

## Plenum Low Loss BNC Male to BNC Male Cable LMR-240-LLPX Coax with Times Microwave Components



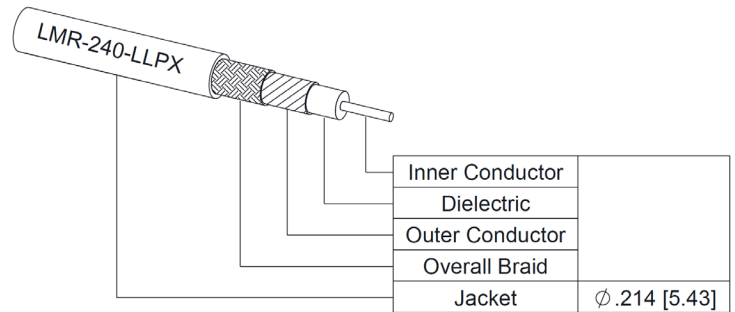
### FMCA100037

#### Configuration

- Connector 1: BNC Male
- Connector 2: BNC Male
- Cable Type: LMR-240-LLPX

#### Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 76% Phase Velocity
- Fluoropolymer Jacket
- 500 Mating Cycles



#### Applications

- General Purpose
- Laboratory Use

#### Description

The BNC male to BNC male cable using LMR-240-LLPX coax, part number FMCA100037, 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 LMR-240-LLPX coax. The FMCA100037 BNC male to BNC male cable assembly operates to 4 GHz.

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		76		%
RF Shielding	90			dB
Capacitance		26.7 [87.6]		pF/ft [pF/m]
Inductance		0.067 [0.22]		uH/ft [uH/m]
DC Resistance Inner Conductor		4 [13.12]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		3.9 [12.8]		Ohms/1000ft [Ohms/Km]
Jacket Spark			5,000	Vrms

#### Specifications by Frequency

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**FMCA100037**

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency	100	250	500	1000	4000	
FMCA100037	Custom Lengths Available	Insertion Loss (Typ.)	0.023	0.038	0.056	0.079	0.163	dB/ft	
			0.08	0.13	0.19	0.26	0.54	dB/m	
FMCA100037-12	12 Inch	Insertion Loss (Typ.)	0.09	0.14	0.2	0.28	0.57	dB	0.235
FMCA100037-24	24 Inch	Insertion Loss (Typ.)	0.11	0.18	0.26	0.36	0.73	dB	0.271
FMCA100037-36	36 Inch	Insertion Loss (Typ.)	0.14	0.22	0.31	0.44	0.89	dB	0.306
FMCA100037-48	48 Inch	Insertion Loss (Typ.)	0.16	0.26	0.37	0.52	1.06	dB	0.341
FMCA100037-60	60 Inch	Insertion Loss (Typ.)	0.18	0.29	0.43	0.6	1.22	dB	0.376

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\*SQRT(FGHz) dB  
 Loss due to Connector 2: 0.1\*SQRT(FGHz) dB  
 Base Weight: 0.235 pounds  
 Additional Weight per Inch: 0.4983 pounds

**Mechanical Specifications**

**Cable Assembly**

Width/Diameter 0.5 in [12.7 mm]  
 Weight 0.235 lbs [106.59 g]

**Cable**

Cable Type LMR-240-LLPX  
 Impedance 50 Ohms  
 Inner Conductor Material and Plating Copper  
 Dielectric Type PTFE  
 Outer Conductor 1 Material and Plating Aluminum Tape  
 Jacket Material Fluoropolymer  
 Jacket Diameter 0.214 in [5.44 mm]  
 One Time Minimum Bend Radius 0.75 in [19.05 mm]  
 Repeated Minimum Bend Radius 2.5 in [63.5 mm]  
 Flat Plate Crush 85 lbs/in [1.52 Kg/mm]  
 Tensile Strength 60 lbs [27.22 Kg]

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**Connectors**

Description	Connector 1	Connector 2
Type	BNC Male	BNC Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	500
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	50 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 µin minimum	80 µin minimum

**Environmental Specifications**

Operating Range Temperature -40 to +125 deg C

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

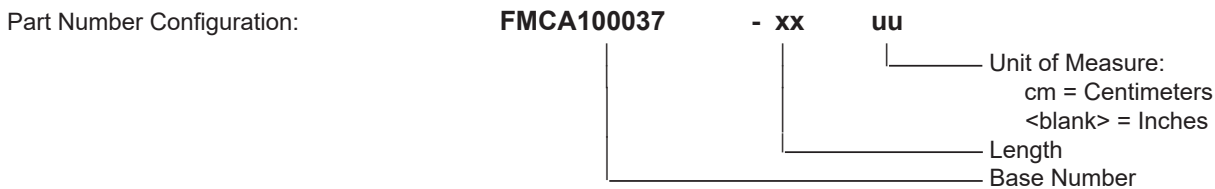
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**FMCA100037**

**Typical Performance Data**

**How to Order**



Example: FMCA100037-12 = 12 inches long cable  
FMCA100037-100cm = 100 cm long cable

Plenum Low Loss BNC Male to BNC Male Cable LMR-240-LLPX Coax with Times Microwave Components 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.

