

# FMC00150-150CM DATA SHEET

# N Male to N Female Bulkhead Cable LMR-100 Coax in 150 CM

The type N male to type N female bulkhead 150 cm cable using LMR-100 coax, part number FMC00150-150CM, from Fairview Microwave is in-stock and ships same day. This Fairview type N 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 FMC00150-150CM type N male 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	Т	ур	Max	U	nits	
Frequency Range	DC			5.8	(	GHz	
VSWR				1.4:1			
Velocity of Propagation		(	56			%	
RF Shielding	90				(	dB	
Group Delay		1.54	[5.05]		ns/ft	[ns/n	n]
Capacitance		30.8 [	101.05	]	pF/ft	[pF/n	n]
Inductance		0.077	' [0.25]		uH/ft	[uH/r	<u>n]</u>
DC Resistance Inner Cor	nductor	81 [2	265.75]		Ω/1000	)ft [Ω/I	Km]
DC Resistance Outer Cor	nductor	9.5 [	31.17]		Ω/1000	)ft [Ω/I	Km]
Jacket Spark				2,000	Vı	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.)	0.76	1.01	1.38	2.15	3.35	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

#### **Mechanical Specifications**

**Cable Assembly** 

Length\* Diameter 59.06 in [150.01 cm] 0.827 in [21.01 mm]



# **Configuration:**

- N Male
- 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
- Antenna Installations
- Land Mobile Radio & Other Communication Systems
- Cellular & Wi-Fi Systems

Fairview Microwave 301 Leora Ln., Suite 100 Lewisville, TX 75056 Tel: 1-800-715-4396 / (972) 649-6678

Fax: (972) 649-6689 www.fairviewmicrowave.com sales@fairviewmicrowave.com





Cable

Cable Type LMR-100A Impedance 50 Ohms Inner Conductor Type Solid

Inner Conductor Material and Plating Copper Clad Steel Dielectric Type PE

Dielectric Type Pf 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	Connector 1			r 2	
Туре	N Male			N Female		
Mount Method				Bulkhead		
Specification				MIL-STD-3	48A	
Impedance	50 Ohms	5		50 Ohm	S	
Mating Cycles	500					
Contact Material & Plating	Beryllium Copper, Gold			Beryllium Copper, Gold		
Contact Plating Spec.				30 µin minin	num	
Dielectric Type	PTFE			PTFE		
Outer Cond Material & Plating			Brass, Nickel			
Outer Cond Plating Spec.			100 µin minimum			
Body Material & Plating	Brass, Nickel					
Coupling Nut Material & Pla	iting Brass, Nick	el				
Hex Size				3/4 inch	1	

#### Mechanical Specification Notes:

# **Environmental Specifications**

Temperature

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

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

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

Notes:

301 Leora Ln., Suite 100, Lewisville, TX 75056 | Tel: 1-800-715-4396 / (972) 649-6678 / Fax: (972) 649-6689

Copyright © 2019

<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:	FMC00150	- xx	uu	
				cm = Centimeters <blank> = Inches</blank>
				- Length

Example: FMC00150-12 = 12 inches long cable

FMC00150-100cm = 100 cm long cable

N Male to N Female Bulkhead Cable LMR-100 Coax in 150 CM 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: N Male to N Female Bulkhead Cable LMR-100 Coax in 150 CM FMC00150-150CM

URL: https://www.fairviewmicrowave.com/n-male-n-female-cable-lmr100-coax-fmc00150-150cm-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.

301 Leora Ln., Suite 100, Lewisville, TX 75056 | Tel: 1-800-715-4396 / (972) 649-6678 / Fax: (972) 649-6689



# FMC00150-150CM DATA SHEET

