

# FMCA1490 DATA SHEET

## BNC Male to RA 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	Т	ур	Max	U	Inits
Frequency Range	DC			3		GHz
VSWR				1.6:1		
Velocity of Propagation		e	6			%
RF Shielding	90					dB
Group Delay		1.54	[5.05]		ns/f	t [ns/m]
Capacitance		30.8 [	101.05	]	pF/f	t [pF/m]
Inductance		0.077	[0.25]		uH/f	t [uH/m]
DC Resistance Inner Cor	ductor	81 [2	65.75]		Ω/100	0ft [Ω/Km]
DC Resistance Outer Cor	nductor	9.5 [	31.17]		Ω/100	0ft [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	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

0.57 in [14.48 mm]



### **Configuration:**

- BNC Male
- SSMC Plug Right Angle
- LMR-100Å

### **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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Fairview Microwave

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#### Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Shield Layer 1 Shield Layer 2 Jacket Material Jacket Diameter

LMR-100A 50 Ohms Solid Copper Clad Steel PE 2 Aluminum Tape Tinned Copper Braid PVC, Black 0.11 in [2.79 mm]

One Time Minimum Bend Radius0.25 in [6.35 mm]Repeated Minimum Bend Radius1 in [25.4 mm]Bending Moment0.1 lbs-ft [0.14 N-m]Flat Plate Crush10 lbs/in [0.18 Kg/mm]Tensile Strength15 lbs [6.8 Kg]

#### Connectors

Description	Connecto	r 1	Connector 2
Туре	BNC Mal	е	SSMC Plug
Specification	MIL-STD-3	48A	
Impedance	50 Ohm	S	50 Ohms
Mating Cycles			500
Contact Material & Plating	Brass, Go	ld	Beryllium Copper, Gold
Contact Plating Spec.	50 µin minin	num	MIL-G-45204
Dielectric Type	PTFE		Teflon
Body Material & Plating	Brass, Nicl	kel	Brass, Gold
Body Plating Spec.	100 µin mini	mum	MIL-G-45204
Coupling Nut Material & Pla	iting Brass, Nicl	kel	Beryllium Copper, Gold
Coupling Nut Plating Spec.	100 µin mini	mum	MIL-G-45204
Torque			1.75 in-lbs [0.2 Nm]

Mechanical Specification Notes:

\*All cable assemblies have a length tolerance of 1.5% or  $\pm$  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:

FMCA1490 - xx



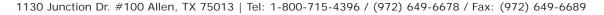
Example: FMCA1490-12 = 12 inches long cable FMCA1490-100cm = 100 cm long cable

BNC Male to RA 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: BNC Male to RA SSMC Plug Cable LMR-100 Coax FMCA1490

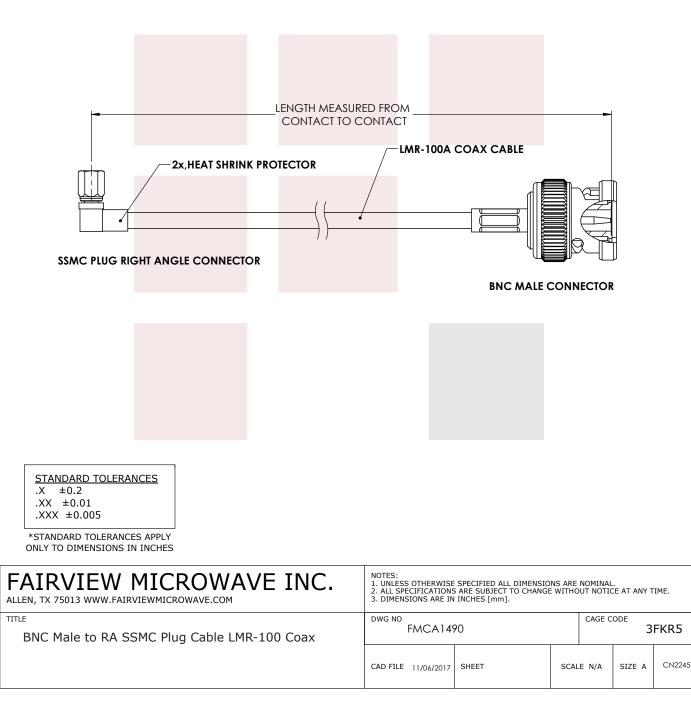
URL: https://www.fairviewmicrowave.com/bnc-male-ra-ssmc-plug-cable-Imr100-coax-fmca1490-p.aspx

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.









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