

### FMC00347-48 DATA SHEET

# SMC Plug to SMC Plug Cable LMR-100 Coax in 48 Inch

The SMC plug to SMC plug 48 inch cable using LMR-100 coax, part number FMC00347-48, from Fairview Microwave is in-stock and ships same day. This Fairview SMC to SMC cable assembly has a plug to plug 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 FMC00347-48 SMC plug to SMC plug 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			ć	66			%	
RF Shielding		90					dB	
Group Delay			1.54	[5.05]		ns/f	t [ns/n	n]
Capacitance			30.8 [	101.05	]	pF/f	t [pF/r	n]
Inductance		0.077	[0.25]		uH/f	t [uH/r	n]	
DC Resistance Inner Conductor		81 [265.75]		Ω/1000ft [Ω/Km]				
DC Resistance Outer Cor	nductor		9.5 [	31.17]		Ω/100	Oft [Ω/	Km]
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.)	0.66	0.86	1.16	1.79	2.76	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\* 48 in [121.92 cm]

#### Cable

Cable Type Impedance Inner Conductor Type LMR-100A 50 Ohms Solid

### **Configuration:**

- SMC Plug
- SMC Plug
- LMR-100A

### Features:

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

### **Applications:**

- General Purpose
- · Laboratory Use

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Inner Conductor Material and Plating Copper Clad Steel

Dielectric Type PE Number of Shields 2

Shield Layer 1 Aluminum Tape
Shield Layer 2 Tinned Copper Braid
Jacket Material PVC, Black

Jacket Diameter 0.11 in [2.79 mm]

One Time Minimum Bend Radius

Repeated Minimum Bend Radius

1 in [25.4 mm]

Bending Moment

O.1 lbs-ft [0.14 N-m]

Flat Plate Crush

10 lbs/in [0.18 Kg/mm]

Tensile Strength 15 lbs [6.8 Kg]

#### **Connectors**

Description	Connector 1	Connector 2			
Туре	SMC Plug	SMC Plug			
Specification	MIL-STD-348A	MIL-STD-348A			
Impedance	50 Ohms	50 Ohms			
Contact Material & Plating	Beryllium Copper, Go	old Beryllium Copper, Gold			
Contact Plating Spec.	50 µin minimum	50 µin minimum			
Dielectric Type	PTFE	PTFE			
Body Material & Plating	Brass, Gold	Brass, Gold			
Body Plating Spec.	3 µin minimum	3 µin minimum			
Coupling Nut Material & Pla	ting Brass, Gold	Brass, Gold			
Coupling Nut Plating Spec.	3 µin minimum	3 µin minimum			
Hex Size	1/4 inch	1/4 inch			

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:

### **How to Order**

Part Number Configuration:

FMC00347 - xx uu

cm = Centimeters
<black> = Inches

Length

Example: FMC00347-12 = 12 inches long cable

FMC00347-100cm = 100 cm long cable

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





SMC Plug to SMC Plug Cable LMR-100 Coax in 48 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: SMC Plug to SMC Plug Cable LMR-100 Coax in 48 Inch FMC00347-48

URL: https://www.fairviewmicrowave.com/smc-plug-smc-plug-cable-lmr100-coax-fmc00347-48-p.aspx







