

## SMA Male to SSMC Plug Cable LMR-100 Coax

Fairview Microwave's SSMC cable assemblies are part of our full line of RF interconnects available for same-day shipping. These SSMC cable assemblies are designed for test applications or connection of your SSMC system components. With a high frequency range up to 12.4 GHz, this family of SSMC cables can also be used to connect your data acquisition system or SSMC connections on your A/D converters. There are hundreds of possible cable assembly configurations to choose from, all available same day.

This SSMC cable assembly datasheet PDF contains specifications, CAD drawing and dimensions that are shown below. Fairview Microwave not only has many SSMC cable assembly options, but also a wide selection of RF, microwave and millimeter wave cable assemblies which allows RF designers to customize their configurations to whatever is required. Whether the need is to provide low loss SSMC I/O for digital receivers or simply create a custom cable assembly configuration, Fairview Microwave has the right cable assemblies for the job. Fairview can also expertly build your custom RF cable assemblies for you and ship same day.

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		3	GHz
VSWR			1.5:1	
Velocity of Propagation		66		%
RF Shielding	90			dB
Group Delay		1.54 [5.05]		ns/ft [ns/m]
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Inductance		0.077 [0.25]		uH/ft [uH/m]
DC Resistance Inner Conductor		81 [265.75]		$\Omega/1000ft$ [ $\Omega/Km$ ]
DC Resistance Outer Conductor		9.5 [31.17]		$\Omega/1000ft$ [ $\Omega/Km$ ]
Jacket Spark			2,000	Vrms

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	3	GHz
						dB/m
Insertion Loss (Typ.)	0.12	0.17	0.24	0.4	0.44	dB/ft
	0.39	0.56	0.79	1.31	1.44	dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Diameter 0.315 in [8 mm]



### Configuration:

- SMA Male
- SSMC Plug
- LMR-100A

### Features:

- Reliable threaded SSMC cable connection
- Max. Operating Frequency of 3 GHz
- Small form factor (SSMC connection is 50% smaller than SMA)
- In stock and ready to ship

### Applications:

- Software Defined Radio (SDR)
- Data acquisition systems with SSMC connections
- Digital Wideband Receivers
- SSMC patch panels
- A/D Conversion

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**Cable**

Cable Type	LMR-100A
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]

One Time Minimum Bend Radius	0.25 in [6.35 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Flat Plate Crush	10 lbs/in [0.18 Kg/mm]
Tensile Strength	15 lbs [6.8 Kg]

**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male	SSMC Plug
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material & Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Spec.	30 µin minimum	MIL-G-45204
Dielectric Type	PTFE	Teflon
Body Material & Plating	Brass, Nickel	Beryllium Copper, Gold
Body Plating Spec.	100 µin minimum	MIL-G-45204
Coupling Nut Material & Plating	Brass, Nickel	Beryllium Copper, Gold
Coupling Nut Plating Spec.	100 µin minimum	MIL-G-45206
Hex Size	5/16 inch	
Torque	3 in-lbs [0.34 Nm]	1.75 in-lbs [0.2 Nm]

Mechanical Specification Notes:

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

**Environmental Specifications**

**Temperature**

Operating Range -40 to +85 deg C

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

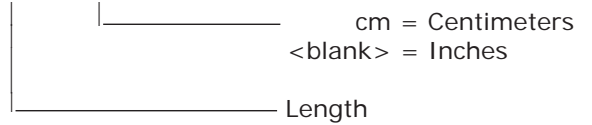
**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMCA1481 - xx uu**



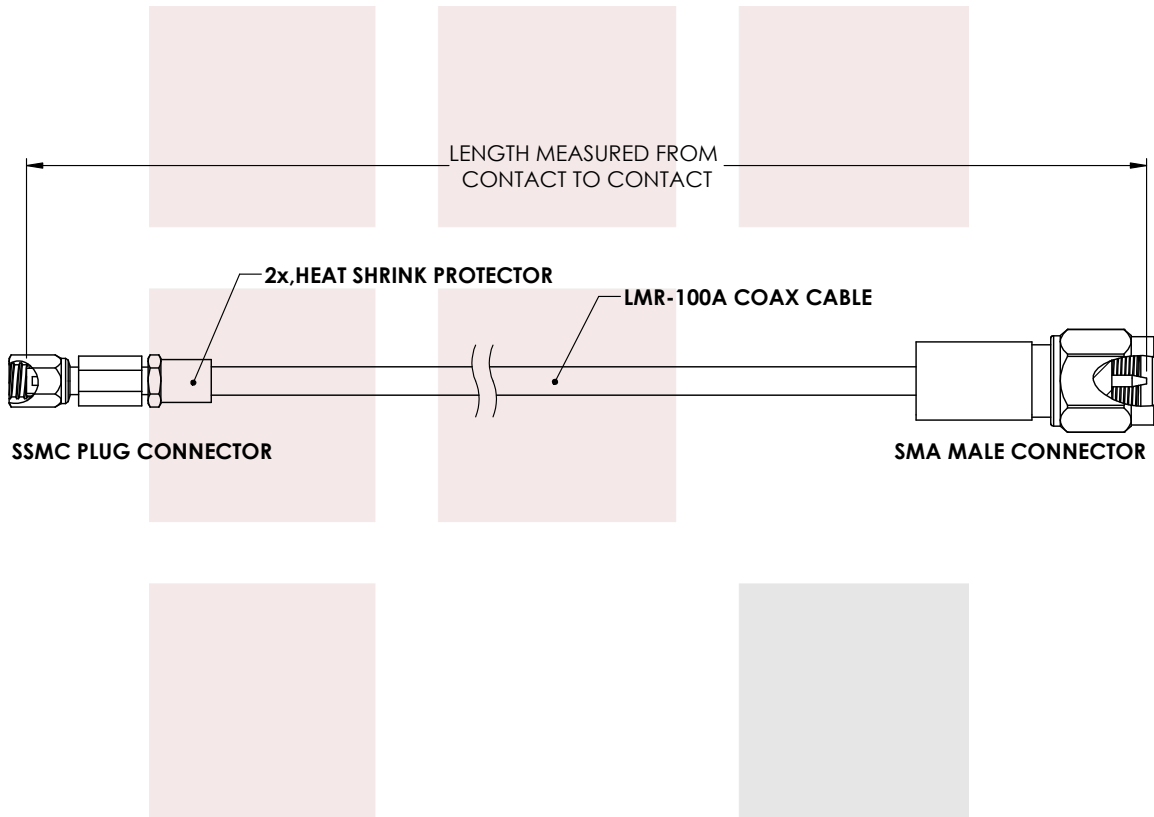
Example: FMCA1481-12 = 12 inches long cable  
 FMCA1481-100cm = 100 cm long cable

SMA Male to SSMC Plug Cable LMR-100 Coax 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 SSMC Plug Cable LMR-100 Coax FMCA1481](#)

URL: <https://www.fairviewmicrowave.com/sma-male-ssmc-plug-cable-lmr100-coax-fmca1481-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.



STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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TITLE SMA Male to SSMC Plug Cable LMR-100 Coax		DWG NO FMCA1481		CAGE CODE 3FKR5	
		CAD FILE 11/06/2017	SHEET	SCALE N/A	SIZE A CN2245