

Low Loss BNC Male to BNC Male Cable LMR-240-UF Coax with LF Solder

FMCA100212

Configuration

Connector 1: BNC Male
Connector 2: BNC Male
Cable Type: LMR-240-UF
Coax 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 BNC male to BNC male cable using LMR-240-UF coax, part number FMCA100212, 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 FMCA100212 BNC male to BNC male cable assembly operates to 4 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		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]
Jacket Spark			5,000	Vrms

Specifications by Frequency



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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	4000	MHz	weight (ibs)
FMCA100212	Custom Lengths	Insertion Loss (Typ.)	0.029	0.046	0.066	0.096	0.195	dB/ft	
FIVICA100212	Available	ilisertion Loss (Typ.)	0.1	0.16	0.22	0.32	0.64	dB/m	
FMCA100212-12	12 Inch	Insertion Loss (Typ.)	0.23	0.25	0.27	0.3	0.4	dB	0.084
FMCA100212-24	24 Inch	Insertion Loss (Typ.)	0.26	0.3	0.34	0.4	0.59	dB	0.117
FMCA100212-36	36 Inch	Insertion Loss (Typ.)	0.29	0.34	0.4	0.49	0.79	dB	0.149
FMCA100212-60	60 Inch	Insertion Loss (Typ.)	0.35	0.43	0.53	0.68	1.18	dB	0.213
FMCA100212-300	300 Inch	Insertion Loss (Typ.)	0.93	1.35	1.85	2.6	5.08	dB	0.853

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: 0.09 pounds Additional Weight per Inch: 0.00267 pounds

Electrical Specification Notes: Values at 25°C, sea level.

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm] Weight 0.084 lbs [38.1 g]

Cable

Cable Type LMR-240-UF Impedance 50 Ohms Stranded Inner Conductor Type 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

Jacket Diameter 0.24 in [6.1 mm] 0.75 in [19.05 mm] One Time Minimum Bend Radius 2.5 in [63.5 mm] Repeated Minimum Bend Radius **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

Connector 1	Connector 2		
BNC Male	BNC Male		
50 Ohms	50 Ohms		
Straight	Straight		
Brass, Gold	Brass, Gold		
POM	POM		
Brass, Nickel	Brass, Nickel		
	BNC Male 50 Ohms Straight Brass, Gold POM		

Environmental Specifications

Operating Range Temperature

-40 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Values at 25°C, sea level.



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Typical Performance Data

How to Order

Part Number Configuration:

FMCA100212 - xx uu

Unit of Measure:
cm = Centimeters

Length
Base Number

Example: FMCA100212-12 = 12 inches long cable

FMCA100212-100cm = 100 cm long cable

Low Loss BNC Male to BNC Male Cable LMR-240-UF Coax with LF Solder 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 BNC Male to BNC Male Cable LMR-240-UF Coax with LF Solder FMCA100212

URL: https://www.fairviewmicrowave.com/low-loss-bnc-male-to-bnc-male-cable-lmr-240-uf-coax-with-lf-solder-fm-ca100212-p.aspx

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