

RA SMA Male to RA SMA Male Cable RG402 Type .141 Coax

The RA SMA male to RA SMA male cable using RG402 type .141 coax, part number FMCA2820, 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-SR141CU-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 FMCA2820 SMA male to SMA male cable assembly operates to 12.4 GHz. The right angle SMA interfaces on the FM-SR141CU-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 | |
| Capacitance | | 29.9 [98.1] | | pF/ft [pF/m] |
| Dielectric Withstanding Voltage (AC) | | | 1,000 | Vrms |

Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|-------|-------|------|----|-------|
| Frequency | 1 | 2.5 | 5 | 12.4 | | GHz |
| Insertion Loss (Typ.) | 0.12 | 0.175 | 0.266 | 0.51 | | dB/ft |
| | 0.39 | 0.57 | 0.87 | 1.67 | | dB/m |

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB per connector.

Mechanical Specifications

Cable Assembly

Weight 0.062 lbs [28.12 g]

Cable

Cable Type FM-SR141CU-STR
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper Clad Steel, Silver
 Dielectric Type PTFE
 Number of Shields 1
 Shield Layer 1 Copper



Configuration:

- SMA Male Right Angle
- SMA Male Right Angle
- FM-SR141CU-STR

Features:

- Max Frequency 12.4 GHz

Applications:

- General Purpose
- Laboratory Use

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Connectors

| Description | Connector 1 | Connector 2 |
|---------------------------------|-----------------------|-----------------------|
| Type | SMA Male | SMA Male |
| Specification | MIL-STD-348A | MIL-STD-348A |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material & Plating | Brass, Gold | Brass, Gold |
| Contact Plating Spec. | 50µ in. minimum | 50µ in. minimum |
| Dielectric Type | Teflon | Teflon |
| Body Material & Plating | Stainless Steel, Gold | Stainless Steel, Gold |
| Body Plating Spec. | 30µ in. minimum | 30µ in. minimum |
| Coupling Nut Material & Plating | Brass, Nickel | Brass, Nickel |
| Coupling Nut Plating Spec. | 100µ in. minimum | 100µ in. minimum |
| 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:

FMCA2820 - xx uu

cm = Centimeters
<blank> = Inches
Length

Example: FMCA2820-12 = 12 inches long cable
FMCA2820-100cm = 100 cm long cable

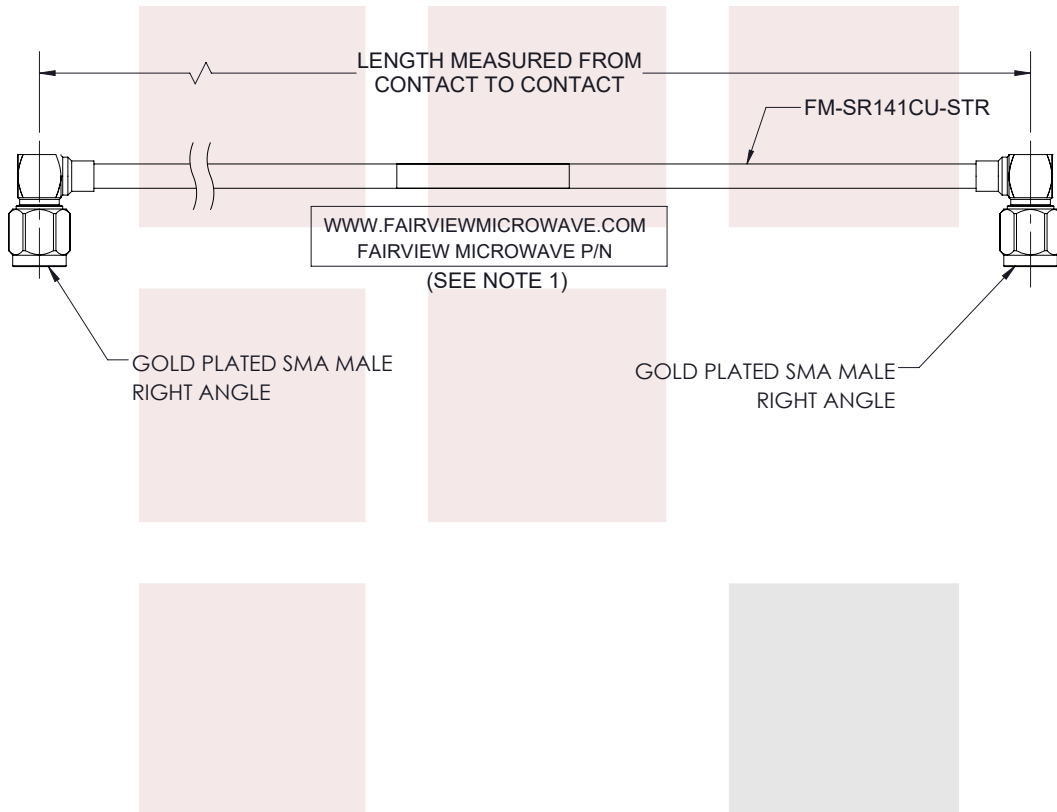
RA SMA Male to RA SMA Male Cable RG402 Type .141 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [RA SMA Male to RA SMA Male Cable RG402 Type .141 Coax FMCA2820](#)

URL: <https://www.fairviewmicrowave.com/ra-sma-male-to-ra-sma-male-cable-rg402-type-.141-coax-fmca2820-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 | 07/12/2022 | 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>Fairview Microwave an INFINIT[®] brand</p> | <p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> | | <p>THIRD-ANGLE PROJECTION</p> | | |
| | <p>TOLERANCES:</p> <p>.X = ±.2 [.508] FRACTIONS ± 1/32</p> <p>.XX = ±.02 [.51] ANGLES ± 1°</p> <p>.XXX = ±.005 [.13]</p> | | <p>CABLE LENGTH (L) TOLERANCES:</p> <p>L ≤ 12 [305] = +1 [25] / -0</p> <p>12 [305] < L ≤ 60 [1524] = +2 [51] / -0</p> <p>60 [1524] < L ≤ 120 [3048] = +4 [102] / -0</p> <p>120 [3048] < L ≤ 300 [7620] = +6 [152] / -0</p> <p>300 [7620] < L = +5%L / -0</p> | | <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> |
| <p>TITLE</p> <p>RA SMA Male to RA SMA Male Cable RG402 Type .141 Coax</p> | | | <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p> <p>SCALE N/A</p> | | |
| SIZE A | CAGE CODE 3FKR5 | DRAWN BY PSRINIVAS | ITEM NO. FMCA2820 | REV A | |

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