

TNC Male to RA TNC Male Cable LMR-240-UF Coax with Heat Shrink in 50CM

The TNC male to RA TNC male 50 cm cable using LMR-240-UF coax, part number FMC00978-50CM, 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 FMC00978-50CM 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	Typ	Max	Units
Frequency Range	DC		5.8	GHz
Velocity of Propagation		84		%
RF Shielding	90			dB
Group Delay	1.21 [3.97]			ns/ft [ns/m]
Capacitance	24.2 [79.4]			pF/ft [pF/m]
Inductance	0.06 [0.2]			uH/ft [uH/m]
DC Resistance Inner Conductor	4.28 [14.04]			$\Omega/1000\text{ft} [\Omega/\text{Km}]$
DC Resistance Outer Conductor	3.89 [12.76]			$\Omega/1000\text{ft} [\Omega/\text{Km}]$
Jacket Spark		5,000		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.)	0.33	0.38	0.46	0.55	0.85	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 $0.1 * \text{SQRT}(F\text{GHz})$ dB per TNC connector and 0.2 dB per RA TNC Connector.

Mechanical Specifications

Cable Assembly

Length*	19.68 in [499.87 mm]
Weight	0.124 lbs [56.25 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

Fairview Microwave
 301 Leora Ln., Suite 100
 Lewisville, TX 75056
 Tel: 1-800-715-4396 / (972) 649-6678
 Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

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	0.75 in [19.05 mm]
Repeated Minimum Bend Radius	2.5 in [63.5 mm]
Bending Moment	0.13 lbs-ft [0.18 N-m]
Flat Plate Crush	13 lbs/in [0.23 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

Connectors

Description	Connector 1	Connector 2
Type	TNC Male	TNC Male
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	
Contact Material & Plating	Phosphor Bronze, Gold	Brass, Gold
Contact Plating Spec.	50 μ in. minimum	
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating	Brass, Tri-Metal	
Body Material & Plating	Brass, Tri-Metal	Brass, Nickel
Body Plating Spec.	80 μ in. minimum	
Coupling Nut Material & Plating	Brass, Tri-Metal	Brass, Nickel
Coupling Nut Plating Spec.	80 μ in. minimum	
Torque	20 in-lbs 2.26 Nm	

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:

FMC00978 - xx uu

 cm = Centimeters
 <blank> = Inches
 Length

 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 50CM 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.

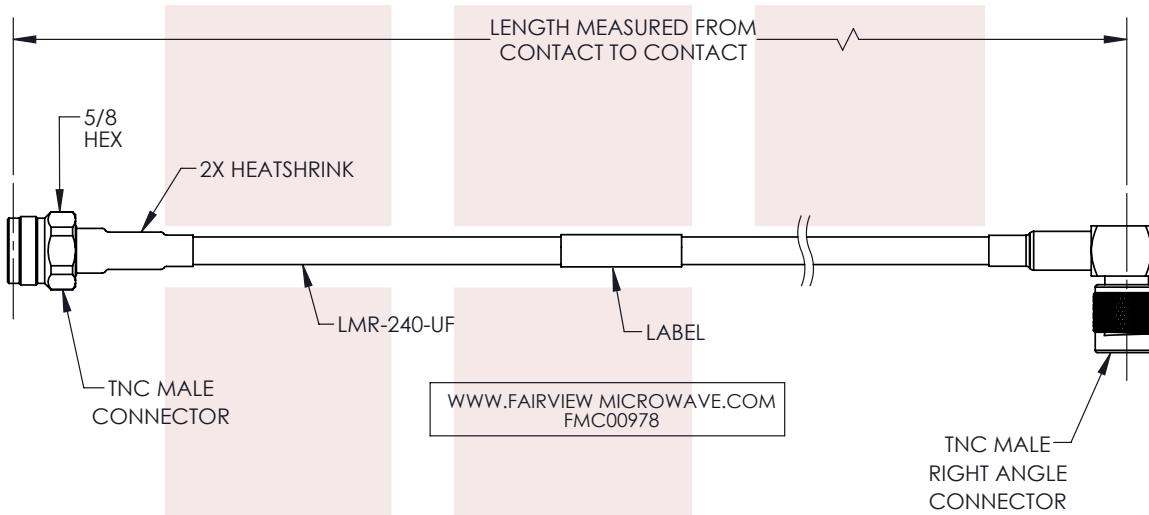
Click the following link to obtain additional part information: [TNC Male to RA TNC Male Cable LMR-240-UF Coax with Heat Shrink in 50CM FMC00978-50CM](https://www.fairviewmicrowave.com/tnc-male-ra-tnc-male-cable-lmr240uf-coax-fmc00978-50cm-p.aspx)

URL: <https://www.fairviewmicrowave.com/tnc-male-ra-tnc-male-cable-lmr240uf-coax-fmc00978-50cm-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.



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	08/10/2022	AGANWANI



NOTES:

1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END 6.0" FROM END OF CONNECTOR

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

Fairview Microwave an INFINITE brand	UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS		 THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.
	TOLERANCES:	CABLE LENGTH (L) TOLERANCES:	
TITLE TNC Male to RA TNC Male Cable LMR-240-UF Coax with Heat Shrink in 50CM	$X = \pm 2$ [5.08] $XX = \pm .02$ [.51] $XXX = \pm .005$ [.13]	FRACTIONS $\pm 1/32$ $\text{ANGLES } \pm 1^\circ$	$L \leq 12$ [305] = ± 1 [25] / -0 12 [305] < $L \leq 60$ [1524] = ± 2 [51] / -0 60 [1524] < $L \leq 120$ [3048] = ± 4 [102] / -0 120 [3048] < $L \leq 300$ [7620] = ± 6 [152] / -0 300 [7620] < L = $\pm 5\%$ / -0
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.		SCALE	N/A
SIZE A	CAGE CODE 3FKR5	DRAWN BY BPUCHASKI	ITEM NO. FMC00978
			REV A

T-Rev.D