

FMCA2151-12 DATA SHEET

SMA Female Bulkhead to RA SSMC Plug Cable LMR-100 Coax in 12 Inch

The SMA female bulkhead to RA SSMC plug 12 inch cable using LMR-100 coax, part number FMCA2151-12, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SSMC cable assembly has a female to plug gender configuration with 50 ohm flexible LMR-100A coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA2151-12 SMA female to SSMC plug cable assembly operates to 5.8 GHz. The right angle SSMC interface on the LMR-100A cable allows for easier connections in tight spaces. Our RF cable assembly with SMA bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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	Min	Т	ур	Max	U	nits	
Frequency Range	DC			5.8	(GHz	
VSWR				1.6:1			
/elocity 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/r	n]
DC Resistance Inner Cor	nductor	81 [2	65.75]		Ω/1000	Oft [Ω/k	(m]
DC Resistance Outer Cor	nductor	9.5 [31.17]		Ω/1000	Oft [Ω/k	(m]
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 (Max.)	0.41	0.44	0.48	0.7	0.94	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. Insertion Loss is estimated as $0.1~\mathrm{dB}$ for the SMA Female connector and $0.2~\mathrm{dB}$ for the SSMC Male connector.

Mechanical Specifications

Cable Assembly

Length* Diameter 12 in [304.8 mm] 0.312 in [7.92 mm]



Configuration:

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

Features:

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- · Double Shielded
- PVC Jacket

Applications:

- General Purpose
- · Laboratory Use

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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	Connecto	or 1	Connector 2		
Туре	SMA Fem	ale	e SSMC Plug		
Mount Method	Bulkhea	d			
Specification	MIL-STD-3	348			
Impedance	50 Ohm	IS .	50 Ohms		
Mating Cycles			500		
Contact Material & Plating	Beryllium Copp	per, Gold Beryllium Copper, Gold		er, Gold	
Contact Plating Spec.		MIL-G-45204			
Dielectric Type		Teflon			
Outer Cond Material & Plat	ing Brass, Nic	kel			
Body Material & Plating	Brass, Nic	ckel Brass, Gold		ld	
Body Plating Spec.		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 Nm			

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:

FMCA2151 - xx uu

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

Example: FMCA2151-12 = 12 inches long cable

FMCA2151-100cm = 100 cm long cable

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SMA Female Bulkhead to RA SSMC Plug Cable LMR-100 Coax in 12 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 Bulkhead to RA SSMC Plug Cable LMR-100 Coax in 12 Inch FMCA2151-12

URL: https://www.fairviewmicrowave.com/sma-female-ra-ssmc-plug-cable-lmr100-coax-fmca2151-12-p.aspx







