

## SMA Male to RA SMA Male Cable Tinned Aluminum RG401 Type .250 Coax

The SMA male to RA SMA male cable using Tinned Aluminum RG401 type .250 coax, part number FMCA3133, 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-SR250ALTN-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 FMCA3133 SMA male to SMA male cable assembly operates to 12 GHz. The right angle SMA interface on the FM-SR250ALTN-STR 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  |              | 12    | GHz          |
| VSWR                                 |     |              | 1.5:1 |              |
| Velocity of Propagation              |     | 69.5         |       | %            |
| Capacitance                          |     | 29.6 [97.11] |       | pF/ft [pF/m] |
| Dielectric Withstanding Voltage (AC) |     |              | 7,500 | Vrms         |

### Performance by Frequency

| Description           | F1   | F2    | F3    | F4   | F5 | Units |
|-----------------------|------|-------|-------|------|----|-------|
| Frequency             | 1    | 2.5   | 5     | 12   |    | GHz   |
| Insertion Loss (Typ.) | 0.08 | 0.123 | 0.195 | 0.37 |    | dB/ft |
|                       | 0.26 | 0.4   | 0.64  | 1.21 |    | dB/m  |

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB for the straight connector and 0.2 dB for the right angle connector.

### Mechanical Specifications

#### Cable Assembly

Weight 0.092 lbs [41.73 g]

#### Cable

Cable Type FM-SR250ALTN-STR  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper, Silver  
 Dielectric Type PTFE  
 Number of Shields 1  
 Shield Layer 1 Tinned Aluminum



### Configuration:

- SMA Male
- SMA Male Right Angle
- FM-SR250ALTN-STR

### Features:

- Max Frequency 12 GHz
- 69.5% Phase Velocity

### Applications:

- General Purpose
- Laboratory Use

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Jacket Diameter 0.25 in [6.35 mm]

One Time Minimum Bend Radius 0.25 in [6.35 mm]

### Connectors

| Description                     | Connector 1      | Connector 2      |
|---------------------------------|------------------|------------------|
| Type                            | SMA Male         | SMA Male         |
| Impedance                       | 50 Ohms          | 50 Ohms          |
| Contact Material & Plating      | Gold             | Brass, Gold      |
| Dielectric Type                 | PTFE             | Teflon           |
| Body Material & Plating         | Brass, Gold      | Brass, Gold      |
| Coupling Nut Material & Plating | Brass, Nickel    | Brass, Gold      |
| Hex Size                        | 5/16 in.         | 5/16 in          |
| Torque                          | 5 in-lbs 0.57 Nm | 5 in-lbs 0.57 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:

- Values at 25°C, sea level.

### How to Order

Part Number Configuration:

**FMCA3133 - xx uu**

cm = Centimeters  
 <blank> = Inches

Length

Example: FMCA3133-12 = 12 inches long cable  
 FMCA3133-100cm = 100 cm long cable

SMA Male to RA SMA Male Cable Tinned Aluminum RG401 Type .250 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 RA SMA Male Cable Tinned Aluminum RG401 Type .250 Coax FMCA3133](#)

URL: <https://www.fairviewmicrowave.com/sma-male-to-ra-sma-male-cable-tinned-aluminum-rg401-type-.250-coax-fmca3133-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.

