

# FMC00273-36 DATA SHEET

# RA SMA Male to RA SMA Male Cable LMR-100 Coax in 36 Inch

The RA SMA male to RA SMA male 36 inch cable using LMR-100 coax, part number FMC00273-36, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to male gender configuration with 50 ohm flexible LMR-100A coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00273-36 SMA male to SMA male cable assembly operates to 5.8 GHz. The right angle SMA interfaces on the LMR-100A 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	Т	ур	Max	ι	Jnits	
Frequency Range	DC			5.8		GHz	
VSWR				1.4:1			
Velocity of Propagation		(	66			%	
RF Shielding	90					dB	
Group Delay		1.54	[5.05]		ns/f	t [ns/n	<u>n]</u>
Capacitance		30.8 [	101.05	]	pF/f	t [pF/n	n]
Inductance		0.077	[0.25]		uH/f	t [uH/r	n]
DC Resistance Inner Cor	nductor	81 [2	65.75]		Ω/100	Oft [Ω/I	(m)
DC Resistance Outer Cor	nductor	9.5 [	31.17]		Ω/100	Oft [Ω/I	(m)
Jacket Spark				2,000	١	/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.)	0.74	0.89	1.12	1.59	2.32	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 0.2 dB per connector

# **Mechanical Specifications**

## **Cable Assembly**

Length\* 36 in [914.4 mm]
Diameter 0.315 in [8 mm]

#### Cable

Cable Type LMR-100A



# **Configuration:**

- SMA Male Right Angle
- SMA Male Right Angle
- LMR-100A

# **Features:**

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

# **Applications:**

- General Purpose
- · Laboratory Use
- Antenna Installations
- Land Mobile Radio & Other Communication Systems
- Cellular & Wi-Fi Systems

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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

One Time Minimum Bend Radius Repeated Minimum Bend Radius

Bending Moment

Flat Plate Crush

Tensile Strength

50 Ohms Solid

Copper Clad Steel

PΕ 2

Aluminum Tape Tinned Copper Braid

PVC, Black

0.11 in [2.79 mm]

0.25 in [6.35 mm] 1 in [25.4 mm]

0.1 lbs-ft [0.14 N-m] 10 lbs/in [0.18 Kg/mm]

15 lbs [6.8 Kg]

#### **Connectors**

Description	Connector 1	Connector 2
Туре	SMA Male	SMA Male
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Gold	Brass, Gold
Contact Plating Spec.	50 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Nickel	Brass, Nickel
Body Plating Spec.	100 μin minimum	100 µin minimum
Coupling Nut Material & Pla	ating Brass, Nickel	Brass, Nickel
Coupling Nut Plating Spec.	100 µin minimum	100 µin minimum
Hex Size	5/16 inch	5/16 inch

# Mechanical Specification Notes:

# **Environmental Specifications Temperature**

-40 to +85 deg C Operating Range Storage Range -70 to +85 deg C

**Compliance Certifications** (see product page for current document)

### **Plotted and Other Data**

Notes:

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REV 1.0 Page 2 of 4

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





## **How to Order**

Part Number Configuration:	FMC00273	- xx	uu	
			<u> </u>	- cm = Centimeters <blank> = Inches</blank>
				- Length

Example: FMC00273-12 = 12 inches long cable

FMC00273-100cm = 100 cm long cable

RA SMA Male to RA SMA Male Cable LMR-100 Coax in 36 Inch 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: RA SMA Male to RA SMA Male Cable LMR-100 Coax in 36 Inch FMC00273-36

URL: https://www.fairviewmicrowave.com/ra-sma-male-ra-sma-male-cable-lmr100-coax-fmc00273-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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