

Low Loss N Male to RA TNC Male Cable LMR-240-DB Coax



FMCA10047

Configuration

- Connector 1: N Male
- Connector 2: TNC Male Right Angle
- Cable Type: LMR-240-DB
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket

Applications

- General Purpose
- Laboratory Use

Description

The type N male to RA TNC male cable using LMR-240-DB coax, part number FMCA10047, from Fairview Microwave is in-stock and ships same day. This Fairview type N to TNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240-DB coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA10047 type N male to TNC male cable assembly operates to 6 GHz. The right angle TNC interface on the LMR-240-DB cable allows 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		6	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		3.2 [10.5]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ohms/1000ft [Ohms/Km]

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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					MHz	
FMCA10047	Custom Lengths Available	Insertion Loss (Typ.)	0.04	0.06	0.08	0.13	0.2	dB/ft	
			0.13	0.19	0.26	0.43	0.67	dB/m	
FMCA10047-12	12 Inch	Insertion Loss (Typ.)	0.39	0.41	0.43	0.48	0.56	dB	0.036
FMCA10047-24	24 Inch	Insertion Loss (Typ.)	0.43	0.46	0.51	0.61	0.76	dB	0.044
FMCA10047-36	36 Inch	Insertion Loss (Typ.)	0.47	0.52	0.59	0.74	0.97	dB	0.052
FMCA10047-48	48 Inch	Insertion Loss (Typ.)	0.51	0.57	0.67	0.87	1.17	dB	0.06
FMCA10047-60	60 Inch	Insertion Loss (Typ.)	0.55	0.63	0.75	1	1.37	dB	0.081

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: 0.25 dB
- Loss due to Connector 2: 0.1 dB
- Base Weight: 0.036 pounds
- Additional Weight per Inch: 0.1075 pounds

Mechanical Specifications

Cable Assembly

- Width/Diameter: 0.5 in [12.7 mm]
- Weight: 0.036 lbs [16.33 g]

Cable

- Cable Type: LMR-240-DB
- 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: 0.24 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: 0.25 lbs-ft [0.34 N-m]
- Flat Plate Crush: 20 lbs/in [0.36 Kg/mm]
- Tensile Strength: 80 lbs [36.29 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	N Male	TNC Male Right Angle
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Tri-Metal
Body Plating Specification	100 µin minimum	80 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Tri-Metal
Coupling Nut Plating Specification	100 µin minimum	80 µin minimum

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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FMCA10047

Typical Performance Data

How to Order

Part Number Configuration:

FMCA10047

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: FMCA10047-12 = 12 inches long cable
FMCA10047-100cm = 100 cm long cable

Low Loss N Male to RA TNC Male Cable LMR-240-DB 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 N Male to RA TNC Male Cable LMR-240-DB Coax FMCA10047](#)

URL: <https://www.fairviewmicrowave.com/low-loss-n-male-to-ra-tnc-male-cable-lmr-240-db-coax-fmca10047-p.aspx>

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