

## SMA Male to RA SMA Male Cable FM-SR141TB Coax in 12 Inch with LF Solder

The SMA male to RA SMA male 12 inch cable using FM-SR141TB coax, part number FMCA2112-12, 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 formable FM-SR141TB coax. Fairview Microwave's formable RF cable assemblies provide an alternative to costly pre-formed semi-rigid assemblies since they are hand formable. The FMCA2112-12 SMA male to SMA male cable assembly operates to 10 GHz. The right angle SMA interface on the FM-SR141TB 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  |             | 10    | GHz          |
| VSWR                    |     |             | 1.4:1 |              |
| Velocity of Propagation |     | 69.5        |       | %            |
| RF Shielding            | 100 |             |       | dB           |
| Group Delay             |     | 1.43 [4.69] |       | ns/ft [ns/m] |
| Capacitance             |     | 29 [95.14]  |       | pF/ft [pF/m] |

### Performance by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.5  | 1    | 2.5  | 5    | 10   | GHz   |
| Insertion Loss (Typ.) | 0.38 | 0.42 | 0.48 | 0.59 | 0.75 | dB    |

#### Electrical Specification Notes:

The Insertion Loss includes an estimated insertion loss of 0.1 dB for the straight connector and 0.2 dB for the right angle connector.

### Mechanical Specifications

#### Cable Assembly

|          |                  |
|----------|------------------|
| Length*  | 12 in [304.8 mm] |
| Diameter | 0.315 in [8 mm]  |

#### Cable

|                                      |                               |
|--------------------------------------|-------------------------------|
| Cable Type                           | FM-SR141TB                    |
| Impedance                            | 50 Ohms                       |
| Inner Conductor Type                 | Solid                         |
| Inner Conductor Material and Plating | Copper, Silver                |
| Dielectric Type                      | PTFE                          |
| Outer Conductor Material and Plating | Tinned Copper Composite Braid |
| One Time Minimum Bend Radius         | 0.315 in [8 mm]               |



### Configuration:

- SMA Male
- SMA Male Right Angle
- FM-SR141TB

### Features:

- Max Frequency 10 GHz
- Shielding Effectivity > 100 dB
- 69.5% Phase Velocity
- Dimensionally and electrically the same as standard, solid outer conductor semi-rigid coax
- Cable may be formed by hand and does not require special tools to bend
- May be formed more than once without damaging the outer conductor
- High RF Shielding >100 dB
- 100% Hi-pot and continuity tested
- 100% VSWR tested to max frequency of assembly
- Standard and custom lengths ship the same day

### 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)

Repeated Minimum Bend Radius 1.57 in [39.88 mm]

### Connectors

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

### Mechanical Specification Notes:

\*All cable assemblies have a length tolerance of 1.5% or  $\pm 3/8"$ , whichever is greater.

### 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:

**FMCA2112 - xx uu**

cm = Centimeters  
 <blank> = Inches

Length

Example: FMCA2112-12 = 12 inches long cable  
 FMCA2112-100cm = 100 cm long cable

