

#### Low Loss SMA Male to TNC Female Cable LMR-100A-UF Coax

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#### FMCA10044

#### Configuration

· Connector 1: SMA Male · Connector 2: TNC Female · Cable Type: LMR-100A-UF · Coax Flex Type: Flexible

#### **Features**

- · Max Frequency 6 GHz
- · Shielding Effectivity > 90 dB
- · 66% Phase Velocity
- · Double Shielded
- TPE Jacket

#### **Applications**

· General Purpose

· Laboratory Use

#### **Description**

The SMA male to TNC female cable using LMR-100A-UF coax, part number FMCA10044, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to TNC cable assembly has a male to female gender configuration with 50 ohm flexible LMR-100A-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA10044 SMA male to TNC female 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		66		%
RF Shielding	90			dB
Group Delay		1.54 [5.05]		ns/ft [ns/m]
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Inductance		0.077 [0.25]		uH/ft [uH/m]
DC Resistance Inner Conductor		81 [265.75]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ohms/1000ft [Ohms/Km]
Jacket Spark			2,000	Vrms

#### Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Maight (lbs)	
Part Number		Frequency	250	500	1000	2500	6000	MHz	Weight (lbs)	
FMCA10044	Custom Lengths	Insertion Loss (Typ.)	0.115	0.165	0.24	0.398	0.641	dB/ft		
TWEATOUTT	Available	111361 tio11 to33 (19p.)	0.38	0.55	0.79	1.31	2.11	dB/m		
FMCA10044-24	24 Inch	Insertion Loss (Typ.)	0.43	0.53	0.68	1	1.49	dB	0.065	
FMCA10044-36	36 Inch	Insertion Loss (Typ.)	0.55	0.7	0.92	1.4	2.13	dB	0.074	
FMCA10044-48	48 Inch	Insertion Loss (Typ.)	0.66	0.86	1.16	1.8	2.77	dB	0.083	
FMCA10044-100CM	100 CM	Insertion Loss (Typ.)	0.58	0.75	0.99	1.51	2.31	dB	0.077	
FMCA10044-200CM	200 CM	Insertion Loss (Typ.)	0.96	1.29	1.78	2.82	4.41	dB	0.106	

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:

0.056 pounds

Additional Weight per Inch:

0.1025 pounds

#### **Mechanical Specifications**

#### Cable Assembly

 Width/Diameter
 0.5 in [12.7 mm]

 Weight
 0.056 lbs [25.4 g]

#### Cable

Cable Type LMR-100A-UF Impedance 50 Ohms Inner Conductor Type Stranded Inner Conductor Material and Plating Copper Dielectric Type PE

Number of Shields

Shield Layer 1

Shield Layer 2

Aluminum Tape
Tinned Copper

Jacket MaterialTPE, BlackJacket Diameter0.11 in [2.79 mm]One Time Minimum Bend Radius0.25 in [6.35 mm]Repeated Minimum Bend Radius1 in [25.4 mm]

Repeated Minimum Bend Radius 1 in [25.4 mm]

Bending Moment 0.1 lbs-ft [0.14 N-m]

Flat Plate Crush 10 lbs/in [0.18 Kg/mm]

Tensile Strength 15 lbs [6.8 Kg]



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#### **Connectors**

Description	Connector 1	Connector 2
Туре	SMA Male	TNC Female
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	15 µin minimum	
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	200 μin minimum	
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	200 μin minimum	
Torque	7 in-lbs 0.79 Nm	

#### **Environmental Specifications**

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:



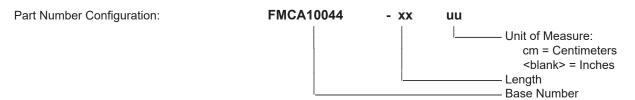
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#### **FMCA10044**

#### **Typical Performance Data**

#### **How to Order**



Example: FMCA10044-12 = 12 inches long cable

FMCA10044-100cm = 100 cm long cable

Low Loss SMA Male to TNC Female Cable LMR-100A-UF 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 Female Cable LMR-100A-UF Coax FMCA10044

URL: https://www.fairviewmicrowave.com/low-loss-sma-male-to-tnc-female-cable-lmr-100a-uf-coax-fmca10044-p.aspx

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