

# FMCA1486-72 DATA SHEET

# SMA Female to RA SSMC Plug Cable LMR-100 Coax in 72 Inch

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	Т	ур Мах		Units			
Frequency Range	DC			5.8		GHz		
VSWR				1.6:1				
Velocity of Propagation		6	66			%		
RF Shielding	90					dB		
Group Delay		1.54	.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]		Ω/1000ft [Ω/Km]				
DC Resistance Outer Conductor		9.5 [31.17]		Ω/1000ft [Ω/Km]				
Jacket Spark				2,000	V	/rms		

#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.92	1.22	1.64	2.59	4.05	dB

### **Mechanical Specifications**

#### **Cable Assembly**

Length\* 72 in [182.88 cm]
Diameter 0.312 in [7.92 mm]

#### Cable

Cable Type
Impedance
Inner Conductor Type
Inner Conductor Material and Plating
Dielectric Type

LMR-100A 50 Ohms Solid Copper Clad Steel PE



# **Configuration:**

- SMA Female
- SSMC Plug Right Angle
- LMR-100A

#### **Features:**

- Reliable threaded SSMC cable connection
- Max. Operating Frequency of 5.8 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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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

Repeated Minimum Bend Radius

1 in [25.4 mm]

Bending Moment

O.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		
Туре	SMA Female	SSMC Plug		
Specification	MIL-STD-348			
Impedance	50 Ohms	50 Ohms		
Mating Cycles	100	500		
Contact Material & Plating	Beryllium Copper, (	old Beryllium Copper, Gold		
Contact Plating Spec.	ASTM-B488	MIL-G-45204		
Dielectric Type	PTFE	Teflon		
Body Material & Plating	Brass, Nickel	Brass, Gold		
Body Plating Spec.	ASTM-B689	MIL-G-45204		
Coupling Nut Material & Pla	nting	Beryllium Copper, Gold		
Coupling Nut Plating Spec.	MIL-G-45204			
Torque	1.75 in-lbs [0.2			

#### Mechanical Specification Notes:

#### **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:

FMCA1486 - xx uu

| cm = Centimeters |
| chlark > = Inches |
| Length

Example: FMCA1486-12 = 12 inches long cable

FMCA1486-100cm = 100 cm long cable

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





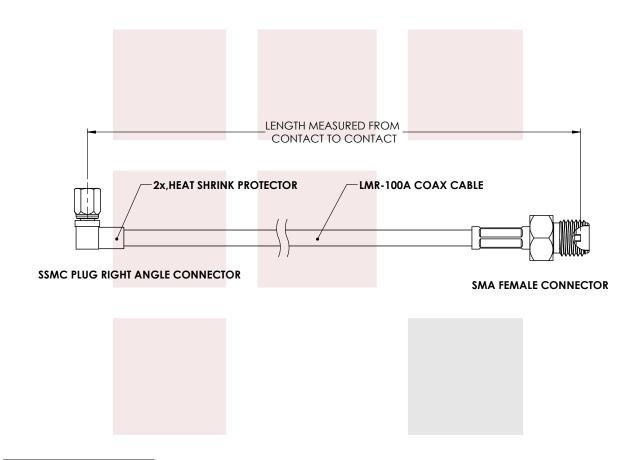
SMA Female to RA SSMC Plug Cable LMR-100 Coax in 72 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: SMA Female to RA SSMC Plug Cable LMR-100 Coax in 72 Inch FMCA1486-72

URL: https://www.fairviewmicrowave.com/sma-female-ra-ssmc-plug-cable-Imr100-coax-fmca1486-72-p.aspx







STANDARD TOLERANCES

.X ±0.2 .XX ±0.01 .XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM	NOTES:  1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  3. DIMENSIONS ARE IN INCHES [mm].				IME.	
SMA Female to RA SSMC Plug Cable LMR-100 Coax in	DWG NO FMCA1486			CAGE CODE 3FKR5		
72 Inch	CAD FILE 11/07/2017	SHEET	SCAL	E N/A	SIZE A	CN2245