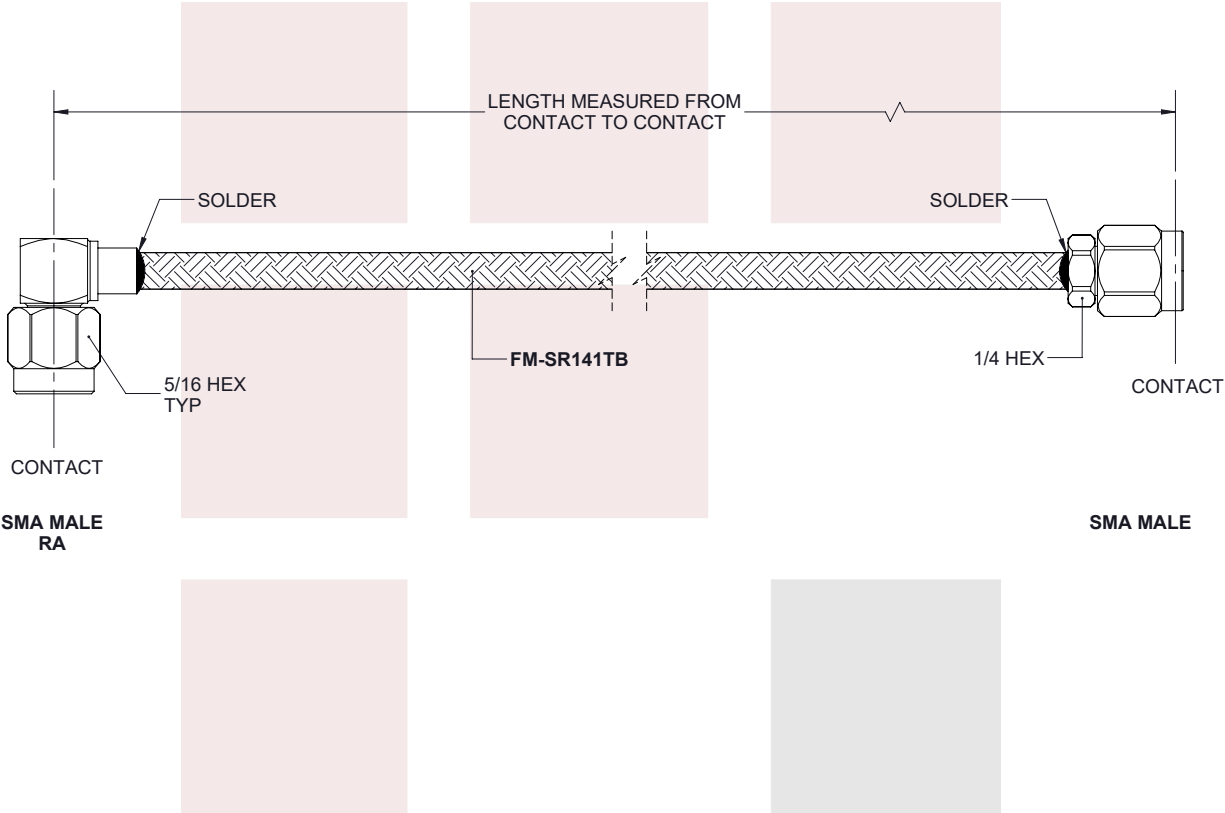
SMA Male to RA SMA Male Cable FM-SR141TB Coax in 12 Inch with LF Solder from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [SMA Male to RA SMA Male Cable FM-SR141TB Coax in 12 Inch with LF Solder FMCA2112-12](#)

URL: <https://www.fairviewmicrowave.com/sma-male-ra-sma-male-cable-fm-sr141tb-coax-fmca2112-12-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 | 11/26/19 | S.ELLIS  |



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| TITLE<br><br>SMA Male to RA SMA Male Cable FM-SR141TB Coax in 12 Inch with LF Solder                                                     |                    | TOLERANCES:                                                                                                                                                                                                                                                                                               |                         | CABLE LENGTH (L) TOLERANCES:                                                                                        |  |
|                                                                                                                                          |                    | .X = ±.2 [ .51 ]    FRACTIONS    L ≤ 12 [305] = +1 [25] / -0<br>.XX = ±.02 [ .51 ]    ± 1/32    12 [305] < L ≤ 60 [1524] = +2 [51] / -0<br>.XXX = ±.005 [ .13 ]    ANGLES ± 1°    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 DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED. |  |
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|                                                                                                                                          |                    |                                                                                                                                                                                                                                                                                                           |                         | SCALE N/A                                                                                                           |  |
| SIZE<br>A                                                                                                                                | CAGE CODE<br>3FKR5 | DRAWN BY<br>K.DANG                                                                                                                                                                                                                                                                                        | PART NUMBER<br>FMCA2112 | REV<br>A                                                                                                            |  |

T-Rev.D