

Low Loss TNC Male to BNC Male Cable LMR-240-UF Coax

FMCA100209



Configuration

- Connector 1: TNC Male
- Connector 2: BNC Male
- Cable Type: LMR-240-UF
- Coax Flex Type: Flexible

Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- TPE Jacket

Applications

- General Purpose
- Laboratory Use

Description

The TNC male to BNC male cable using LMR-240-UF coax, part number FMCA100209, from Fairview Microwave is in-stock and ships same day. This Fairview TNC to BNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100209 TNC male to BNC male 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		84		%
RF Shielding	90			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		4.28 [14.04]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ohms/1000ft [Ohms/Km]
Jacket Spark			5,000	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	4000	MHz	
FMCA100209	Custom Lengths Available	Insertion Loss (Typ.)	0.029	0.046	0.066	0.096	0.195	dB/ft	
			0.1	0.16	0.22	0.32	0.64	dB/m	
FMCA100209-12	12 Inch	Insertion Loss (Typ.)	0.23	0.25	0.27	0.3	0.4	dB	0.09
FMCA100209-24	24 Inch	Insertion Loss (Typ.)	0.26	0.3	0.34	0.4	0.59	dB	0.123
FMCA100209-36	36 Inch	Insertion Loss (Typ.)	0.29	0.34	0.4	0.49	0.79	dB	0.155
FMCA100209-60	60 Inch	Insertion Loss (Typ.)	0.35	0.43	0.53	0.68	1.18	dB	0.219
FMCA100209-300	300 Inch	Insertion Loss (Typ.)	0.93	1.35	1.85	2.6	5.08	dB	0.859

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: 0.09 pounds
 Additional Weight per Inch: 0.00267 pounds

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

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
 Weight 0.09 lbs [40.82 g]

Cable

Cable Type LMR-240-UF
 Impedance 50 Ohms
 Inner Conductor Type Stranded
 Inner Conductor Material and Plating Copper
 Dielectric Type PE (F)
 Number of Shields 2
 Shield Layer 1 Aluminum Tape
 Shield Layer 2 Tinned Copper Braid
 Jacket Material TPE, Black
 Jacket Diameter 0.24 in [6.1 mm]
 One Time Minimum Bend Radius 0.75 in [19.05 mm]
 Repeated Minimum Bend Radius 2.5 in [63.5 mm]
 Bending Moment 0.13 lbs-ft [0.18 N-m]
 Flat Plate Crush 13 lbs/in [0.23 Kg/mm]
 Tensile Strength 80 lbs [36.29 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	TNC Male	BNC Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Dielectric Type	POM	POM
Body Material and Plating	Brass, Nickel	Brass, Nickel

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: **FMCA100209** **- xx** **uu**

Unit of Measure:
cm = Centimeters
<blank> = Inches

Length

Base Number

Example: FMCA100209-12 = 12 inches long cable
FMCA100209-100cm = 100 cm long cable

