

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

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	
FMC00060	Custom Lengths Available	Insertion Loss (Typ.)	0.03	0.06	0.081	0.116	0.239	dB/ft	
			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 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.082 pounds
Additional Weight per Inch:	0.00184 pounds

Mechanical Specifications

Cable Assembly

Weight	0.082 lbs [37.19 g]
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Cable

Cable Type	LMR-195
Impedance	50 Ohms
Inner Conductor Type	Solid
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	PE, Black
Jacket Diameter	0.195 in [4.95 mm]
One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	2 in [50.8 mm]
Bending Moment	0.2 lbs-ft [0.27 N-m]
Flat Plate Crush	15 lbs/in [0.27 Kg/mm]
Tensile Strength	40 lbs [18.14 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	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:

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FMC00060

Typical Performance Data

How to Order

Part Number Configuration:

FMC00060

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

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 on-demand.

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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FMC00060 CAD Drawing
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