in-lbs 0.34 Nm |

**Environmental Specifications**
**Temperature**

Operating Range    -55 to +150 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:

**FMCA3115 - xx uu**

 cm = Centimeters  
 <blank> = Inches

Length

 Example: FMCA3115-12 = 12 inches long cable  
 FMCA3115-100cm = 100 cm long cable

SMA Male to SMA Male Cable RG401 Type .250 Coax in 50 CM 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.

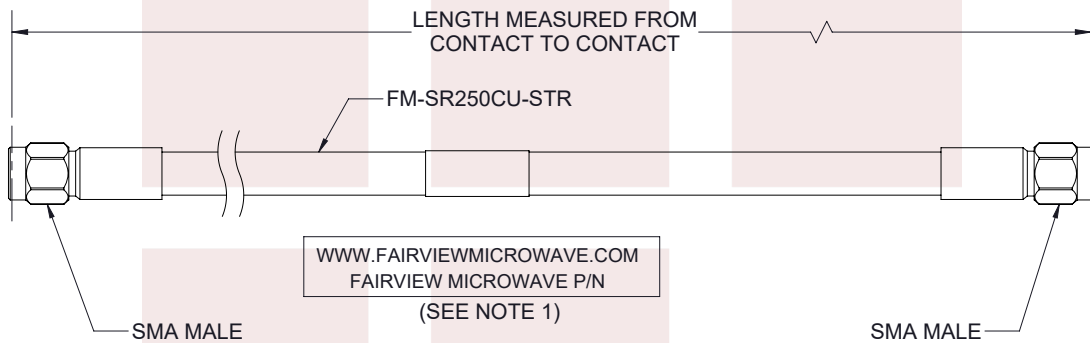
Click the following link to obtain additional part information: [SMA Male to SMA Male Cable RG401 Type .250 Coax in 50 CM FMCA3115-50CM](https://www.fairviewmicrowave.com/sma-male-to-sma-male-cable-rg401-type-.250-coax-in-50-cm-fmca3115-50cm)

URL: <https://www.fairviewmicrowave.com/sma-male-to-sma-male-cable-rg401-type-.250-coax-fmca3115-50cm-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 | 07/05/22 | 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 Male Cable RG401 Type .250 Coax<br>in 50 CM | .X = ±.2 [ .51]   | FRACTIONS<br>± 1/32    | L ≤ 12 [305] = +1 [25] / -0<br>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 | THE INFORMATION AND<br>DESIGN IN THIS DOCUMENT<br>IS THE PROPERTY OF<br>FAIRVIEW MICROWAVE CORPORATION.<br>ALL RIGHTS RESERVED. |
|  | .XX = ±.02 [ .51]   | ANGLES ± 1°            | ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.  | SHEET 1 OF 1<br><br>SCALE N/A   |
| SIZE<br>A  | CAGE CODE<br>3FKR5  | DRAWN BY<br>VTHANGARAJ | ITEM NO.<br>FMCA3115  | REV<br>A  |

T-Rev.D