

## RA SMA Male to RA SMA Male Cable Tinned Aluminum RG401 Type .250 Coax in 48 Inch

The RA SMA male to RA SMA male 48 inch cable using Tinned Aluminum RG401 type .250 coax, part number FMCA3135-48, 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 FMCA3135-48 SMA male to SMA male cable assembly operates to 12.4 GHz. The right angle SMA interfaces on the FM-SR250ALTN-STR cable allow 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  |              | 12.4  | 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    | 12.4 |    | GHz   |
| Insertion Loss (Typ.) | 0.72 | 0.9 | 1.18 | 1.91 |    | 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 0.2 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Length\* 48 in [121.92 cm]  
Weight 0.28 lbs [127.01 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 Right Angle
- SMA Male Right Angle
- FM-SR250ALTN-STR

### Features:

- Max Frequency 12.4 GHz
- 69.5% Phase Velocity

### Applications:

- General Purpose
- Laboratory Use

Fairview Microwave  
301 Leora Ln., Suite 100  
Lewisville, TX 75056  
Tel: 1-800-715-4396 / (972) 649-6678  
Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

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      | Brass, Gold      | Brass, Gold      |
| Dielectric Type                 | Teflon           | Teflon           |
| Body Material & Plating         | Brass, Gold      | Brass, Gold      |
| Coupling Nut Material & Plating | Brass, Gold      | 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:

Cable assemblies that are 60 inches or less use straight coax, greater than 60 inches use coiled coax

### 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:

**FMCA3135 - xx uu**

cm = Centimeters  
 <blank> = Inches

Length

Example: FMCA3135-12 = 12 inches long cable  
 FMCA3135-100cm = 100 cm long cable

RA SMA Male to RA SMA Male Cable Tinned Aluminum RG401 Type .250 Coax in 48 Inch 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: [RA SMA Male to RA SMA Male Cable Tinned Aluminum RG401 Type .250 Coax in 48 Inch FMCA3135-48](#)

URL: <https://www.fairviewmicrowave.com/ra-sma-male-to-ra-sma-male-cable-rg401-type-.250-coax-fmca3135-48-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.

