

FMC00242-24 DATA SHEET

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

The RA SMA male to TNC male 24 inch cable using LMR-240-UF coax, part number FMC00242-24, 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 FMC00242-24 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	Т	ур	Max	ι	Jnits	
Frequency Range	DC			5.8		GHz	
VSWR				1.4:1			
Velocity of Propagation		8	34			%	
RF Shielding	90					dB	
Group Delay		1.21	[3.97]		ns/f	t [ns/n	n]
Capacitance		24.2	[79.4]		pF/f	t [pF/n	า]
Inductance		0.06	[0.2]		uH/f	t [uH/r	n]
DC Resistance Inner Cor	nductor	4.28	[14.04]		Ω/100	Oft [Ω/ŀ	(m]
DC Resistance Outer Cor	nductor	3.89	[12.76]		Ω/100	Oft [Ω/l	(m]
Jacket Spark				5,000	\	/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.)	0.39	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:

- 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
Inner Conductor Type
Inner Conductor Material and Plating

Dielectric Type
Number of Shields
Shield Layer 1
Shield Layer 2
Jacket Material
Jacket Diameter

2 Aluminum Tape Tinned Copper Braid

TPE, Black

50 Ohms

Stranded

Copper

PE (F)

0.24 in [6.1 mm]

One Time Minimum Bend Radius Repeated Minimum Bend Radius

Bending Moment Flat Plate Crush Tensile Strength 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	Connecto	Connector 1				
Туре	SMA Ma	le	TNC Male			
Impedance	50 Ohm	าร	50 Ohms			
Mating Cycles			500			
Contact Material & Plating	Beryllium Copp	er, Gol	d Phosphor Bronze, Go	ld		
Contact Plating Spec.			50μ in. minimum			
Dielectric Type	PTFE		PTFE			
Outer Cond Material & Plati	ing Brass, Nic	kel	Brass, Tri-Metal			
Body Material & Plating	Brass, Nic	kel	Brass, Tri-Metal			
Body Plating Spec.			80μ in. minimum			
Coupling Nut Material & Plating			Brass, Tri-Metal	Brass, Tri-Metal		
Coupling Nut Plating Spec.			80µ in. minimum			
Hex Size	5/16 ind	ch				
Torque		20 in-lbs 2.26 Nm				

Mechanical Specification Notes:

Environmental Specifications Temperature

Operating Range Storage Range

-40 to +85 deg C

-70 to +85 deg C $\,$

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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^{*}All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.





How to Order

Part Number Configuration:	FMC00242 -	xx uu	
			<pre>— cm = Centimeters <black< td=""></black<></pre>
			— Length

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 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 RA SMA Male to TNC Male Cable LMR-240-UF Coax in 24 Inch with Times Microwave components FMC00242-24

URL: https://www.fairviewmicrowave.com/low-loss-ra-sma-male-tnc-male-cable-lmr240uf-coax-fmc00242-24-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.

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