

Low Loss RA SMA Male to TNC Male Cable LMR-240-UF Coax in 50 CM with Times Microwave components

The RA SMA male to TNC male 50 cm cable using LMR-240-UF coax, part number FMC00242-50CM, 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-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00242-50CM SMA male to TNC male cable assembly operates to 5.8 GHz. The right angle SMA 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]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ω /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.)	0.38	0.41	0.46	0.55	0.7	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* 19.68 in [499.87 mm]

Cable

Cable Type LMR-240-UF



Configuration:

- SMA Male Right Angle
- TNC Male
- 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	SMA Male	TNC Male
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material & Plating	Beryllium Copper, Gold	Phosphor Bronze, Gold
Contact Plating Spec.		50μ in. minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating	Brass, Nickel	Brass, Tri-Metal
Body Material & Plating	Brass, Nickel	Brass, Tri-Metal
Body Plating Spec.		80μ in. minimum
Coupling Nut Material & Plating		Brass, Tri-Metal
Coupling Nut Plating Spec.		80μ in. minimum
Hex Size	5/16 inch	
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)

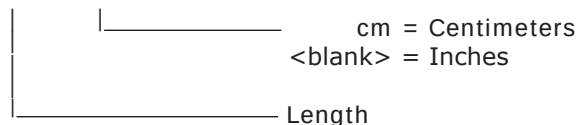
Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMC00242 - xx uu



Example: FMC00242-12 = 12 inches long cable
FMC00242-100cm = 100 cm long cable

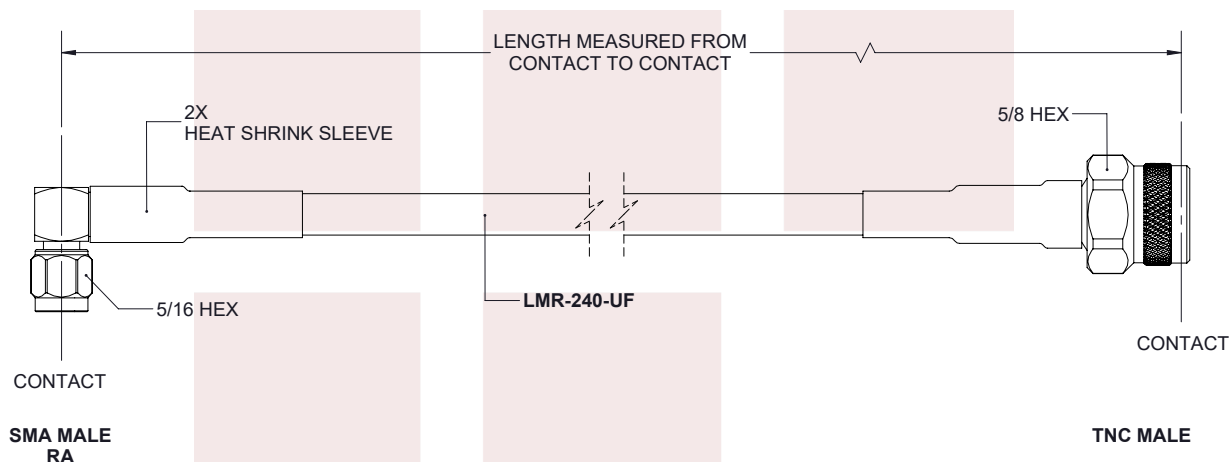
Low Loss RA SMA Male to TNC Male Cable LMR-240-UF Coax in 50 CM with Times Microwave components from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss RA SMA Male to TNC Male Cable LMR-240-UF Coax in 50 CM with Times Microwave components FMC00242-50CM](https://www.fairviewmicrowave.com/low-loss-ra-sma-male-tnc-male-cable-lmr240uf-coax-fmc00242-50cm-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-loss-ra-sma-male-tnc-male-cable-lmr240uf-coax-fmc00242-50cm-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	2/21/2020	S.ELLIS



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Fairview Microwave an INFINITI® brand		UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS		THIRD-ANGLE PROJECTION	
TITLE Low Loss RA SMA Male to TNC Male Cable LMR-240-UF Coax in 50 CM with Times Microwave components		TOLERANCES: .X = ±.2 [5.08] FRACTIONS ± 1/32 .XX = ±.02 [.51] ANGLES ± 1° .XXX = ±.005 [.13]		CABLE LENGTH (L) TOLERANCES: L ≤ 12 [305] = +1 [25] / -0 12 [305] < L ≤ 60 [1524] = +2 [51] / -0 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 300 [7620] < L = +5%L / -0	
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.		SHEET 1 OF 1		SCALE N/A	
SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. FMC00242	REV A	

T-Rev.D