



#### FMCA100250

#### Configuration

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

Cable Type: LMR-240-UFCoax Flex Type: Flexible

#### **Features**

- · Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- · 84% Phase Velocity
- · Double Shielded
- TPE Jacket

#### **Applications**

· General Purpose

· Laboratory Use

#### **Description**

The RA BNC male to RA BNC male cable using LMR-240-UF coax, part number FMCA100250, from Fairview Microwave is in-stock and ships same day. This Fairview BNC to BNC 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 FMCA100250 BNC male to BNC male cable assembly operates to 4 GHz. The right angle BNC interfaces on the LMR-240-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		4	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]





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### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Jacket Spark			5,000	Vrms

Specifications by Frequency

Don't Number		Description	F1	F2	F3	F4	F5	Units	\A/a:=b+ /lb-a\
Part Number	Length	Frequency	100	250	500	1000	4000	MHz	Weight (lbs)
FMCA100250	Custom Lengths	Insertion Loss (Typ.)	0.029	0.046	0.066	0.096	0.195	dB/ft	
TWICATOUZSU	Available	1113C1 (1011 L033 (19p.)	0.1	0.16	0.22	0.32	0.64	dB/m	
FMCA100250-12	12 inch	Insertion Loss (Typ.)	0.43	0.45	0.47	0.5	0.6	dB	0.126
FMCA100250-24	24 inch	Insertion Loss (Typ.)	0.46	0.5	0.54	0.6	0.79	dB	0.159
FMCA100250-36	36 inch	Insertion Loss (Typ.)	0.49	0.54	0.6	0.69	0.99	dB	0.191
FMCA100250-60	60 inch	Insertion Loss (Typ.)	0.55	0.63	0.73	0.88	1.38	dB	0.255
FMCA100250-300	300 inch	Insertion Loss (Typ.)	1.13	1.55	2.05	2.8	5.28	dB	0.895

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: 0.126 pounds
Additional Weight per Inch: 0.00267 pounds

#### **Mechanical Specifications**

Cable Assembly

 Width/Diameter
 0.5 in [12.7 mm]

 Weight
 0.126 lbs [57.15 g]

Cable

Cable TypeLMR-240-UFImpedance50 OhmsInner Conductor TypeStrandedInner Conductor Material and PlatingCopper

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 Material

Jacket Diameter

One Time Minimum Bend Radius

Repeated Minimum Bend Radius

Bending Moment

One Time Minimum Bend Radius

One Time Minimum

Flat Plate Crush 13 lbs/in [0.23 Kg/mm]
Tensile Strength 80 lbs [36.29 Kg]





## FMCA100250

#### **Connectors**

Description	Connector 1	Connector 2
Туре	BNC Male Right Angle	BNC Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Right Angle
Contact Material and Plating	Brass, Gold	Brass, Gold
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel

### **Environmental Specifications**

Operating Range Temperature

-40 to +85 deg C

Compliance Certifications (see product page for current document)

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

Notes:

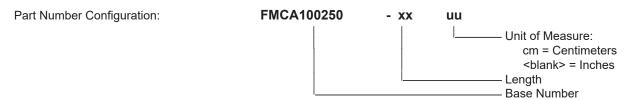




### FMCA100250

#### **Typical Performance Data**

#### **How to Order**



Example: FMCA100250-12 = 12 inches long cable

FMCA100250-100cm = 100 cm long cable

Low Loss RA BNC Male to RA BNC 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 RA BNC Male to RA BNC Male Cable LMR-240-UF Coax FMCA100250

URL: https://www.fairviewmicrowave.com/low-loss-ra-bnc-male-to-ra-bnc-male-cable-lmr-240-uf-coax-fmca100250-p. aspx

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