

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



FMCA100228/0000

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 FMCA100228/0000, 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 FMCA100228/0000 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	Weight (lbs)
			Frequency					MHz	
FMCA100228/0000	Custom Lengths Available	Insertion Loss (Typ.)	0.042	0.068	0.097	0.132	0.285	dB/ft	
			0.14	0.23	0.32	0.44	0.94	dB/m	
FMCA100228/0000-12	12 Inch	Insertion Loss (Typ.)	0.25	0.27	0.3	0.34	0.49	dB	0.075
FMCA100228/0000-24	24 Inch	Insertion Loss (Typ.)	0.29	0.34	0.4	0.47	0.77	dB	0.096
FMCA100228/0000-36	36 Inch	Insertion Loss (Typ.)	0.33	0.41	0.5	0.6	1.06	dB	0.117
FMCA100228/0000-60	60 Inch	Insertion Loss (Typ.)	0.41	0.54	0.69	0.86	1.63	dB	0.159
FMCA100228/0000-300	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

Cable Type	LMR-195-UF
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper
Dielectric Type	Foam PE
Number of Shields	2
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
Type	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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FMCA100228/0000

Typical Performance Data

How to Order

Part Number Configuration: **FMCA100228/0000** - **xx** **uu**

_____ Unit of Measure:
 cm = Centimeters
 <blank> = Inches
 _____ Length
 _____ Base Number

Example: FMCA100228/0000-12 = 12 inches long cable
 FMCA100228/0000-100cm = 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.

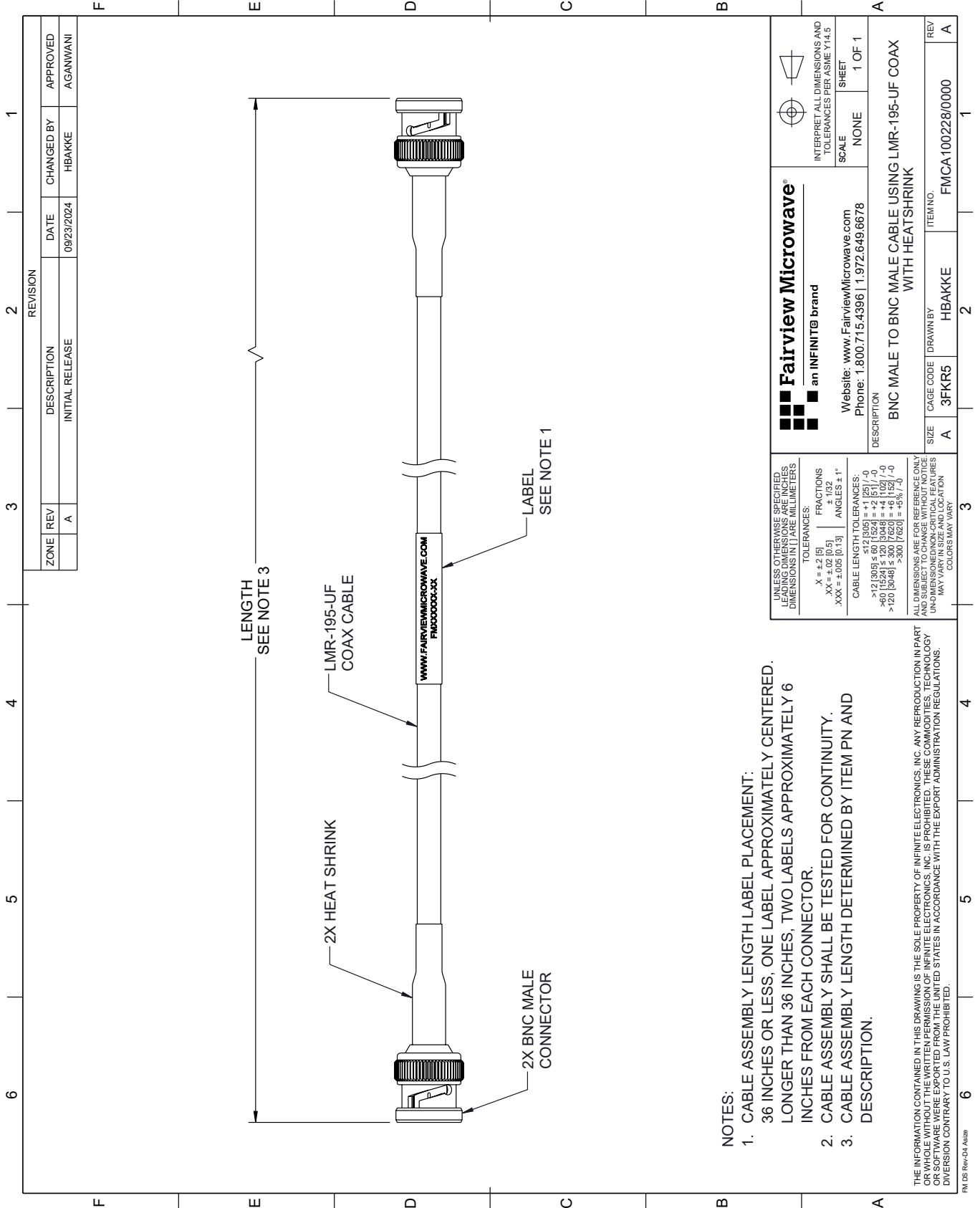
For additional information on this product, please click the following link: [Low Loss BNC Male to BNC Male Cable LMR-195-UF Coax FMCA100228/0000](https://www.fairviewmicrowave.com/low-loss-bnc-male-to-bnc-male-cable-lmr-195-uf-coax-fmca100228-0000-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-loss-bnc-male-to-bnc-male-cable-lmr-195-uf-coax-fmca100228-0000-p.aspx>

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FMCA100228/0000 CAD Drawing

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NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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FM DS Rev-D4 Alt2b

 Fairview Microwave [®] an INFINIT [®] brand		Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678
UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
TOLERANCES: .X = ±.2 [5] .XX = ±.02 [0.5] .XXX = ±.005 [0.13]		SCALE NONE SHEET 1 OF 1
FRACTIONS ± 1/32 ANGLES ± 1°		
CABLE LENGTH TOLERANCES: <12 [305] ≤ 60 [1524] = ±1 [25] / -0 >60 [1524] ≤ 120 [3048] = ±4 [102] / -0 >120 [3048] ≤ 300 [7620] = ±5% / -0		
ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.		
DESCRIPTION	SIZE	ITEM NO.
BNC MALE TO BNC MALE CABLE USING LMR-195-UF COAX WITH HEATSHRINK	A 3FKR5	FMCA100228/0000