



### **FMC00110**

### Configuration

Connector 1: SMA Male
Connector 2: N Male
Cable Type: LMR-400
Coax Flex Type: Flexible

#### **Features**

- · Max Frequency 6 GHz
- · Shielding Effectivity > 90 dB
- · 85% Phase Velocity
- · Double Shielded
- PE Jacket

### **Applications**

General Purpose

· Laboratory Use

### **Description**

The SMA male to type N male cable using LMR-400 coax, part number FMC00110, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00110 SMA male to type N male cable assembly operates to 6 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		6	GHz
VSWR			1.4:1	
Velocity of Propagation		85		%
RF Shielding	90			dB
Group Delay		1.2 [3.94]		ns/ft [ns/m]
Capacitance		23.9 [78.41]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		1.39 [4.56]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]
Jacket Spark			8,000	Vrms

### Specifications by Frequency





## **FMC00110**

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	5800	MHz	weight (has)
FMC00110	Custom Lengths	Insertion Loss (Typ.)	0.02	0.03	0.041	0.068	0.108	dB/ft	
FIVICOUTIO	Available	iliseitioli Loss (Typ.)	0.07	0.1	0.14	0.23	0.36	dB/m	
FMC00110-12	12 inch	Insertion Loss (Typ.)	0.15	0.18	0.21	0.27	0.36	dB	0.195
FMC00110-24	24 inch	Insertion Loss (Typ.)	0.17	0.2	0.25	0.34	0.47	dB	0.263
FMC00110-36	36 inch	Insertion Loss (Typ.)	0.19	0.23	0.29	0.4	0.57	dB	0.33
FMC00110-48	48 inch	Insertion Loss (Typ.)	0.21	0.26	0.33	0.47	0.68	dB	0.397
FMC00110-60	60 inch	Insertion Loss (Typ.)	0.23	0.29	0.37	0.54	0.79	dB	0.464

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: 0.06 x sqrt(fGHz) dB Base Weight: 0.195 pounds Additional Weight per Inch: 0.00559 pounds

### **Mechanical Specifications**

### **Cable Assembly**

Tensile Strength

Weight 0.195 lbs [88.45 g]

#### Cable

Cable Type LMR-400 Impedance 50 Ohms Inner Conductor Type Solid

Copper Clad Aluminum Inner Conductor Material and Plating

Dielectric Type PE(F) Number of Shields Shield Layer 1 Aluminum Tape Shield Layer 2 Tinned Copper Braid Jacket Material PE, Black Jacket Diameter 0.405 in [10.29 mm]

One Time Minimum Bend Radius 1 in [25.4 mm] Repeated Minimum Bend Radius 4 in [101.6 mm] **Bending Moment** 0.5 lbs-ft [0.68 N-m] Flat Plate Crush 40 lbs/in [0.71 Kg/mm]

160 lbs [72.57 Kg]





## **FMC00110**

### **Connectors**

Description	Connector 1	Connector 2	
Туре	SMA Male	N Male	
Impedance	50 Ohms	50 Ohms	
Configuration	Straight	Straight	
Contact Material and Plating	Brass, Gold	Brass, Gold	
Contact Plating Specification	50µin Minimum	3 µin minimum	
Dielectric Type	Teflon	PTFE	
Body Material and Plating	Brass, Tri-Metal	Brass, Nickel	
Body Plating Specification		100 μin minimum	
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Nickel	
Coupling Nut Plating Specification		100 μin minimum	

## **Environmental Specifications**

Compliance Certifications (see product page for current document)

### **Plotted and Other Data**

Notes:

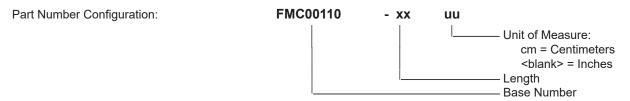




### **FMC00110**

### **Typical Performance Data**

#### **How to Order**



Example: FMC00110-12 = 12 inches long cable

FMC00110-100cm = 100 cm long cable

Low Loss SMA Male to N Male Cable LMR-400 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 ondemand.

For additional information on this product, please click the following link: Low Loss SMA Male to N Male Cable LMR-400 Coax FMC00110

URL: https://www.fairviewmicrowave.com/low-loss-sma-male-to-n-male-cable-lmr-400-coax-fmc00110-p.aspx

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