

## Low Loss SMA Male to SMA Male Cable LMR-195-UF Coax



### FMCA100261

#### Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: LMR-195-UF
- Coax Flex Type: Flexible

#### Features

- Max Frequency 8 MHz
- Shielding Effectivity > 90 dB
- 74% Phase Velocity
- Double Shielded
- TPE Jacket

#### Applications

- General Purpose
- Laboratory Use

#### Description

The SMA male to SMA male cable using LMR-195-UF coax, part number FMCA100261, 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 flexible LMR-195-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100261 SMA male to SMA male cable assembly operates to 8 MHz. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 90 dB.

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	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
VSWR			1.5:1	
Velocity of Propagation		74		%
RF Shielding	90			dB
Group Delay		1.27 [4.17]		ns/ft [ns/m]
Capacitance		25.4 [83.33]		pF/ft [pF/m]
Inductance		0.064 [0.21]		uH/ft [uH/m]
DC Resistance Inner Conductor		9.5 [31.17]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		4.9 [16.08]		Ohms/1000ft [Ohms/Km]
Operating Voltage (AC)			500	Vrms
Dielectric Withstanding Voltage (AC)			1,000	Vrms

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**FMCA100261**

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Jacket Spark			3,000	Vrms

**Specifications by Frequency**

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
FMCA100261	Custom Lengths Available	Insertion Loss (Typ.)	0.068	0.097	0.139	0.226	0.356	dB/ft	
			0.23	0.32	0.46	0.75	1.17	dB/m	
FMCA100261-12	12 Inch	Insertion Loss (Typ.)	0.27	0.3	0.34	0.43	0.56	dB	0.053
FMCA100261-24	24 Inch	Insertion Loss (Typ.)	0.34	0.4	0.48	0.66	0.92	dB	0.074
FMCA100261-36	36 Inch	Insertion Loss (Typ.)	0.41	0.5	0.62	0.88	1.27	dB	0.095
FMCA100261-60	60 Inch	Insertion Loss (Typ.)	0.54	0.69	0.9	1.33	1.98	dB	0.137
FMCA100261-300	300 Inch	Insertion Loss (Typ.)	1.9	2.63	3.68	5.85	9.1	dB	0.557

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

- Loss due to Connector 1: 0.1 dB
- Loss due to Connector 2: 0.1 dB
- Base Weight: 0.053 pounds
- Additional Weight per Inch: 0.00175 pounds

Electrical Specification Notes:  
Values at 25°C, sea level.

**Mechanical Specifications**

**Cable Assembly**

- Width/Diameter: 0.5 in [12.7 mm]
- Weight: 0.053 lbs [24.04 g]

**Cable**

- Cable Type: LMR-195-UF
- Impedance: 50 Ohms
- Inner Conductor Type: Stranded
- Inner Conductor Material and Plating: Copper
- Dielectric Type: Foam PE
- Number of Shields: 2
- Shield Layer 1: Aluminum Tape
- Shield Layer 2: Tinned Copper
- Jacket Material: TPE, Black
- Jacket Diameter: 0.195 in [4.95 mm]
- One Time Minimum Bend Radius: 0.5 in [12.7 mm]
- Repeated Minimum Bend Radius: 2 in [50.8 mm]
- Bending Moment: 0.1 lbs-ft [0.14 N-m]
- Flat Plate Crush: 10 lbs/in [0.18 Kg/mm]
- Tensile Strength: 40 lbs [18.14 Kg]

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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
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 µin minimum	100 µin minimum
Hex Size	5/16 inch	5/16 inch
Torque	3 in-lbs 0.34 Nm	3 in-lbs 0.34 Nm

#### Environmental Specifications

Operating Range Temperature -40 to +85 deg C

**Compliance Certifications** (see [product page](#) for current document)

#### Plotted and Other Data

Notes:  
Values at 25°C, sea level.

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### FMCA100261

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**FMCA100261**

- **xx**

**uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches  
Length  
Base Number

Example: FMCA100261-12 = 12 inches long cable  
FMCA100261-100cm = 100 cm long cable

Low Loss SMA Male to SMA Male Cable LMR-195-UF Coax from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Low Loss SMA Male to SMA Male Cable LMR-195-UF Coax FMCA100261](https://www.fairviewmicrowave.com/low-loss-sma-male-to-sma-male-cable-lmr-195-uf-coax-fmca100261)

URL: <https://www.fairviewmicrowave.com/low-loss-sma-male-to-sma-male-cable-lmr-195-uf-coax-fmca100261-p.aspx>

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# FMCA100261 CAD Drawing

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