

Low Loss TNC Male to TNC Male Cable LMR-240-UF Coax



FMCA100225

Configuration

- Connector 1: TNC Male
- Connector 2: TNC Male
- Cable Type: LMR-240-UF
- Coax Flex Type: Flexible

Features

- Max Frequency 8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- TPE Jacket

Applications

- General Purpose
- Laboratory Use

Description

The TNC male to TNC male cable using LMR-240-UF coax, part number FMCA100225, from Fairview Microwave is in-stock and ships same day. This Fairview TNC to TNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100225 TNC male to TNC male cable assembly operates to 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	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
VSWR			1.4:1	
Velocity of Propagation		84		%
RF Shielding	90			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		4.28 [14.04]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ohms/1000ft [Ohms/Km]
Operating Voltage (AC)			500	Vrms
Dielectric Withstanding Voltage (AC)			1,500	Vrms

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			5,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	500	1000	2000	4000	8000	MHz	
FMCA100225	Custom Lengths Available	Insertion Loss (Typ.)	0.066 0.22	0.096 0.32	0.138 0.46	0.155 0.51	0.244 0.81	dB/ft dB/m	
FMCA100225-12	12 inch	Insertion Loss (Typ.)	0.27	0.3	0.34	0.36	0.45	dB	0.115
FMCA100225-24	24 inch	Insertion Loss (Typ.)	0.34	0.4	0.48	0.51	0.69	dB	0.148
FMCA100225-36	36 inch	Insertion Loss (Typ.)	0.4	0.49	0.62	0.67	0.94	dB	0.18
FMCA100225-60	60 inch	Insertion Loss (Typ.)	0.53	0.68	0.89	0.98	1.42	dB	0.244
FMCA100225-300	300 inch	Insertion Loss (Typ.)	1.85	2.6	3.65	4.08	6.3	dB	0.884

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:	0.115 pounds
Additional Weight per Inch:	0.00267 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.115 lbs [52.16 g]

Cable

Cable Type	LMR-240-UF
Impedance	50 Ohms
Inner Conductor Type	Stranded
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	TPE, Black
Jacket Diameter	0.24 in [6.1 mm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]
Repeated Minimum Bend Radius	2.5 in [63.5 mm]
Bending Moment	0.13 lbs-ft [0.18 N-m]
Flat Plate Crush	13 lbs/in [0.23 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	TNC Male	TNC Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		500
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification		50 μinch
Dielectric Type	POM	Teflon
Body Material and Plating	Brass, Nickel	Brass, Tri-Metal
Body Plating Specification		80 μinch
Coupling Nut Material and Plating		Brass, Tri-Metal
Coupling Nut Plating Specification		80 μinch
Hex Size		8 12

Environmental Specifications

Operating Range Temperature-40 to +85 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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Typical Performance Data

How to Order

Part Number Configuration: **FMCA100225** **- xx** **uu**

Unit of Measure:
cm = Centimeters
<blank> = Inches

Length

Base Number

Example: FMCA100225-12 = 12 inches long cable
FMCA100225-100cm = 100 cm long cable

Low Loss TNC Male to TNC Male Cable LMR-240-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 TNC Male to TNC Male Cable LMR-240-UF Coax FMCA100225](https://www.fairviewmicrowave.com/low-loss-tnc-male-to-tnc-male-cable-lmr-240-uf-coax-fmca100225-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-loss-tnc-male-to-tnc-male-cable-lmr-240-uf-coax-fmca100225-p.aspx>

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FMCA100225 CAD Drawing
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