

# FMC00237-50CM DATA SHEET

# Low Loss SMA Male to RP SMA Female Cable LMR-240-UF Coax in 50 CM

The SMA male to RP SMA female 50 cm cable using LMR-240-UF coax, part number FMC00237-50CM, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to reverse polarity SMA cable assembly has a male to female 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 FMC00237-50CM SMA male to reverse polarity SMA female 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		Min	Т	ур	Max	ι	Jnits	
Frequency Range		DC			5.8		GHz	
VSWR					1.4:1			
Velocity of Propagation			3	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/r	<u>n]</u>
Inductance		0.06	[0.2]		uH/f	t [uH/r	<u>m]</u>	
DC Resistance Inner Conductor			4.28	[14.04]		Ω/100	Oft [Ω/	Km]
DC Resistance Outer Cor	Outer Conductor		3.89	[12.76]		Ω/100	Oft [Ω/	Km]
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.)	0.28	0.31	0.36	0.45	0.6	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 per connector

#### **Mechanical Specifications**

#### **Cable Assembly**

Length\* 19.68 in [499.87 mm]

#### Cable

Cable Type Impedance Inner Conductor Type LMR-240-UF 50 Ohms Stranded



## **Configuration:**

- SMA Male
- SMA Female Reverse Polarity
- 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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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

Repeated Minimum Bend Radius

Bending Moment

Flat Plate Crush

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]

Tensile Strength 80 lbs [36.29 Kg]

#### Connectors

Description	Connector 1	Connector 2		
Туре	SMA Male	SMA Female		
Polarity		Reverse Polarity		
Specification	MIL-STD-348A			
Impedance	50 Ohms	50 Ohms		
Contact Material & Plating	Beryllium Copper, G	old Beryllium Copper, Gold		
Contact Plating Spec.	50 µin minimum			
Dielectric Type	PTFE	PTFE		
Body Material & Plating	Brass, Gold	Brass, Gold		
Body Plating Spec.	3 µin minimum			
Coupling Nut Material & Pla	ting Brass, Gold	Brass, Gold		
Coupling Nut Plating Spec.	3 µin minimum			
Hex Size	5/16 inch			

#### Mechanical Specification Notes:

# **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:

FMC00237 - xx uu

cm = Centimeters
<black> = Inches

Length

Example: FMC00237-12 = 12 inches long cable

FMC00237-100cm = 100 cm long cable

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





Low Loss SMA Male to RP SMA Female Cable LMR-240-UF Coax in 50 CM 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 SMA Male to RP SMA Female Cable LMR-240-UF Coax in 50 CM FMC00237-50CM

URL: https://www.fairviewmicrowave.com/low-loss-sma-male-sma-female-cable-lmr240uf-coax-fmc00237-50cm-p.aspx