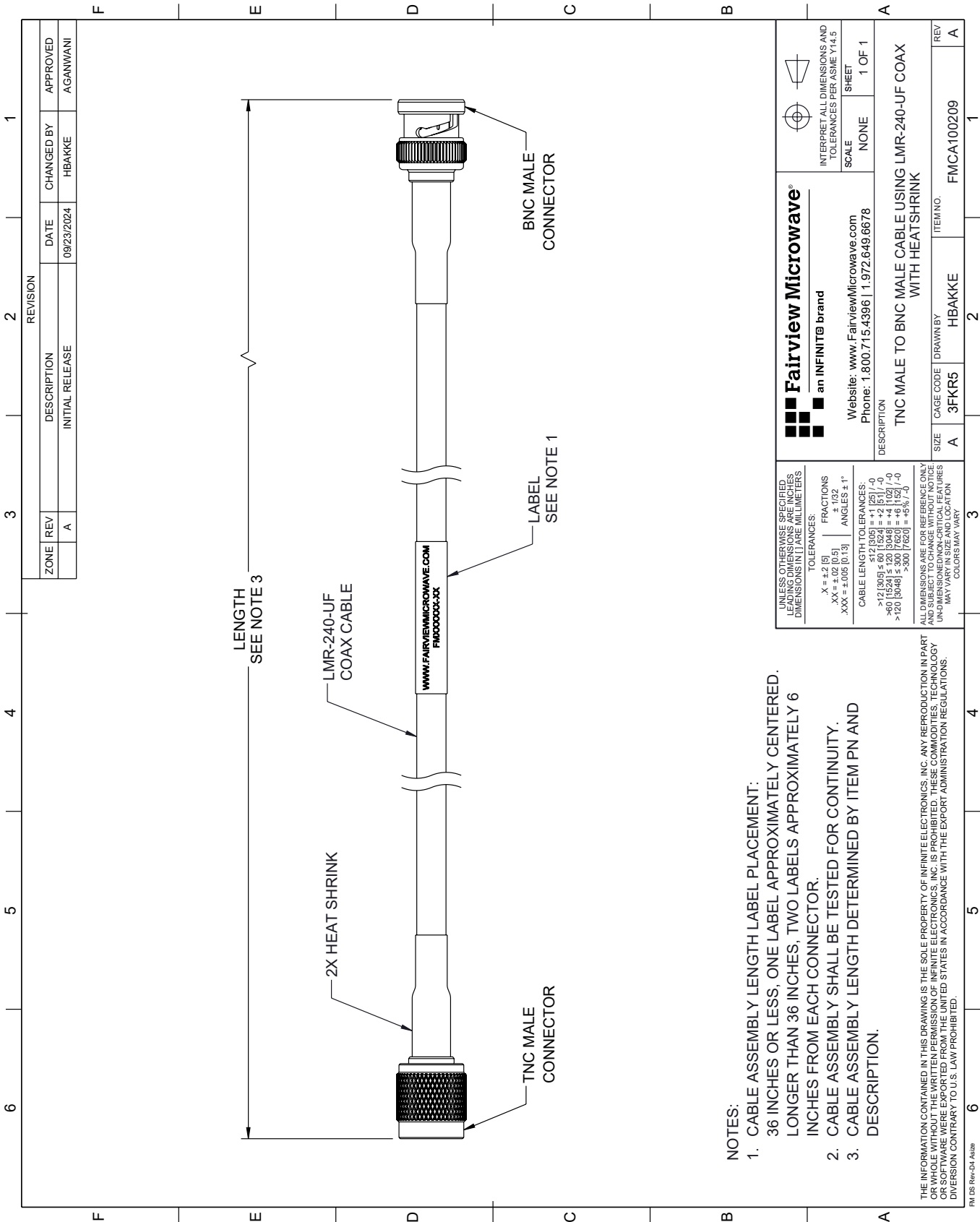
Low Loss TNC Male to BNC Male Cable LMR-240-UF Coax from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Low Loss TNC Male to BNC Male Cable LMR-240-UF Coax FMCA100209](https://www.fairviewmicrowave.com/low-loss-tnc-male-to-bnc-male-cable-lmr-240-uf-coax-fmca100209-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-loss-tnc-male-to-bnc-male-cable-lmr-240-uf-coax-fmca100209-p.aspx>

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FMCA100209 CAD Drawing
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UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.		Fairview Microwave® an INFINITI® brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
TOLERANCES:		Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678		SCALE NONE	
X = ±.2 [5] .XX = ±.02 [0.5] .XXX = ±.005 [0.13]		FRACTIONS ± 1/32 ANGLES ± 1°		SHEET 1 OF 1	
CABLE LENGTH TOLERANCES:		DESCRIPTION TNC MALE TO BNC MALE CABLE USING LMR-240-UF COAX WITH HEATSHRINK			
>12 [305] ≤ 60 [1524] = ±.125 [-.0]		SIZE A		ITEM NO. FMCA100209	
>60 [1524] ≤ 120 [3048] = ±.110 [-.0]		CAGE CODE 3FKR5		DRAWN BY HBAKKE	
>120 [3048] ≤ 300 [7620] = ±.05 [-.0]		REV A			
ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS. COLORS MAY VARY.					

- NOTES:
- 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.
 - CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
 - CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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