

Low Loss RA TNC Male to RA TNC Male Cable LMR-400-UF Coax with Times Microwave Components, 180 Degree Clocking



FMCA100235

Configuration

Connector 1: TNC Male Right AngleConnector 2: TNC Male Right Angle

Cable Type: LMR-400-UFCoax Flex Type: Flexible

Features

- · Max Frequency 8 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- · Double Shielded
- TPE Jacket
- · 500 Mating Cycles

Applications

· General Purpose

· Laboratory Use

Description

The RA TNC male to RA TNC male cable using LMR-400-UF coax, part number FMCA100235, 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-400-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100235 TNC male to TNC male cable assembly operates to 8 GHz. The right angle TNC interfaces on the LMR-400-UF cable allow for easier connections in tight spaces. 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		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		1.07 [3.51]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]
Operating Voltage (AC)			500	Vrms



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Dielectric Withstanding Voltage (AC)			1,000	Vrms
Jacket Spark			8,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
Fait Number		rengui	Frequency	500	1000	2000	4000	8000	MHz
FMCA100235	Custom Lengths	Insertion Loss (Typ.)	0.035	0.05	0.072	0.094	0.13	dB/ft	
FIVICA100233	Available	insertion Loss (Typ.)	0.12	0.17	0.24	0.31	0.43	dB/m	
FMCA100235-12	12 inch	Insertion Loss (Typ.)	0.44	0.45	0.48	0.5	0.53	dB	0.307
FMCA100235-24	24 inch	Insertion Loss (Typ.)	0.47	0.5	0.55	0.59	0.66	dB	0.394
FMCA100235-36	36 inch	Insertion Loss (Typ.)	0.51	0.55	0.62	0.69	0.79	dB	0.481
FMCA100235-60	60 inch	Insertion Loss (Typ.)	0.58	0.65	0.76	0.87	1.05	dB	0.655
FMCA100235-300	300 inch	Insertion Loss (Typ.)	1.28	1.65	2.2	2.75	3.65	dB	2.395

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: 0.2 dB Loss due to Connector 2: 0.2 dB Base Weight: 0.307 pounds Additional Weight per Inch: 0.00725 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm] Weight 0.307 lbs [139.25 g]

Cable

LMR-400-UF Cable Type Impedance 50 Ohms Inner Conductor Type Stranded Inner Conductor Material and Plating Copper Dielectric Type PE(F)

Number of Shields Shield Layer 1 Aluminum Tape Shield Layer 2 **Tinned Copper Braid** Jacket Material TPE, Black 0.405 in [10.29 mm] Jacket Diameter

One Time Minimum Bend Radius 1 in [25.4 mm] Repeated Minimum Bend Radius 4 in [101.6 mm] **Bending Moment** 0.38 lbs-ft [0.52 N-m] Flat Plate Crush 20 lbs/in [0.36 Kg/mm]

Tensile Strength 160 lbs [72.57 Kg]



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Connectors

Description	Connector 1	Connector 2		
Туре	TNC Male Right Angle	TNC Male Right Angle		
Impedance	50 Ohms	50 Ohms		
Configuration	Right Angle	Right Angle		
Mating Cycles	500	500		
Contact Material and Plating	Brass, Gold	Brass, Silver		
Contact Plating Specification	50 μin			
Dielectric Type	Teflon	PTFE		
Body Material and Plating	Brass, Tri-metal	Brass, Silver		
Body Plating Specification	80 μin			
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Silver		
Coupling Nut Plating Specification	80 μin			
Hex Size	15.8 mm	15.8 mm		
Torque	15 in-lbs 1.7 Nm	15 in-lbs 1.7 Nm		
Seal Gasket Material	Silicone	Silicone		

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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FMCA100235

Typical Performance Data

How to Order

Part Number Configuration:

FMCA100235
- xx uu

Unit of Measure:
cm = Centimeters

Length
Base Number

Example: FMCA100235-12 = 12 inches long cable

FMCA100235-100cm = 100 cm long cable

Low Loss RA TNC Male to RA TNC Male Cable LMR-400-UF Coax with Times Microwave Components, 180 Degree Clocking 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 RA TNC Male to RA TNC Male Cable LMR-400-UF Coax with Times Microwave Components, 180 Degree Clocking FMCA100235

URL: https://www.fairviewmicrowave.com/low-loss-ra-tnc-male-to-ra-tnc-male-cable-lmr-400-uf-coax-with-times-micro-wave-components-180-degree-clocking-fmca100235-p.aspx

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FMCA100235 CAD Drawing

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