

Low Loss RA SMA Male to RA TNC Male Cable LMR-240 Coax

The RA SMA male to RA TNC male cable using LMR-240 coax, part number FMC00511, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to TNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00511 SMA male to TNC male cable assembly operates to 5.8 GHz. The right angle SMA and right angle TNC interfaces on the LMR-240 cable allow 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		3.2 [10.5]		$\Omega/1000ft$ [Ω/Km]
DC Resistance Outer Conductor		3.89 [12.76]		$\Omega/1000ft$ [Ω/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.)	0.039	0.055	0.079	0.12	0.2	dB/ft
	0.13	0.18	0.26	0.39	0.66	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB per connector.

Mechanical Specifications

Cable Assembly

Weight 0.104 lbs [47.17 g]

Cable

Cable Type LMR-240
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper



Configuration:

- SMA Male Right Angle
- TNC Male Right Angle
- LMR-240

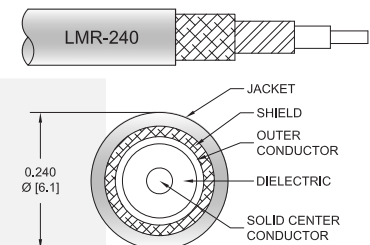
Features:

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

Applications:

- General Purpose
- Laboratory Use

Cable Diagram:



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Dielectric Type PE (F)
 Number of Shields 2
 Shield Layer 1 Aluminum Tape
 Shield Layer 2 Tinned Copper Braid
 Jacket Material PE, 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 0.25 lbs-ft [0.34 N-m]
 Flat Plate Crush 20 lbs/in [0.36 Kg/mm]
 Tensile Strength 80 lbs [36.29 Kg]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	TNC Male
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	
Contact Material & Plating	Brass/Phosphor Bronze, Gold	Brass, Gold
Contact Plating Spec.	50 μinch	
Dielectric Type	Teflon	PTFE
Body Material & Plating	Brass, Tri-Metal	Brass, Nickel
Body Plating Spec.	80 μinch	
Coupling Nut Material & Plating	Brass, Tri-Metal	Brass, Nickel
Coupling Nut Plating Spec.	80 μinch	
Hex Size	5/16 inch	
Torque	7 in-lbs 0.79 Nm	

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

Compliance Certifications (see [product page](#) for current document)

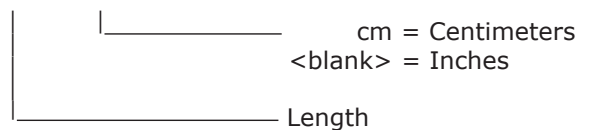
Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMC00511 - xx uu



