

### FMC00304-36 DATA SHEET

# RA SMA Male to N Female Bulkhead Cable LMR-100 Coax in 36 Inch

The RA SMA male to type N female bulkhead 36 inch cable using LMR-100 coax, part number FMC00304-36, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to type N cable assembly has a male to female 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 FMC00304-36 SMA male to type N female cable assembly operates to 5.8 GHz. The right angle SMA interface on the LMR-100A cable allows for easier connections in tight spaces. 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	Т	ур	Max	Units	5
Frequency Range	DC			5.8	GHz	
VSWR				1.4:1		
Velocity of Propagation		ć	6		%	
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 Cor	nductor	81 [2	65.75]		Ω/1000ft [Ω	2/Km]
DC Resistance Outer Cor	nductor	9.5 [	31.17]		Ω/1000ft [Ω	2/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.)	0.65	0.8	1.02	1.49	2.22	dB

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB for the straight connector and 0.2 dB for the right angle connector.

#### **Mechanical Specifications**

**Cable Assembly** 

Length\*

36 in [914.4 mm]



#### **Configuration:**

- SMA Male Right Angle
- · N Female Bulkhead
- 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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Diameter 0.807 in [20.5 mm]

**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

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

#### **Connectors**

Description	Connect	or 1	Connector 2	
Туре	SMA Ma	ale	N Female	
Mount Method			Bulkhead	
Specification	MIL-STD-	348A	MIL-STD-348A	
Impedance	50 Ohr	ns	50 Ohms	
Contact Material & Plating	Brass, G	old	Beryllium Copper, Gold	
Contact Plating Spec.	50 μin min	imum	30 µin minimum	
Dielectric Type	PTFE		PTFE	
Outer Cond Material & Plati	ng		Brass, Nickel	
Outer Cond Plating Spec.			100 µin minimum	
Body Material & Plating	Brass, Ni	ckel		
Body Plating Spec.	100 µin mir	nimum	1	
Coupling Nut Material & Pla	iting Brass, Ni	ckel		
Coupling Nut Plating Spec.	100 µin mir	nimum	1	
Hex Size	5/16 in	ch	3/4 inch	

#### Mechanical Specification Notes:

## **Environmental Specifications Temperature**

Operating Range -40 to +85 deg C Storage Range -70 to +85 deg C

**Compliance Certifications** (see product page for current document)

#### **Plotted and Other Data**

Notes:

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





#### **How to Order**

Part Number Configuration:	FMC00304	- xx	uu	
				cm = Centimeters <blank> = Inches - Length</blank>

Example: FMC00304-12 = 12 inches long cable

FMC00304-100cm = 100 cm long cable

RA SMA Male to N Female Bulkhead Cable LMR-100 Coax in 36 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: RA SMA Male to N Female Bulkhead Cable LMR-100 Coax in 36 Inch FMC00304-36

URL: https://www.fairviewmicrowave.com/ra-sma-male-n-female-cable-lmr100-coax-fmc00304-36-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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