

## Low Loss SMA Male to BNC Male Cable LMR-240-UF Coax

### FMCA100213



#### Configuration

- Connector 1: SMA 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 SMA male to BNC male cable using LMR-240-UF coax, part number FMCA100213, from Fairview Microwave is in-stock and ships same day. This Fairview SMA 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 FMCA100213 SMA 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

## Low Loss SMA Male to BNC Male Cable LMR-240-UF Coax



### FMCA100213

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	4000	MHz	
FMCA100213	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	
FMCA100213-12	12 Inch	Insertion Loss (Typ.)	0.23	0.25	0.27	0.3	0.4	dB	0.071
FMCA100213-24	24 Inch	Insertion Loss (Typ.)	0.26	0.3	0.34	0.4	0.59	dB	0.104
FMCA100213-36	36 Inch	Insertion Loss (Typ.)	0.29	0.34	0.4	0.49	0.79	dB	0.136
FMCA100213-60	60 Inch	Insertion Loss (Typ.)	0.35	0.43	0.53	0.68	1.18	dB	0.2
FMCA100213-300	300 Inch	Insertion Loss (Typ.)	0.93	1.35	1.85	2.6	5.08	dB	0.84

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: 0.071 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 0.071 lbs [32.21 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]

## Low Loss SMA Male to BNC Male Cable LMR-240-UF Coax



**FMCA100213**

### Connectors

Description	Connector 1	Connector 2
Type	SMA Male	BNC Male
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification	50 µin minimum	
Dielectric Type	PTFE	POM
Body Material and Plating	Brass, Gold	Brass, Nickel
Body Plating Specification	3 µin minimum	
Coupling Nut Material and Plating	Brass, Gold	
Coupling Nut Plating Specification	3 µin minimum	
Hex Size	5/16 inch	

### 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.

## Low Loss SMA Male to BNC Male Cable LMR-240-UF Coax



### FMCA100213

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**FMCA100213**

**- xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: FMCA100213-12 = 12 inches long cable  
FMCA100213-100cm = 100 cm long cable

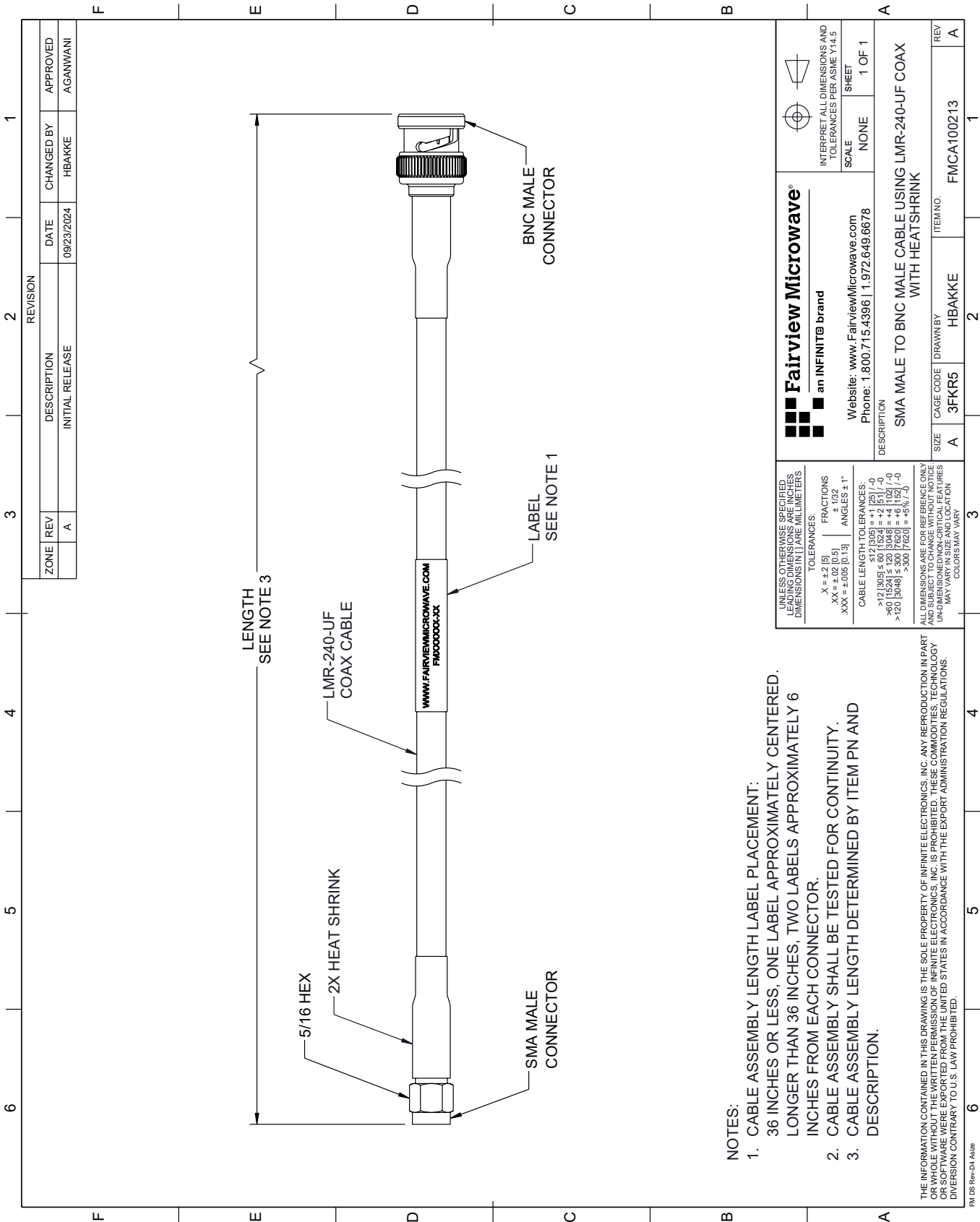
Low Loss SMA Male to BNC Male Cable LMR-240-UF Coax from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Low Loss SMA Male to BNC Male Cable LMR-240-UF Coax FMCA100213](https://www.fairviewmicrowave.com/low-loss-sma-male-to-bnc-male-cable-lmr-240-uf-coax-fmca100213-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-loss-sma-male-to-bnc-male-cable-lmr-240-uf-coax-fmca100213-p.aspx>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

FMCA100213 CAD Drawing
Low Loss SMA Male to BNC Male Cable LMR-240-UF Coax



- 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.