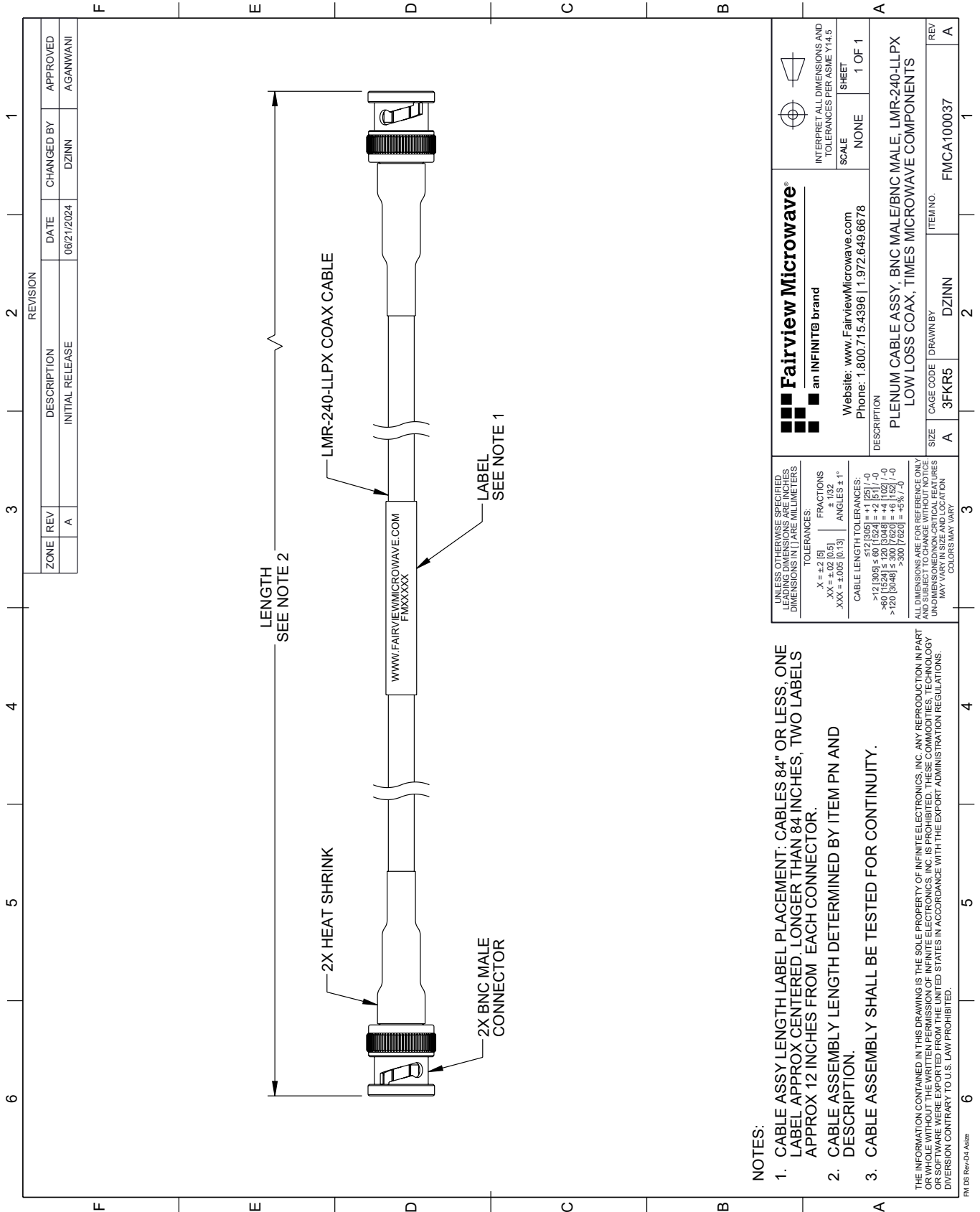
For additional information on this product, please click the following link: [Plenum Low Loss BNC Male to BNC Male Cable LMR-240-LLPX Coax with Times Microwave Components FMCA100037](#)

URL: <https://www.fairviewmicrowave.com/plenum-low-loss-bnc-male-to-bnc-male-cable-lmr-240-llpx-coax-with-times-microwave-components-fmca100037-p.aspx>

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# FMCA100037 CAD Drawing

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**NOTES:**

1. CABLE ASSY LENGTH LABEL PLACEMENT: CABLES 84" OR LESS, ONE LABEL APPROX CENTERED, LONGER THAN 84 INCHES, TWO LABELS APPROX 12 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
3. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.

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FM DS Rev-D4 Add

REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	A	06/21/2024	DZINN	AGANWANI
DESCRIPTION				
INITIAL RELEASE				

<p><b>Fairview Microwave®</b> an INFINITO brand</p> <p>Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE SHEET: 1 OF 1</p>
<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES: .X = ±.2 [5]      FRACTIONS ± 1/32 .XX = ±.02 [0.5]      ± 1/32 .XXX = ±.005 [0.13]      ANGLES ± 1°</p> <p>CABLE LENGTH TOLERANCES: &gt;12 [305] ≤ 60 [1524] = ±1 [25] / -0 &gt;60 [1524] ≤ 120 [3048] = ±4 [102] / -0 &gt;120 [3048] ≤ 300 [7620] = ±5% / -0</p> <p>ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>		
<p>DESCRIPTION PLENUM CABLE ASSY, BNC MALE/BNC MALE; LMR-240-LLPX LOW LOSS COAX, TIMES MICROWAVE COMPONENTS</p>		
SIZE	CAGE CODE	ITEM NO.
A	3FKR5	FMCA100037
DRAWN BY	DZINN	REV
		A