

### FMC00478-12 DATA SHEET

# Low Loss N Male to RA TNC Male Cable LMR-240-UF Coax in 12 Inch

The type N male to RA TNC male 12 inch cable using LMR-240-UF coax, part number FMC00478-12, from Fairview Microwave is in-stock and ships same day. This Fairview type N to TNC 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 FMC00478-12 type N male to TNC male cable assembly operates to 5.8 GHz. The right angle TNC interface on the LMR-240-UF cable allows for easier connections in tight spaces. 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	Unit	s
Frequency Range	DC			5.8	GH:	<u></u>
VSWR				1.4:1		
Velocity of Propagation		3	34		%	
RF Shielding	90				dB	
Group Delay		1.21	[3.97]		ns/ft [ns	s/m]
Capacitance		24.2	[79.4]		pF/ft [pf	-/m]
Inductance		0.06	[0.2]		uH/ft [ul	l/m]
DC Resistance Inner Cor	ductor	4.28	[14.04]		Ω/1000ft [.	Ω/Km]
DC Resistance Outer Cor	nductor	3.89	[12.76]		Ω/1000ft [.	Ω/Km]
Operating Voltage (DC)				2,500	Vdc	
Dielectric Withstanding \	/oltage (DC)			1,500	Vdc	
Jacket Spark				5,000	Vrm	S
Input Power (Peak)				5.6	KWat	ts

#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.24	0.28	0.33	0.44	0.6	dB

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated 0.15 dB for the right angle connector and 0.1\*SQRT(FGHz) dB for the straight connector.

#### **Mechanical Specifications**

Cable Assembly Length\*

gth\* 12 in [304.8 mm]



#### **Configuration:**

- N Male
- TNC Male Right Angle
- 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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Diameter 0.24 in [6.1 mm]
Weight 0.03 lbs [13.61 g]

Cable

Cable Type LMR-240-UF
Impedance 50 Ohms
Inner Conductor Type Stranded
Inner Conductor Material and Plating Copper
Dielectric Type PE (F)
Number of Shields 2

Shield Layer 1 Aluminum Tape
Shield Layer 2 Tinned Copper Braid

Jacket Material TPE, Black

Jacket Diameter 0.24 in [6.1 mm]

One Time Minimum Bend Radius

Repeated Minimum Bend Radius

Bending Moment

Flat Plate Crush

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]

Tensile Strength 80 lbs [36.29 Kg]

#### **Connectors**

Description	Connector 1	Connector 2		
Туре	N Male	TNC Male		
Impedance	50 Ohms	50 Ohms		
Contact Material & Plating	Brass, Gold	Brass, Gold		
Contact Plating Spec.	50 µinch			
Dielectric Type	PTFE	PTFE		
Body Material & Plating	Brass, Tri-Metal	Brass, Nickel		
Body Plating Spec.	80 µinch			
Coupling Nut Material & Plat	ting Brass, Tri-Metal	Brass, Nickel		
Coupling Nut Plating Spec.	80 µinch			
Hex Size	13/16 inch	13/16 inch		
Torque	15.05 in-lbs 1.7 Nm	15.05 in-lbs 1.7 Nm		
Seal Gasket Material	Silicone	Silicone		

## **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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#### **How to Order**

Part Number Configuration:	FMC00478	- xx	uu	
				cm = Centimeters <blank> = Inches - Length</blank>

Example: FMC00478-12 = 12 inches long cable

FMC00478-100cm = 100 cm long cable

Low Loss N Male to RA TNC Male Cable LMR-240-UF Coax in 12 Inch 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: Low Loss N Male to RA TNC Male Cable LMR-240-UF Coax in 12 Inch FMC00478-12

URL: https://www.fairviewmicrowave.com/n-male-ra-tnc-male-cable-lmr240uf-coax-fmc00478-12-p.aspx

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