



## FMCA100259

#### Configuration

· Connector 1: N Male · Connector 2: N Male · Cable Type: LMR-600-UF · Coax Flex Type: Flexible

#### **Features**

- · Max Frequency 8 GHz
- · Shielding Effectivity > 90 dB
- · 87% Phase Velocity
- · Double Shielded
- TPE Jacket

#### **Applications**

· General Purpose

· Laboratory Use

## **Description**

The type N male to type N male cable using LMR-600-UF coax, part number FMCA100259, from Fairview Microwave is in-stock and ships same day. This Fairview type N to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-600-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100259 type N male to type N male cable assembly operates to 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**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
VSWR			1.4:1	
Velocity of Propagation		87		%
RF Shielding	90			dB
Group Delay		1.17 [3.84]		ns/ft [ns/m]
Capacitance		23.4 [76.77]		pF/ft [pF/m]
Inductance		0.058 [0.19]		uH/ft [uH/m]
DC Resistance Inner Conductor		0.43 [1.41]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.2 [3.94]		Ohms/1000ft [Ohms/Km]
Jacket Spark			8,000	Vrms

#### Specifications by Frequency

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# FMCA100259

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	500	1000	2000	4000	8000	MHz	weight (ms)
FMCA100259	Custom Lengths	Insertion Loss (Typ.)	0.022	0.032	0.047	0.062	0.087	dB/ft	
TWCA100239	Available	ilisertion Loss (Typ.)	0.08	0.11	0.16	0.21	0.29	dB/m	
FMCA100259-12	12 inch	Insertion Loss (Typ.)	0.23	0.24	0.25	0.27	0.29	dB	0.474
FMCA100259-24	24 inch	Insertion Loss (Typ.)	0.25	0.27	0.3	0.33	0.38	dB	0.651
FMCA100259-36	36 inch	Insertion Loss (Typ.)	0.27	0.3	0.35	0.39	0.47	dB	0.827
FMCA100259-60	60 inch	Insertion Loss (Typ.)	0.31	0.36	0.44	0.51	0.64	dB	1.179
FMCA100259-300	3000 inch	Insertion Loss (Typ.)	0.75	1	1.38	1.75	2.38	dB	4.699

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.1 dB Loss due to Connector 2: 0.1 dB Base Weight: 0.474 pounds Additional Weight per Inch: 0.01467 pounds

# **Mechanical Specifications**

#### **Cable Assembly**

Width/Diameter 0.5 in [12.7 mm] Weight 0.474 lbs [215 g]

#### Cable

Cable Type LMR-600-UF Impedance 50 Ohms Inner Conductor Type Stranded Inner Conductor Material and Plating Copper Foam PE

Dielectric Type Number of Shields Shield Layer 1 Aluminum Tape

Shield Layer 2 **Tinned Copper** Jacket Material TPE, Black Jacket Diameter

0.59 in [14.99 mm] 1.5 in [38.1 mm] One Time Minimum Bend Radius Repeated Minimum Bend Radius 6 in [152.4 mm] **Bending Moment** 1.75 lbs-ft [2.37 N-m]

Flat Plate Crush 40 lbs/in [0.71 Kg/mm] Tensile Strength 350 lbs [158.76 Kg]





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#### **Connectors**

Connector 1	Connector 2		
N Male	N Male		
50 Ohms	50 Ohms		
Straight	Straight		
Brass, Gold	Brass, Gold		
PTFE	PTFE		
Brass, Tri-Metal	Brass, Tri-Metal		
Brass, Tri-Metal	Brass, Tri-Metal		
	N Male 50 Ohms Straight Brass, Gold PTFE Brass, Tri-Metal		

## **Environmental Specifications**

Operating Range Temperature

-40 to +85 deg C

Compliance Certifications (see product page for current document)

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

Notes:

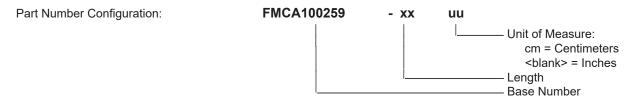




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#### **Typical Performance Data**

#### **How to Order**



Example: FMCA100259-12 = 12 inches long cable

FMCA100259-100cm = 100 cm long cable

Low Loss N Male to N Male Cable LMR-600-UF Coax from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF ondemand.

For additional information on this product, please click the following link: Low Loss N Male to N Male Cable LMR-600-UF Coax FMCA100259

URL: https://www.fairviewmicrowave.com/low-loss-n-male-to-n-male-cable-lmr-600-uf-coax-fmca100259-p.aspx

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