

# **FMC00978-12 DATA SHEET**

## TNC Male to RA TNC Male Cable LMR-240-UF Coax with Heat Shrink in 12 Inch

The TNC male to RA TNC male 12 inch cable using LMR-240-UF coax, part number FMC00978-12, from Fairview Microwave is in-stock and ships same day. This Fairview TNC 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 FMC00978-12 TNC 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	U	nits	
Frequency Range	DC			5.8		GHz	
Velocity of Propagation		84		%			
RF Shielding	90					dB	
Group Delay		1.21	[3.97]		ns/ft	[ns/n	<u>n]</u>
Capacitance		24.2	[79.4]		pF/ft [pF/m]		
Inductance			[0.2]		uH/ft	[uH/r	n]
DC Resistance Inner Conductor			[14.04]		Ω/1000	Oft [Ω/I	Km]
DC Resistance Outer Conductor			[12.76]		Ω/1000	Oft [Ω/I	Km]
Jacket Spark				5,000	V	′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.)	0.3	0.34	0.4	0.48	0.69	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 insertion loss of 0.1\*SQRT(FGHz) dB per TNC connector and 0.2 dB per RA TNC Connector.

## **Mechanical Specifications**

#### **Cable Assembly**

Length\* 12 in [304.8 mm] Weight 0.105 lbs [47.63 g]

#### Cable

Cable Type LMR-240-UF Impedance 50 Ohms



## **Configuration:**

- TNC 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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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 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	TNC Male	TNC Male
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	
Contact Material & Plating	Phosphor Bronze, G	old Brass, Gold
Contact Plating Spec.	50μ in. minimum	
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plati	ng Brass, Tri-Metal	
Body Material & Plating	Brass, Tri-Metal	Brass, Nickel
Body Plating Spec.	80μ in. minimum	
Coupling Nut Material & Pla	ting Brass, Tri-Metal	Brass, Nickel
Coupling Nut Plating Spec.	80µ in. minimum	
Torque	20 in-lbs 2.26 Nr	n

## **Environmental Specifications**

Temperature

Operating Range

-40 to +85 deg C

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

## **Plotted and Other Data**

Notes:

## **How to Order**

Part Number Configuration:

Example: FMC00978-12 = 12 inches long cable

FMC00978-100cm = 100 cm long cable





TNC Male to RA TNC Male Cable LMR-240-UF Coax with Heat Shrink 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: TNC Male to RA TNC Male Cable LMR-240-UF Coax with Heat Shrink in 12 Inch FMC00978-12

URL: https://www.fairviewmicrowave.com/tnc-male-ra-tnc-male-cable-lmr240uf-coax-fmc00978-12-p.aspx







