

Low Loss 75 Ohm BNC Male to 75 Ohm BNC Male Cable 75 Ohm LMR-400-75 Coax with Times Microwave Components

FMCA100022

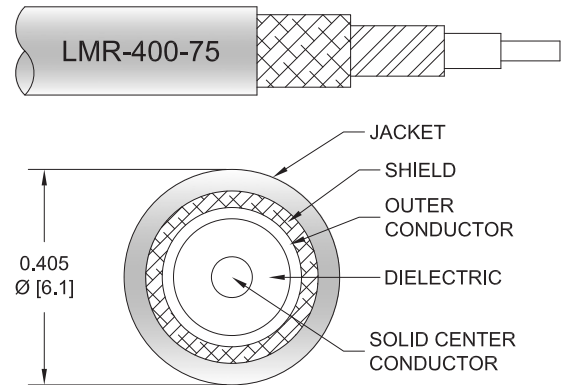


Configuration

- Connector 1: BNC Male
- Connector 2: BNC Male
- Cable Type: LMR-400-75
- Coax Flex Type: Flexible

Features

- Max Frequency 2 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- PE Jacket
- 500 Mating Cycles



Applications

- General Purpose
- Laboratory Use

Description

The 75 ohm BNC male to 75 ohm BNC male cable using 75 ohm LMR-400-75 coax, part number FMCA100022, 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 75 ohm flexible LMR-400-75 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100022 BNC male to BNC male cable assembly operates to 2 GHz.

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		2	GHz
VSWR			1.4:1	
Velocity of Propagation		85		%
RF Shielding	90			dB
Capacitance		15.9 [52.17]		pF/ft [pF/m]
Inductance		0.09 [0.3]		uH/ft [uH/m]
DC Resistance Inner Conductor		2.5 [8.2]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]

Specifications by Frequency

Low Loss 75 Ohm BNC Male to 75 Ohm BNC Male Cable 75 Ohm LMR-400-75 Coax with Times Microwave Components



FMCA100022

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	50	100	250	500	2000	MHz	
FMCA100022	Custom Lengths Available	Insertion Loss (Typ.)	0.008	0.013	0.019	0.027	0.057	dB/ft	
			0.03	0.05	0.07	0.09	0.19	dB/m	
FMCA100022-12	12 Inch	Insertion Loss (Typ.)	0.06	0.08	0.12	0.17	0.34	dB	0.156
FMCA100022-24	24 Inch	Insertion Loss (Typ.)	0.07	0.09	0.14	0.2	0.4	dB	0.227
FMCA100022-36	36 Inch	Insertion Loss (Typ.)	0.07	0.11	0.16	0.23	0.46	dB	0.297
FMCA100022-48	48 Inch	Insertion Loss (Typ.)	0.08	0.12	0.18	0.25	0.52	dB	0.367
FMCA100022-60	60 Inch	Insertion Loss (Typ.)	0.09	0.13	0.2	0.28	0.57	dB	0.437

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*SQRT(FGHz) dB
 Loss due to Connector 2: 0.1*SQRT(FGHz) dB
 Base Weight: 0.156 pounds
 Additional Weight per Inch: 0.00584 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
 Weight 0.156 lbs [70.76 g]

Cable

Cable Type LMR-400-75
 Impedance 75 Ohms
 Inner Conductor Type Stranded
 Inner Conductor Material and Plating Beryllium Copper
 Dielectric Type PE (F)
 Outer Conductor 1 Material and Plating Aluminum Tape
 Outer Conductor Diameter 0.291 in [7.39 mm]
 Jacket Material PE, Black
 Jacket Diameter 0.405 in [10.29 mm]
 One Time Minimum Bend Radius 1 in [25.4 mm]
 Repeated Minimum Bend Radius 4 in [101.6 mm]
 Bending Moment 0.5 lbs-ft [0.68 N-m]
 Flat Plate Crush 40 lbs/in [0.71 Kg/mm]
 Tensile Strength 160 lbs [72.57 Kg]

Low Loss 75 Ohm BNC Male to 75 Ohm BNC
Male Cable 75 Ohm LMR-400-75 Coax with Times
Microwave Components



FMCA100022

Connectors

Description	Connector 1	Connector 2
Type	BNC Male	BNC Male
Impedance	75 Ohms	75 Ohms
Configuration	Straight	Straight
Mating Cycles	500	500
Contact Material and Plating	Brass, Gold over Nickel over Copper	Brass, Gold over Nickel over Copper
Contact Plating Specification	50 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 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:

Low Loss 75 Ohm BNC Male to 75 Ohm BNC Male Cable 75 Ohm LMR-400-75 Coax with Times Microwave Components



FMCA100022

Typical Performance Data

How to Order

Part Number Configuration:

FMCA100022

- xx

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: FMCA100022-12 = 12 inches long cable
FMCA100022-100cm = 100 cm long cable

Low Loss 75 Ohm BNC Male to 75 Ohm BNC Male Cable 75 Ohm LMR-400-75 Coax with Times Microwave Components 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 75 Ohm BNC Male to 75 Ohm BNC Male Cable 75 Ohm LMR-400-75 Coax with Times Microwave Components FMCA100022](#)

URL: <https://www.fairviewmicrowave.com/low-loss-75-ohm-bnc-male-to-75-ohm-bnc-male-cable-75-ohm-lmr-400-75-coax-with-times-microwave-components-fmca100022-p.aspx>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

FMCA100022 CAD Drawing

Low Loss 75 Ohm BNC Male to 75 Ohm BNC Male Cable 75 Ohm LMR-400-75 Coax with Times Microwave Components

