

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



FMCA100287

Configuration

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

Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 74% Phase Velocity
- Double Shielded
- TPE Jacket
- 500 Mating Cycles

Applications

- General Purpose
- Laboratory Use

Description

The type N male to BNC female cable using LMR-195-UF coax, part number FMCA100287, from Fairview Microwave is in-stock and ships same day. This Fairview type N to BNC cable assembly has a male to female 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 FMCA100287 type N male to BNC female 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		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
Dielectric Withstanding Voltage (AC)			1,500	Vrms
Jacket Spark			3,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency	100	250	500	1000	4000	
FMCA100287	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	
FMCA100287-12	12 Inch	Insertion Loss (Typ.)	0.25	0.27	0.3	0.34	0.49	dB	0.121
FMCA100287-24	24 Inch	Insertion Loss (Typ.)	0.29	0.34	0.4	0.47	0.77	dB	0.142
FMCA100287-36	36 Inch	Insertion Loss (Typ.)	0.33	0.41	0.5	0.6	1.06	dB	0.163
FMCA100287-60	60 Inch	Insertion Loss (Typ.)	0.41	0.54	0.69	0.86	1.63	dB	0.205
FMCA100287-300	300 Inch	Insertion Loss (Typ.)	1.25	1.9	2.63	3.5	7.33	dB	0.625

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:	0.121 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	0.121 lbs [54.88 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	N Male	BNC Female
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	500
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	ASTM B488	30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	QQ-N-290	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	QQ-N-290	
Seal Gasket Material	Silicone	

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:

FMCA100287

- **xx**

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

Example: FMCA100287-12 = 12 inches long cable
FMCA100287-100cm = 100 cm long cable

Low Loss N Male to BNC Female 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.

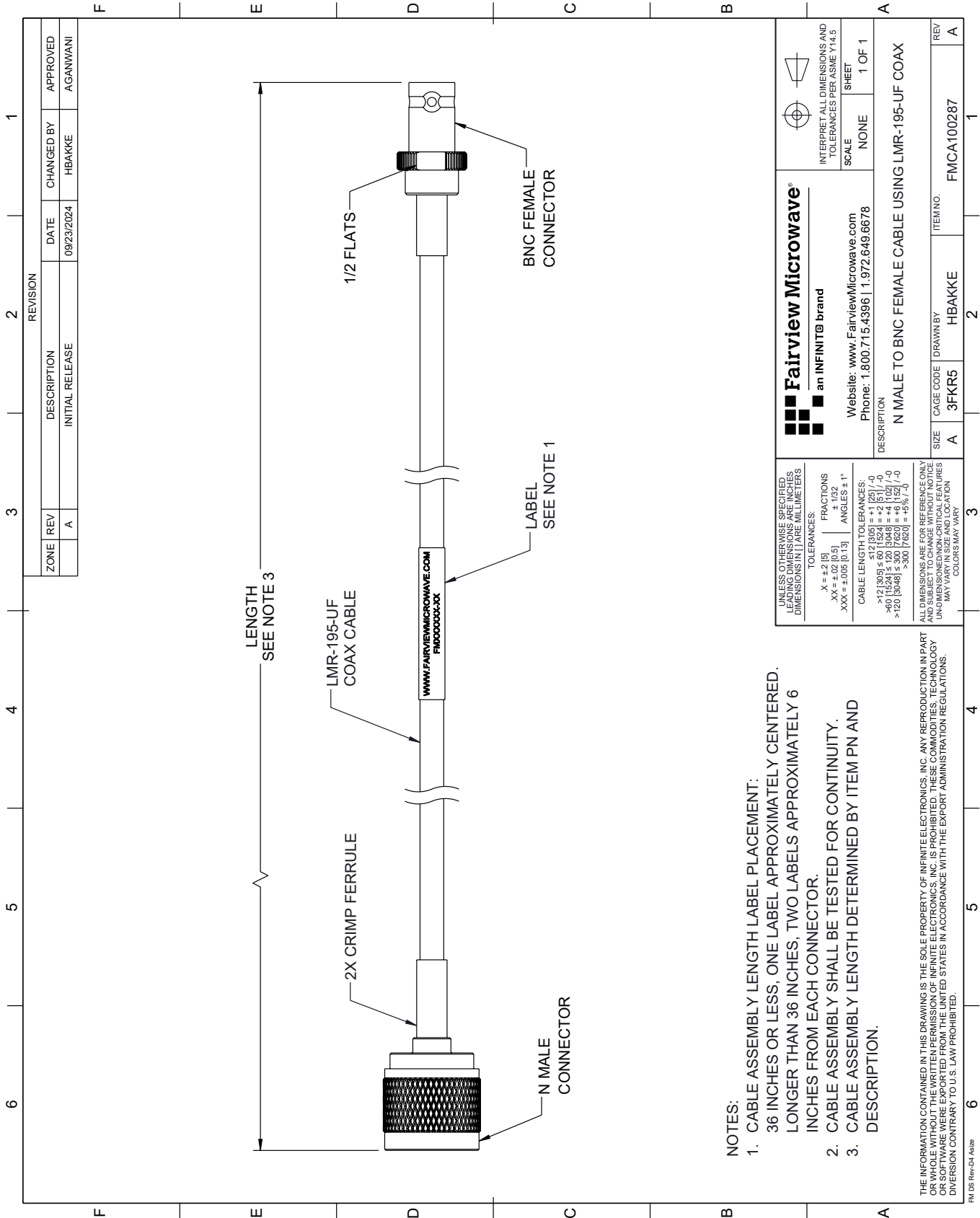
For additional information on this product, please click the following link: [Low Loss N Male to BNC Female Cable LMR-195-UF Coax FMCA100287](https://www.fairviewmicrowave.com/low-loss-n-male-to-bnc-female-cable-lmr-195-uf-coax-fmca100287-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-loss-n-male-to-bnc-female-cable-lmr-195-uf-coax-fmca100287-p.aspx>

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FMCA100287 CAD Drawing

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



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	A	09/23/2024	HBAKKE	AGANWANI
DESCRIPTION				
INITIAL RELEASE				

 Fairview Microwave® an INFINIT® brand		Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678	INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
DESCRIPTION: N MALE TO BNC FEMALE CABLE USING LMR-195-UF COAX			
SIZE: A	CAGE CODE: 3FKR5	DRAWN BY: HBAKKE	ITEM NO.: FMCA100287
REV: A			

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND TRAILING DIMENSIONS ARE IN MILLIMETERS.

TOLERANCES:
 .X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]

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] = ±.8 [20] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

- 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