

FMC00253-100CM DATA SHEET

N Male to BNC Male Cable LMR-100 Coax in 100 CM

The type N male to BNC male 100 cm cable using LMR-100 coax, part number FMC00253-100CM, from Fairview Microwave is in-stock and ships same day. This Fairview type N to BNC cable assembly has a male to male 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 FMC00253-100CM type N male to BNC male cable assembly operates to 5.8 GHz. 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

Frequency Range DC 5.8 GHz VSWR 1:1 1.25:1 Velocity of Propagation 66 % RF Shielding 90 dB Group Delay 1.54 [5.05] ns/ft [ns Capacitance 30.8 [101.05] pF/ft [pF	
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RF Shielding 90 dB Group Delay 1.54 [5.05] ns/ft [ns/ft]	
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Capacitance 30.8 [101.05] pF/ft [pF	/m]
	/m]
Inductance 0.077 [0.25] uH/ft [uH	/m]
DC Resistance Inner Conductor 81 [265.75] $\Omega/1000$ ft [9	2/Km]
DC Resistance Outer Conductor 9.5 [31.17] $\Omega/1000$ ft [9.5]	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.)	0.57	0.74	0.98	1.5	2.3	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 per connector.

Mechanical Specifications

Cable Assembly

Length* 39.37 in [100 cm]
Diameter 0.827 in [21.01 mm]

Cable

Cable Type LMR-100A Impedance 50 Ohms



Configuration:

- N Male
- BNC Male
- 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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Inner Conductor Type

Inner Conductor Material and Plating

Dielectric Type Number of Shields

Shield Layer 1 Shield Layer 2 Jacket Material

Jacket Diameter

One Time Minimum Bend Radius Repeated Minimum Bend Radius Rending Moment

Bending Moment Flat Plate Crush Tensile Strength Solid

Copper Clad Steel

PE 2

Aluminum Tape Tinned Copper Braid

PVC, Black

0.11 in [2.79 mm]

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]

Tensile Strength 15 lbs [6.8 Kg]

Connectors

Description	Connector 1	. Connector 2
Туре	N Male	BNC Male
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	
Contact Material & Plating	Beryllium Copper, (Gold Brass, Gold
Contact Plating Spec.		50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Nickel	Brass, Nickel
Body Plating Spec.		100 µin minimum
Coupling Nut Material & Pla	iting Brass, Nickel	Brass, Nickel
Coupling Nut Plating Spec.		100 µin minimum

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:

How to Order

Part Number Configuration:

FMC00253 - xx uu

cm = Centimeters
<black> = Inches

Length

Example: FMC00253-12 = 12 inches long cable

FMC00253-100cm = 100 cm long cable

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





N Male to BNC Male Cable LMR-100 Coax in 100 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 BNC Male Cable LMR-100 Coax in 100 CM FMC00253-100CM

URL: https://www.fairviewmicrowave.com/n-male-bnc-male-cable-lmr100-coax-fmc00253-100cm-p.aspx





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