

## BNC Female to BNC Female Cable Assembly using LC141TBJ Coax, 2 FT

#### LCCA30109-FT2

#### Configuration

Connector 1: BNC Female
Connector 2: BNC Female
Cable Type: LC141TBJ
Coax Flex Type: Formable

#### **Features**

- · Max Frequency 4 GHz
- Shielding Effectivity > 100dB
- PTFE Dielectric with 70% VoP
- · Hand Formable
- · Tin Filled Copper Braid Outer Conductor
- FEP Jacket

# JACKET Ø.161 [4.09] LC141TBJ INNER CONDUCTOR SECTION VIEW DIELECTRIC

#### **Applications**

· General Purpose

· Laboratory Use

System Interconnect

#### Description

L-com's LCCA30109-FT2 is a BNC female to BNC female cable assembly using LC141TBJ coax, 2 FT and ships same-day. The LC141TBJ coax of this BNC cable uses the PTFE dielectric with a VoP of 70%. These formable RF cable assemblies are a great alternative to expensive semi-rigid assemblies because they can be hand formed to fit specific designs. Our L-com BNC to BNC cable assembly has a female to female gender configuration with formable LC141TBJ series coax and operates to 4 GHz. The jacketed tinned copper braid outer conductor is easily formed by hand with an overall diameter of 0.161 inches and excellent shielding effectiveness greater than 100dB.

Custom versions of this BNC female to BNC female cable, along with the rest of L-com's other RF assemblies, can also be built and shipped same day. Other available RF cable assembly value added services from L-com include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly. Contact a sales representative for testing or custom RF cable quotes. Part number LCCA30109-FT2 L-com BNC Female to BNC Female Cable Assembly using LC141TBJ Coax, 2 FT data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	GHz
VSWR			1.6:1	
Velocity of Propagation		70		%
RF Shielding	100			dB
Group Delay		1.43 [4.69]		ns/ft [ns/m]
Capacitance		29.4 [96.46]		pF/ft [pF/m]
DC Resistance Inner Conductor		8.23 [27]		Ohms/1000ft [Ohms/Km]
Operating Voltage (AC)			1,900	Vrms



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#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Dielectric Withstanding Voltage (AC)			3,000	Vrms

#### **Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	4	GHz
Insertion Loss (Typ.)	0.24	0.29	0.37	0.45	0.75	dB

**Electrical Specification Notes:** 

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss is estimated as 0.1 dB per connector.

#### **Mechanical Specifications**

#### Cable Assembly

Width/Diameter 0.032 in [0.81 mm]

Cable

Cable Type LC141TBJ Impedance 50 Ohms Inner Conductor Type Solid Inner Conductor Material and Plating Copper, Silver

Dielectric Type **PTFE** 

Number of Shields

Outer Conductor 1 Material and Plating **Tinned Copper Braid Outer Conductor Diameter** 0.139 in [3.53 mm] **FEP** 

Jacket Material

Jacket Diameter 0.161 in [4.09 mm] One Time Minimum Bend Radius 0.315 in [8 mm] Repeated Minimum Bend Radius 1.575 in [40.01 mm]

#### **Connectors**

Description	Connector 1	Connector 2	
Туре	BNC Female	BNC Female	
Impedance	50 Ohms	50 Ohms	
Configuration	Straight	Straight	
Dielectric Type	PTFE	PTFE	
Outer Conductor Material and Plating	Brass, Nickel	Brass, Nickel	
Body Material and Plating	Brass, Nickel	Brass, Nickel	

#### **Environmental Specifications**

Operating Range Temperature -65 to +150 deg C



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#### LCCA30109-FT2

Compliance Certifications (see product page for current document)

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

Notes:

Values at 25°C, sea level.

#### **Typical Performance Data**

#### **How to Order**

Part Number Configuration:

LCCA30109 - xx uu

Unit of Measure:
cm = Centimeters
<br/>
<br/>
<br/>
chlank> = Inches
Length
Base Number

Example: LCCA30109-12 = 12 inches long cable

LCCA30109-100cm = 100 cm long cable

BNC Female to BNC Female Cable Assembly using LC141TBJ Coax, 2 FT from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

URL: https://www.l-com.com/bnc-female-bnc-female-cable-assembly-using-lc141tbj-coax-2-ft-lcca30109-ft2-p.aspx

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