

## BNC Female to BNC Female Cable Assembly using LC141TBJ Coax, 5 FT



### LCCA30109-FT5

#### 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

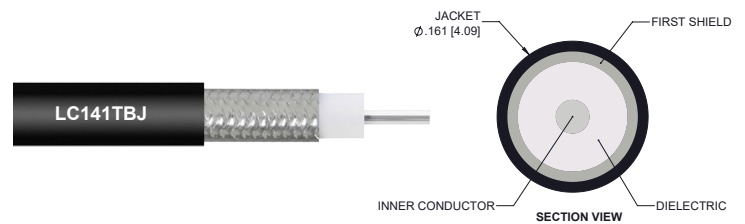
#### Applications

- General Purpose
- Laboratory Use
- System Interconnect

#### Description

L-com's LCCA30109-FT5 is a BNC female to BNC female cable assembly using LC141TBJ coax, 5 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-FT5 L-com BNC Female to BNC Female Cable Assembly using LC141TBJ Coax, 5 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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**LCCA30109-FT5**

**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.)	0.28	0.41	0.61	0.83	1.56	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 0  
 Outer Conductor 1 Material and Plating Tinned Copper Braid  
 Outer Conductor Diameter 0.139 in [3.53 mm]  
 Jacket Material FEP  
 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
Type	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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**Compliance Certifications** (see [product page](#) for current document)

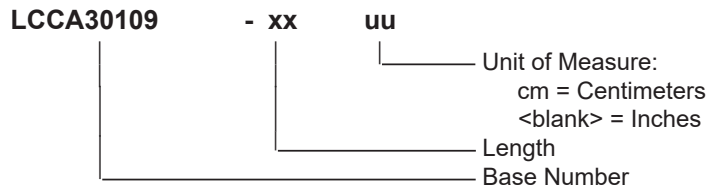
#### Plotted and Other Data

Notes:  
Values at 25°C, sea level.

#### Typical Performance Data

#### How to Order

Part Number Configuration:



Example: LCCA30109-12 = 12 inches long cable  
LCCA30109-100cm = 100 cm long cable

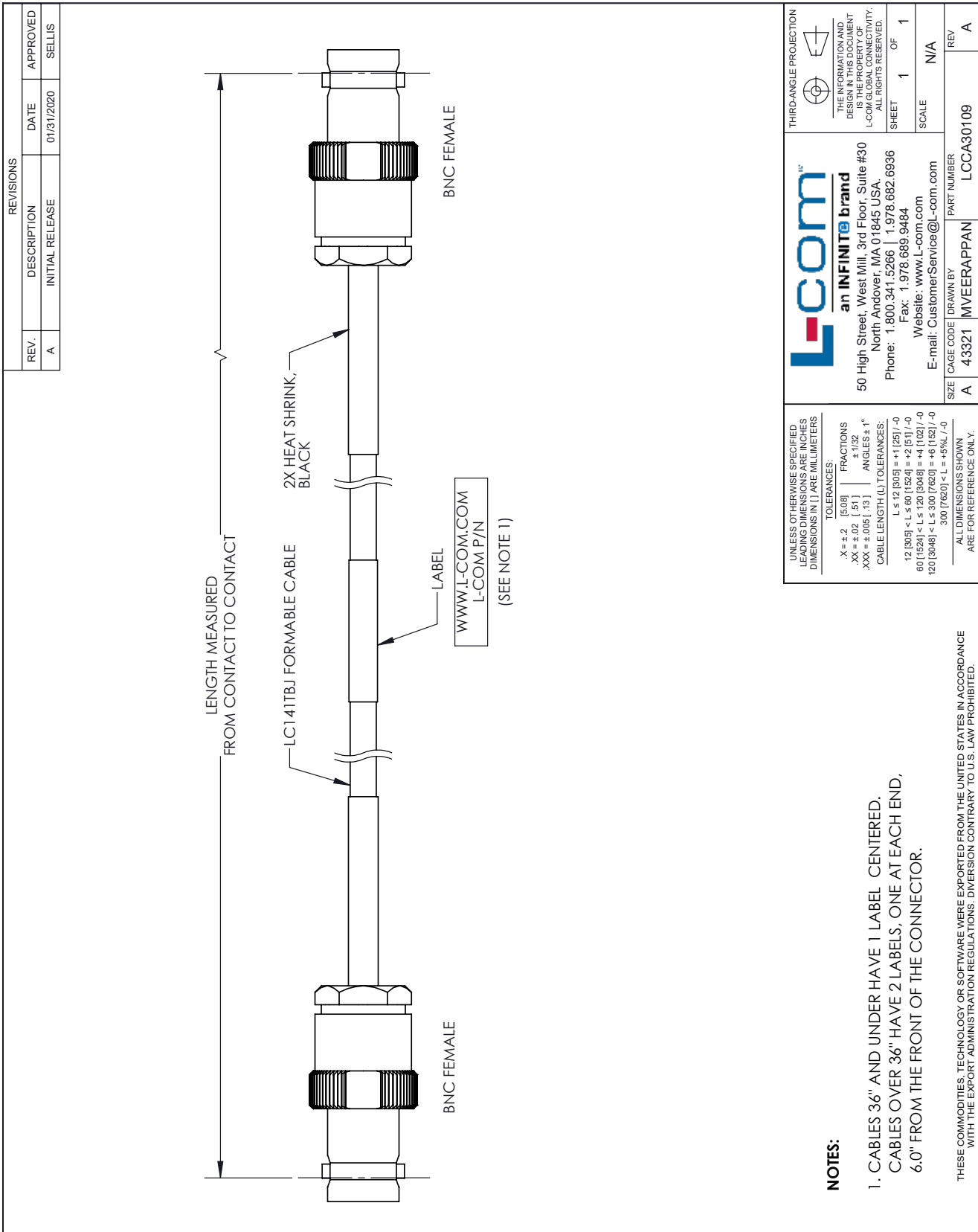
BNC Female to BNC Female Cable Assembly using LC141TBJ Coax, 5 FT from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an 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-5-ft-lcca30109-ft5-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. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.

# LCCA30109-FT5 CAD Drawing

BNC Female to BNC Female Cable Assembly using LC141TBJ Coax, 5 FT



REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	01/31/2020
		APPROVED
		SELLIS

**L-com**  
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UNLESS OTHERWISE SPECIFIED  
LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:  
 .X = ±.2 [5.08]  
 .XX = ±.02 [1.51]  
 .XXX = ±.005 [13]  
 ANGLES ± 1°  
 CABLE LENGTH (L) TOLERANCES:  
 L ≤ 12 [305] = ±1.0 [25] / -0  
 12 [305] < L ≤ 60 [1524] = ±2.0 [51] / -0  
 60 [1524] < L ≤ 120 [3048] = ±4.0 [102] / -0  
 120 [3048] < L ≤ 300 [7620] = ±6.0 [152] / -0  
 300 [7620] < L = +5%L / -0

ALL DIMENSIONS SHOWN  
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

THE INFORMATION AND  
DRAWING CONTENT  
IS THE PROPERTY OF  
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SHEET 1 OF 1

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	PART NUMBER
A	43321	MVEERAPPAN	LCCA30109

REV A

**NOTES:**  
1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED.  
CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END,  
6.0" FROM THE FRONT OF THE CONNECTOR.

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