

## Low Loss TNC Male to RA QMA Male Cable LMR-240-UF Coax in 24 Inch with Times Microwave components

The TNC male to RA QMA male 24 inch cable using LMR-240-UF coax, part number FMC00299-24, from Fairview Microwave is in-stock and ships same day. This Fairview TNC to QMA 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 FMC00299-24 TNC male to QMA male cable assembly operates to 5.8 GHz. The right angle QMA 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
VSWR			1.4:1	
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]		$\Omega$ /1000ft [ $\Omega$ /Km]
DC Resistance Outer Conductor		3.89 [12.76]		$\Omega$ /1000ft [ $\Omega$ /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.)	0.39	0.43	0.49	0.61	0.79	dB

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB for the straight connector and 0.2 dB for the right angle connector

### Mechanical Specifications

#### Cable Assembly

Length\* 24 in [609.6 mm]

#### Cable

Cable Type LMR-240-UF



### Configuration:

- TNC Male
- QMA 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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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 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	QMA Male
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	
Contact Material & Plating	Phosphor Bronze, Gold	Beryllium Copper, Gold
Contact Plating Spec.	50 $\mu$ in. minimum	
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating	Brass, Tri-Metal	Brass, Nickel
Body Material & Plating	Brass, Tri-Metal	Brass, Nickel
Body Plating Spec.	80 $\mu$ in. minimum	
Coupling Nut Material & Plating	Brass, Tri-Metal	
Coupling Nut Plating Spec.	80 $\mu$ in. minimum	
Torque	20 in-lbs 2.26 Nm	

### Mechanical Specification Notes:

\*All cable assemblies have a length tolerance of 1.5% or  $\pm 3/8$ ", whichever is greater.

### 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:

**How to Order**

Part Number Configuration:

**FMC00299 - xx uu**



Example: FMC00299-12 = 12 inches long cable  
FMC00299-100cm = 100 cm long cable

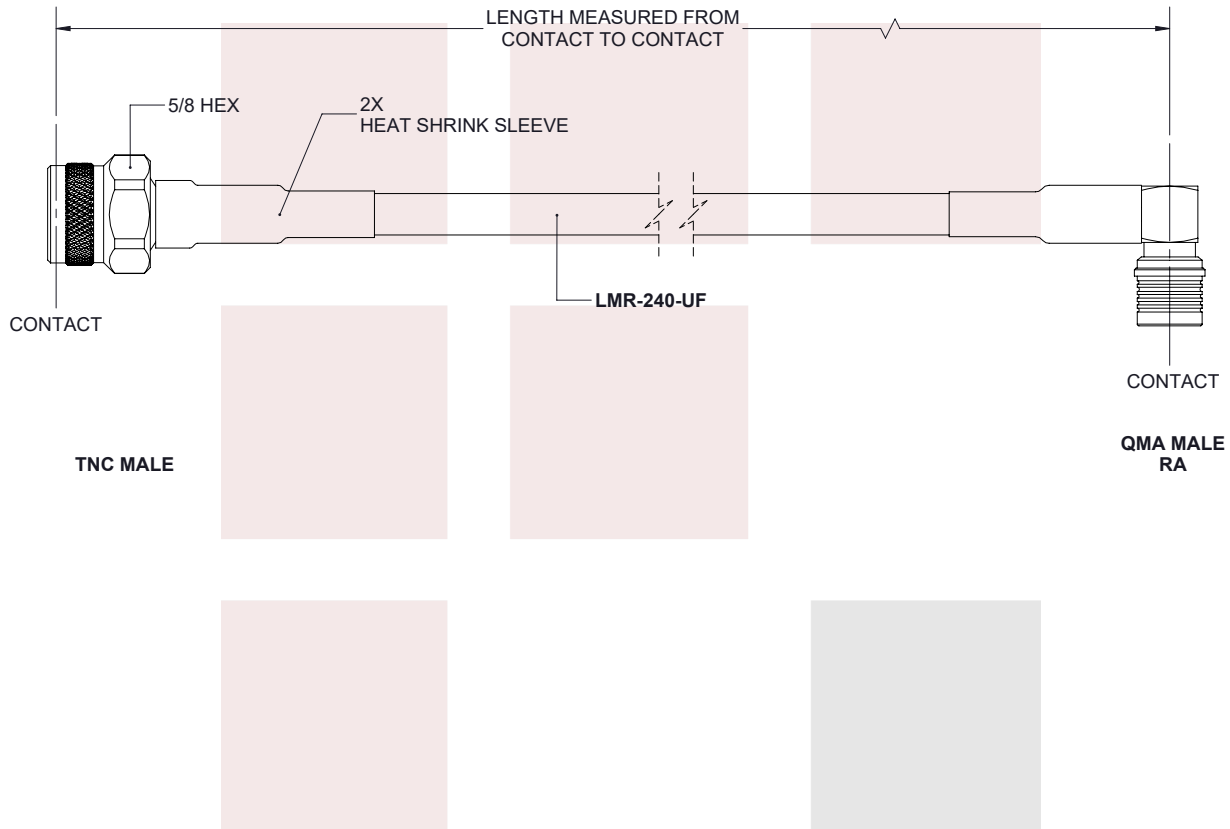
Low Loss TNC Male to RA QMA Male Cable LMR-240-UF Coax in 24 Inch with Times Microwave components from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss TNC Male to RA QMA Male Cable LMR-240-UF Coax in 24 Inch with Times Microwave components FMC00299-24](#)

URL: <https://www.fairviewmicrowave.com/tnc-male-ra-qma-male-cable-lmr240uf-coax-fmc00299-24-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	2/21/2020	S.ELLIS



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TITLE  
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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:		CABLE LENGTH (L) TOLERANCES:	
.X = ±.2 [ .508 ]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0	
.XX = ±.02 [ .51 ]		12 [305] < L ≤ 60 [1524] = +2 [51] / -0	
.XXX = ±.005 [ .13 ]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0	
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0	
		300 [7620] < L = +5%L / -0	

THIRD-ANGLE PROJECTION  
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ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. FMC00299	REV A
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