

Fire Rated Low Loss SSMC Plug to N Female Bulkhead Cable LMR-100-FR Coax

The SSMC plug to type N female bulkhead cable using LMR-100-FR coax, part number FMCA3218, from Fairview Microwave is in-stock and ships same day. This Fairview SSMC to type N cable assembly has a plug to female gender configuration with 50 ohm flexible LMR-100A-FR coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA3218 SSMC plug to type N female cable assembly operates to 5.8 GHz. Our RF cable assembly with type N 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	Typ	Max	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
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]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ω /1000ft [Ω /Km]
Jacket Spark			2,000	Vrms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.115	0.165	0.24	0.398	0.641	dB/ft
	0.38	0.54	0.79	1.31	2.1	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

Weight 0.1 lbs [45.36 g]

Cable

Cable Type LMR-100A-FR



Configuration:

- SSMC Plug
- N Female Bulkhead
- LMR-100A-FR

Features:

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

Applications:

- General Purpose
- Laboratory Use

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Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper
Jacket Material	FRPE, 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	SSMC Plug	N Female
Mount Method		Bulkhead
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	
Contact Material & Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Spec.		30μ in minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating		Brass, Nickel
Body Material & Plating	Beryllium Copper, Gold	Brass, Nickel
Body Plating Spec.		100μ in minimum
Coupling Nut Material & Plating	Brass, Gold	
Hex Size	5/32 inch	
Torque	1 in-lbs 0.11 Nm	

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMCA3218 - xx uu



Example: FMCA3218-12 = 12 inches long cable
FMCA3218-100cm = 100 cm long cable

Fire Rated Low Loss SSMC Plug to N Female Bulkhead Cable LMR-100-FR Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Fire Rated Low Loss SSMC Plug to N Female Bulkhead Cable LMR-100-FR Coax FMCA3218](https://www.fairviewmicrowave.com/fire-rated-low-loss-ssmc-plug-to-n-female-bulkhead-cable-lmr-100-fr-coax-fmca3218)

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