



# FMC00060

### Configuration

Connector 1: SMA Male
Connector 2: TNC Male
Cable Type: LMR-195
Coax Flex Type: Flexible

#### **Features**

- · Max Frequency 4 GHz
- · Shielding Effectivity > 90 dB
- · 80% Phase Velocity
- · Double Shielded
- PE Jacket

### **Applications**

General Purpose

· Laboratory Use

# **Description**

The SMA male to TNC male cable using LMR-195 coax, part number FMC00060, 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-195 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00060 SMA male to TNC male cable assembly operates to 4 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		4	GHz
VSWR			1.4:1	
Velocity of Propagation		80		%
RF Shielding	90			dB
Group Delay		1.27 [4.17]		ns/ft [ns/m]
Capacitance		25.4 [83.33]		pF/ft [pF/m]
Inductance		0.064 [0.21]		uH/ft [uH/m]
DC Resistance Inner Conductor		7.6 [24.93]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		4.9 [16.08]		Ohms/1000ft [Ohms/Km]
Jacket Spark			3,000	Vrms

### Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	4000	MHz	weight (has)
FMC00060	Custom Lengths	Insertion Loss (Typ.)	0.03	0.06	0.081	0.116	0.239	dB/ft	
FIVICUUBU	Available	ilisertion Loss (Typ.)	0.12	0.19	0.27	0.39	0.79	dB/m	
FMC00060-12	12 inch	Insertion Loss (Typ.)	0.24	0.26	0.29	0.32	0.44	dB	0.082
FMC00060-24	24 inch	Insertion Loss (Typ.)	0.27	0.32	0.37	0.44	0.68	dB	0.105
FMC00060-36	36 inch	Insertion Loss (Typ.)	0.31	0.38	0.45	0.55	0.92	dB	0.127
FMC00060-48	48 inch	Insertion Loss (Typ.)	0.34	0.43	0.53	0.67	1.16	dB	0.149
FMC00060-60	60 inch	Insertion Loss (Typ.)	0.37	0.49	0.61	0.78	1.4	dB	0.171

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 dBLoss due to Connector 2:0.1 dBBase Weight:0.082 poundsAdditional Weight per Inch:0.00184 pounds

# **Mechanical Specifications**

### **Cable Assembly**

Weight 0.082 lbs [37.19 g]

#### Cable

Cable TypeLMR-195Impedance50 OhmsInner Conductor TypeSolidInner Conductor Material and PlatingCopperDielectric TypePE (F)

Dielectric Type PE (F)
Number of Shields 2
Shield Layer 1 Aluminum Tape

Shield Layer 1 Aluminum Tape
Shield Layer 2 Tinned Copper Braid
Jacket Material PE, Black
Jacket Diameter 0.195 in [4.95 mm]

One Time Minimum Bend Radius

Repeated Minimum Bend Radius

2 in [50.8 mm]

Bending Moment

0.2 lbs-ft [0.27 N-m]

Flat Plate Crush

Tensile Strength

0.5 in [12.7 mm]

2 in [50.8 mm]

40 lbs-ft [0.27 Kg/mm]

40 lbs [18.14 Kg]





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### **Connectors**

Description	Connector 1	Connector 2		
Туре	SMA Male	TNC Male		
Specification		MIL-STD-348A		
Impedance	50 Ohms	50 Ohms		
Configuration	Straight	Straight		
Contact Material and Plating	Brass, Gold	Brass, Gold		
Contact Plating Specification	ASTM B488	30 μin minimum		
Dielectric Type	PTFE	PTFE		
Body Material and Plating	Passivated Stainless Steel	Brass, Nickel		
Body Plating Specification		100 μin minimum		
Coupling Nut Material and Plating	Passivated Stainless Steel	Brass, Nickel		
Coupling Nut Plating Specification		100 μin minimum		
Hex Size	5/16 Inch			

# **Environmental Specifications**

Compliance Certifications (see product page for current document)

# **Plotted and Other Data**

Notes:





# **FMC00060**

# **Typical Performance Data**

#### **How to Order**



Example: FMC00060-12 = 12 inches long cable

FMC00060-100cm = 100 cm long cable

Low loss SMA Male to TNC Male Cable LMR-195 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 TNC Male Cable LMR-195 Coax FMC00060

URL: https://www.fairviewmicrowave.com/low-loss-sma-male-to-tnc-male-cable-lmr-195-coax-fmc00060-p.aspx

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