



FMCA100228

Configuration

Connector 1: BNC Male
Connector 2: BNC Male
Cable Type: LMR-195-UF
Coax Flex Type: Flexible

Features

- · Max Frequency 4 MHz
- Shielding Effectivity > 90 dB
- · 74% Phase Velocity
- · Double Shielded
- TPE Jacket

Applications

· General Purpose

· Laboratory Use

Description

The BNC male to BNC male cable using LMR-195-UF coax, part number FMCA100228, 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-195-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100228 BNC male to BNC male cable assembly operates to 4 MHz. 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			1.5:1	
Velocity of Propagation		74		%
RF Shielding	90			dB
Group Delay		1.27 [4.17]		ns/ft [ns/m]
Capacitance		25.4 [83.33]		pF/ft [pF/m]
Inductance		0.064 [0.21]		uH/ft [uH/m]
DC Resistance Inner Conductor		9.5 [31.17]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		4.9 [16.08]		Ohms/1000ft [Ohms/Km]
Operating Voltage (AC)			500	Vrms





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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			3,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	\\/a;=b+ (b=\
		Frequency	100	250	500	1000	4000	MHz	Weight (lbs)
FMCA100228	Custom Lengths	Insertion Loss (Typ.)	0.042	0.068	0.097	0.132	0.285	dB/ft	
	Available		0.14	0.23	0.32	0.44	0.94	dB/m	
FMCA100228-12	12 Inch	Insertion Loss (Typ.)	0.25	0.27	0.3	0.34	0.49	dB	0.075
FMCA100228-24	24 Inch	Insertion Loss (Typ.)	0.29	0.34	0.4	0.47	0.77	dB	0.096
FMCA100228-36	36 Inch	Insertion Loss (Typ.)	0.33	0.41	0.5	0.6	1.06	dB	0.117
FMCA100228-60	60 Inch	Insertion Loss (Typ.)	0.41	0.54	0.69	0.86	1.63	dB	0.159
FMCA100228-300	300 Inch	Insertion Loss (Typ.)	1.25	1.9	2.63	3.5	7.33	dB	0.579

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: 0.075 pounds Additional Weight per Inch: 0.00175 pounds

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

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm] Weight 0.075 lbs [34.02 g]

Cable

LMR-195-UF Cable Type Impedance 50 Ohms Inner Conductor Type Stranded Inner Conductor Material and Plating Copper Foam PE

Dielectric Type Number of Shields

Shield Layer 1 Aluminum Tape Shield Layer 2 **Tinned Copper** Jacket Material TPE, Black

Jacket Diameter 0.195 in [4.95 mm] One Time Minimum Bend Radius 0.5 in [12.7 mm] Repeated Minimum Bend Radius 2 in [50.8 mm] **Bending Moment** 0.1 lbs-ft [0.14 N-m] Flat Plate Crush 10 lbs/in [0.18 Kg/mm]

Tensile Strength 40 lbs [18.14 Kg]





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Connectors

Description	Connector 1	Connector 2
Туре	BNC Male	BNC Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 μin minimum	30 μin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 μin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 μin minimum	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:

Values at 25°C, sea level.

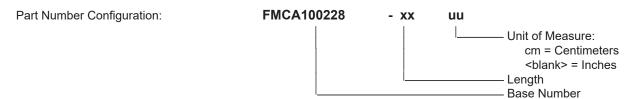




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Typical Performance Data

How to Order



Example: FMCA100228-12 = 12 inches long cable

FMCA100228-100cm = 100 cm long cable

Low Loss BNC Male to BNC Male Cable LMR-195-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 BNC Male to BNC Male Cable LMR-195-UF Coax FMCA100228

URL: https://www.fairviewmicrowave.com/low-loss-bnc-male-to-bnc-male-cable-lmr-195-uf-coax-fmca100228-p.aspx

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