

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



FMCA10054

Configuration

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

Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket

Applications

- General Purpose
- Laboratory Use

Description

The BNC male to UHF male cable using LMR-400 coax, part number FMCA10054, from Fairview Microwave is in-stock and ships same day. This Fairview BNC to UHF cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA10054 BNC male to UHF male cable assembly operates to 3 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		3	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		1.39 [4.56]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]
Jacket Spark			8,000	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	3000	
FMCA10054	Custom Lengths Available	Insertion Loss (Typ.)	0.01	0.02	0.03	0.04	0.07	dB/ft	
			0.04	0.07	0.1	0.14	0.24	dB/m	
FMCA10054-12	12 Inch	Insertion Loss (Typ.)	0.29	0.29	0.3	0.32	0.35	dB	0.139
FMCA10054-24	24 Inch	Insertion Loss (Typ.)	0.3	0.31	0.33	0.36	0.42	dB	0.173
FMCA10054-36	36 Inch	Insertion Loss (Typ.)	0.31	0.33	0.36	0.4	0.49	dB	0.207
FMCA10054-48	48 Inch	Insertion Loss (Typ.)	0.32	0.35	0.39	0.44	0.57	dB	0.241
FMCA10054-60	60 Inch	Insertion Loss (Typ.)	0.33	0.37	0.41	0.48	0.64	dB	0.275

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: 0.17 dB
 Base Weight: 0.139 pounds
 Additional Weight per Inch: 0.1325 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
 Weight 0.139 lbs [63.05 g]

Cable

Cable Type LMR-400
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper Clad Aluminum
 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 0.405 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]

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Connectors

Description	Connector 1	Connector 2
Type	BNC Male	UHF Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		500
Contact Material and Plating	Copper, Gold	Phosphor Bronze, Silver
Contact Plating Specification		200 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tin/Nickel
Body Plating Specification		100 µin minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tin/Nickel
Coupling Nut Plating Specification		100 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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Typical Performance Data

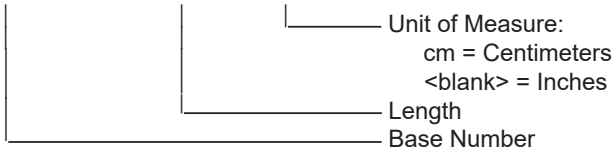
How to Order

Part Number Configuration:

FMCA10054

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Example: FMCA10054-12 = 12 inches long cable
FMCA10054-100cm = 100 cm long cable

Low Loss BNC Male to UHF Male Cable LMR-400 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 BNC Male to UHF Male Cable LMR-400 Coax with Times Microwave Components FMCA10054](#)

URL: <https://www.fairviewmicrowave.com/low-loss-bnc-male-to-uhf-male-cable-lmr-400-coax-with-times-microwave-components-fmca10054-p.aspx>

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FMCA10054 CAD Drawing

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