

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

FMC00185



Configuration

- Connector 1: SMA Male
- Connector 2: TNC Male
- Cable Type: LMR-240-UF
- Coax Flex Type: Flexible

Features

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

Applications

- General Purpose
- Laboratory Use

Description

The SMA male to TNC male cable using LMR-240-UF coax, part number FMC00185, 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 FMC00185 SMA male to TNC male cable assembly operates to 5.8 GHz. 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	Minimum	Typical	Maximum	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]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ohms/1000ft [Ohms/Km]
Jacket Spark			5,000	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	5800	MHz	
FMC00185	Custom Lengths Available	Insertion Loss (Typ.)	0.05	0.07	0.095	0.155	0.244	dB/ft	
			0.16	0.22	0.32	0.51	0.81	dB/m	
FMC00185-12	12 inch	Insertion Loss (Typ.)	0.2	0.24	0.3	0.42	0.59	dB	0.101
FMC00185-24	24 inch	Insertion Loss (Typ.)	0.25	0.31	0.39	0.57	0.83	dB	0.134
FMC00185-36	36 inch	Insertion Loss (Typ.)	0.29	0.37	0.49	0.73	1.08	dB	0.166
FMC00185-60	60 inch	Insertion Loss (Typ.)	0.38	0.51	0.68	1.04	1.57	dB	0.23
FMC00185-300	300 inch	Insertion Loss (Typ.)	1.3	1.83	2.58	4.14	6.45	dB	0.87

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.1 dB
 Loss due to Connector 2: 0.1 x sqrt(fGHz) dB
 Base Weight: 0.101 pounds
 Additional Weight per Inch: 0.00267 pounds

Mechanical Specifications

Cable Assembly

Weight 0.101 lbs [45.81 g]

Cable

Cable Type LMR-240-UF
 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]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	TNC Male
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		500
Contact Material and Plating	Beryllium Copper, Gold	Phosphor Bronze, Gold
Contact Plating Specification	50 µin minimum	50µ in. minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Tri-Metal
Body Material and Plating	Brass, Gold	Brass, Tri-Metal
Body Plating Specification	3 µin minimum	80µ in. minimum
Coupling Nut Material and Plating	Brass, Gold	Brass, Tri-Metal
Coupling Nut Plating Specification	3 µin minimum	80µ in. minimum
Hex Size	5/16 inch	
Torque		20 in-lbs 2.26 Nm

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

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Typical Performance Data

How to Order

Part Number Configuration:

FMC00185

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Unit of Measure:
cm = Centimeters
<blank> = Inches

Length
Base Number

Example: FMC00185-12 = 12 inches long cable
FMC00185-100cm = 100 cm long cable

Low Loss SMA Male to TNC Male Cable LMR-240-UF Coax from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Low Loss SMA Male to TNC Male Cable LMR-240-UF Coax FMC00185](#)

URL: <https://www.fairviewmicrowave.com/low-loss-sma-male-to-tnc-male-cable-lmr-240-uf-coax-fmc00185-p.aspx>

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FMC00185 CAD Drawing
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