Example: FMC00511-12 = 12 inches long cable
 FMC00511-100cm = 100 cm long cable

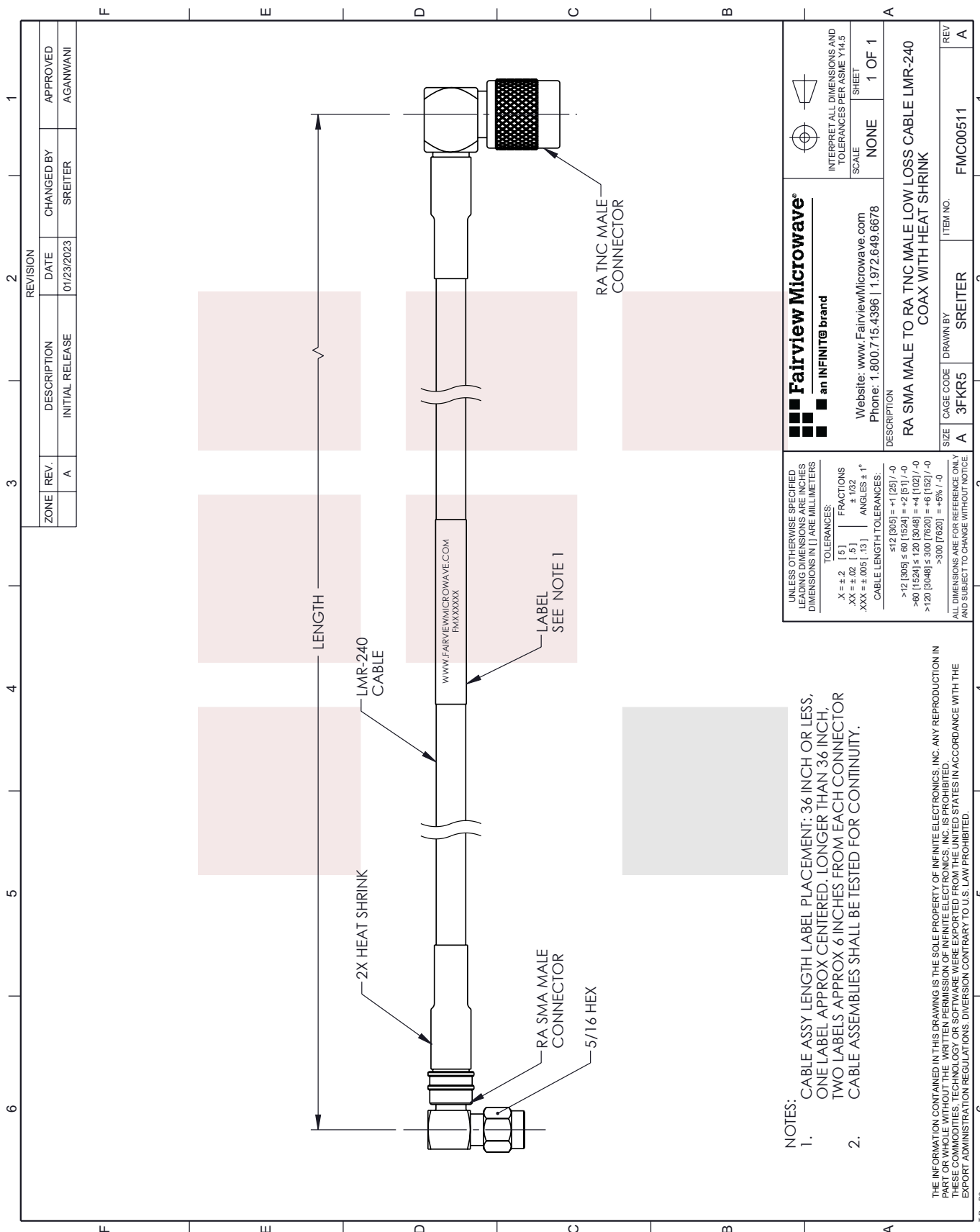
Low Loss RA SMA Male to RA TNC Male Cable LMR-240 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss RA SMA Male to RA TNC Male Cable LMR-240 Coax FMC00511](https://www.fairviewmicrowave.com/low-loss-ra-sma-male-to-ra-tnc-male-cable-lmr-240-coax-fmc00511)

URL: <https://www.fairviewmicrowave.com/low-loss-ra-sma-male-to-ra-tnc-male-cable-lmr-240-coax-fmc00511-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.





NOTES:

- CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCH OR LESS, ONE LABEL APPROX CENTERED, LONGER THAN 36 INCH, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> <p>TOLERANCES: .X = ±.2 [.5] FRACTIONS .XX = ±.02 [.5] ±.132 .XXX = ±.005 [.13] ANGLES ± 1°</p> <p>CABLE LENGTH TOLERANCES: ≤12 [305] = ±1 [25] / -0 >12 [305] ≤ 60 [1524] = +2 [51] / -0 >60 [1524] ≤ 120 [3048] = +4 [102] / -0 >120 [3048] ≤ 300 [7620] = +6 [152] / -0 >300 [7620] = +5% / -0</p>	<p>FAIRVIEW MICROWAVE[®] an INFINIT[®] brand</p> <p>Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678</p>	<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SHEET</p> <p>SCALE NONE</p> <p>SHEET 1 OF 1</p>
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DESCRIPTION
**RA SMA MALE TO RA TNC MALE LOW LOSS CABLE LMR-240
 COAX WITH HEAT SHRINK**

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	SREITER	FMC00511