

FMC00502 DATA SHEET

N Male to N Male Cable LMR-240-UF Coax with Heat Shrink

The type N male to type N male cable using LMR-240-UF coax, part number FMC00502, 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-240-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00502 type N male to type N 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

Description	ı	4in	T	ур	Max	ι	Inits
Frequency Range	-	DC			5.8		GHz
VSWR					1.4:1		
Velocity of Propagation			8	34			%
RF Shielding	1	90					dB
Group Delay			1.21	[3.97]		ns/f	t [ns/m]
Capacitance			24.2	[79.4]		pF/f	t [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]			
DC Resistance Inner Conductor		4.28 [14.04]		Ω/1000ft [Ω/Km]			
DC Resistance Outer Cor	nductor		3.89 [[12.76]		Ω/100	0ft [Ω/Km]
Operating Voltage (DC)					2,500		Vdc
Dielectric Withstanding Voltage (DC)				1,500		Vdc	
Jacket Spark					5,000	\	/rms
Input Power (Peak)					5.6	K'	Watts

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.03	0.05	0.08	0.13	0.2	dB/ft
	0.1	0.16	0.26	0.43	0.66	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1*SQRT(FGHz) dB for the straight connectors.

Mechanical Specifications

Cable Assembly

Diameter

0.875 in [22.23 mm]



Configuration:

- N Male
- N Male
- LMR-240-UF

Features:

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- · Double Shielded
- TPE Jacket

Applications:

- General Purpose
- · Laboratory Use

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Cable

Cable Type
Impedance
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

Bending Moment Flat Plate Crush Tensile Strength LMR-240-UF 50 Ohms Stranded Copper PE (F)

Aluminum Tape Tinned Copper Braid TPE, Black

0.24 in [6.1 mm]

0.75 in [19.05 mm] 2.5 in [63.5 mm] 0.13 lbs-ft [0.18 N-m] 13 lbs/in [0.23 Kg/mm] 80 lbs [36.29 Kg]

Connectors

Description	Connector 1	Connector 2		
Туре	N Male	N Male		
Specification	MIL-STD-348	MIL-STD-348		
Impedance	50 Ohms	50 Ohms		
Contact Material & Plating	Beryllium Copper, G	old Beryllium Copper, Gold		
Contact Plating Spec.	ASTM-B488	ASTM-B488		
Dielectric Type	PTFE	PTFE		
Outer Cond Material & Plat	ing Brass, Tri-Metal	Brass, Tri-Metal		
Body Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal		
Body Plating Spec.	QQ-N-290	QQ-N-290		
Coupling Nut Material & Pla	ting Brass, Tri-Metal	Brass, Tri-Metal		
Coupling Nut Plating Spec.	QQ-N-290	QQ-N-290		
Hex Size	13/16 inch	13/16 inch		

Environmental Specifications Temperature

Operating Range

Storage Range

-40 to +85 deg C -70 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration:	FMC00502 -	XX	uu	
				cm = Centimeters <blank> = Inches</blank>
				——— Length

Example: FMC00502-12 = 12 inches long cable FMC00502-100cm = 100 cm long cable

N Male to N Male Cable LMR-240-UF Coax with Heat Shrink 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: N Male to N Male Cable LMR-240-UF Coax with Heat Shrink FMC00502

URL: https://www.fairviewmicrowave.com/n-male-n-male-cable-lmr240uf-coax-fmc00502-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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