



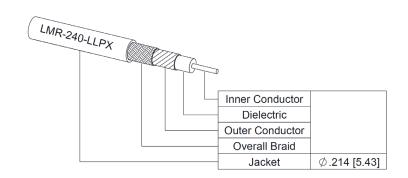
## **FMCA100040**

#### Configuration

Connector 1: BNC MaleConnector 2: TNC MaleCable 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 TNC male cable using LMR-240-LLPX coax, part number FMCA100040, from Fairview Microwave is in-stock and ships same day. This Fairview BNC to TNC cable assembly has a male to male gender configuration with 50 ohm LMR-240-LLPX coax. The FMCA100040 BNC male to TNC 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





## **FMCA100040**

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
rait Nullibei	Lengui	Frequency	100	250	500	1000	4000	MHz	weight (ms)
FMCA100040	Custom Lengths	Insertion Loss (Typ.)	0.023	0.038	0.056	0.079	0.163	dB/ft	
TWCA100040	Available	ilisertion Loss (Typ.)	0.08	0.13	0.19	0.26	0.54	dB/m	
FMCA100040-12	12 Inch	Insertion Loss (Typ.)	0.16	0.19	0.23	0.28	0.47	dB	0.185
FMCA100040-24	24 Inch	Insertion Loss (Typ.)	0.18	0.23	0.29	0.36	0.63	dB	0.221
FMCA100040-36	36 Inch	Insertion Loss (Typ.)	0.21	0.27	0.34	0.44	0.79	dB	0.256
FMCA100040-48	48 Inch	Insertion Loss (Typ.)	0.23	0.31	0.4	0.52	0.96	dB	0.291
FMCA100040-60	60 Inch	Insertion Loss (Typ.)	0.25	0.34	0.46	0.6	1.12	dB	0.326

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 dB
Base Weight: 0.185 pounds
Additional Weight per Inch: 0.4983 pounds

### **Mechanical Specifications**

### Cable Assembly

 Width/Diameter
 0.5 in [12.7 mm]

 Weight
 0.185 lbs [83.91 g]

## Cable

Cable TypeLMR-240-LLPXImpedance50 OhmsInner Conductor Material and PlatingCopperDielectric TypePTFEOuter Conductor 1 Material and PlatingAluminum TapeJacket MaterialFluoropolymer

Jacket Material

Jacket Diameter

O.214 in [5.44 mm]

One Time Minimum Bend Radius

Repeated Minimum Bend Radius

Flat Plate Crush

Tensile Strength

Pludropolyfile

0.214 in [5.44 mm]

0.75 in [19.05 mm]

8.5 in [63.5 mm]

85 lbs/in [1.52 Kg/mm]

60 lbs [27.22 Kg]





## FMCA100040

#### **Connectors**

Description	Connector 1	Connector 2
Туре	BNC Male	TNC Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	500
Contact Material and Plating	Beryllium Copper, Gold	Phosphor Bronze, Gold
Contact Plating Specification	50 μin minimum	50 μin minimum
Dielectric Type	PTFE	Teflon
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 μin minimum	80 µin minimum
Coupling Nut Material and Plating		Brass, Tri-Metal
Coupling Nut Plating Specification		80 µin minimum
Torque		20 in-lbs 2.26 Nm

## **Environmental Specifications**

Operating Range Temperature

-40 to +125 deg C

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:





## FMCA100040

#### **Typical Performance Data**

#### **How to Order**



Example: FMCA100040-12 = 12 inches long cable

FMCA100040-100cm = 100 cm long cable

Plenum Low Loss BNC Male to TNC Male Cable LMR-240-LLPX Coax with Times Microwave Components from Fairview Microwave is instock 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 TNC Male Cable LMR-240-LLPX Coax with Times Microwave Components FMCA100040

URL: https://www.fairviewmicrowave.com/plenum-low-loss-bnc-male-to-tnc-male-cable-lmr-240-llpx-coax-with-times-mi-crowave-components-fmca100040-p.aspx

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