

BNC Female to SMA Female Cable Assembly using LC141TBJ Coax, 3 FT



**LCCA30470-FT3**

**Configuration**

- Connector 1: BNC Female
- Connector 2: SMA Female
- Cable Type: LC141TBJ

**Features**

- Max Frequency 2 GHz
- Shielding Effectivity > 100dB
- PTFE Dielectric with 69.9% VoP
- Hand Formable
- Tin Filled Copper Braid Outer Conductor

**Applications**

- General Purpose
- Laboratory Use
- System Interconnect



**Description**

L-com's LCCA30470-FT3 is a BNC female to SMA female cable assembly using LC141TBJ coax, 3 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 SMA cable assembly has a female to female gender configuration with formable LC141TBJ series coax and operates to 2 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 LCCA30470-FT3 L-com BNC Female to SMA Female Cable Assembly using LC141TBJ Coax, 3 FT data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

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## LCCA30470-FT3

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		2	GHz
VSWR			1.45:1	
Velocity of Propagation		70		%
RF Shielding	100			dB
Group Delay		1.43 [4.69]		ns/ft [ns/m]
Capacitance		29 [95.14]		pF/ft [pF/m]
DC Resistance Inner Conductor		8.23 [27]		Ohms/1000ft [Ohms/Km]

### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2			GHz
Insertion Loss (Max.)	0.44	0.56	0.68			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 includes an estimated insertion loss of 0.1 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Length 36 in [914.4 mm]

#### Cable

Cable Type LC141TBJ  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper, Silver  
 Dielectric Type PTFE  
 Outer Conductor Material and Plating Tinned Copper Braid  
 Jacket Material FEP, Black  
 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]

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## LCCA30470-FT3

### Connectors

Description	Connector 1	Connector 2
Type	BNC Female	SMA Female
Impedance	50 Ohms	50 Ohms
Contact Material and Plating		Beryllium Copper, Gold over Nickel
Dielectric Type		PTFE
Body Material and Plating	Brass, Nickel	Brass, Gold over Nickel

### Environmental Specifications

#### Temperature

Operating Range -65 to +150 deg C

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

### Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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## LCCA30470-FT3

### How to Order

Part Number Configuration:

**LCCA30470**

- **xx**

**uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches  
Length  
Base Number

Example: LCCA30470-12 = 12 inches long cable  
LCCA30470-100cm = 100 cm long cable

BNC Female to SMA Female Cable Assembly using LC141TBJ Coax, 3 FT from L-com has same day shipment for domestic and International orders. L-com is a leading manufacturer of wired and wireless connectivity products and committed to in-stock availability and same day shipping. 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.

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 impliment 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.ontained 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 impliment 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.

# BNC Female to SMA Female Cable Assembly using LC141TBJ Coax, 3 FT

## L-com CAD Drawing

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	04/21/2020
		APPROVED SELLIS

  

LENGTH MEASURED FROM CONTACT TO CONTACT

SMA FEMALE

BNC FEMALE

WWW.L-COM.COM  
L-COM P/N  
(SEE NOTE 1)

  

<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p><b>TOLERANCES:</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td>X = ± .2</td> <td>[.06]</td> <td>FRACTIONS</td> </tr> <tr> <td>.XX = ± .02</td> <td>[.51]</td> <td>± 1/32</td> </tr> <tr> <td>.XXX = ± .005</td> <td>[.15]</td> <td>ANGLES ± 1°</td> </tr> </table> <p><b>CABLE LENGTH (L) TOLERANCES:</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td>L ≤ 12 [305]</td> <td>± .1 [25] / -0</td> </tr> <tr> <td>12 [305] &lt; L ≤ 60 [1524]</td> <td>± .2 [51] / -0</td> </tr> <tr> <td>60 [1524] &lt; L ≤ 120 [3048]</td> <td>± .4 [102] / -0</td> </tr> <tr> <td>120 [3048] &lt; L ≤ 300 [7620]</td> <td>± .6 [152] / -0</td> </tr> <tr> <td>300 [7620] &lt; L</td> <td>± .5% L / -0</td> </tr> </table> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>	X = ± .2	[.06]	FRACTIONS	.XX = ± .02	[.51]	± 1/32	.XXX = ± .005	[.15]	ANGLES ± 1°	L ≤ 12 [305]	± .1 [25] / -0	12 [305] < L ≤ 60 [1524]	± .2 [51] / -0	60 [1524] < L ≤ 120 [3048]	± .4 [102] / -0	120 [3048] < L ≤ 300 [7620]	± .6 [152] / -0	300 [7620] < L	± .5% L / -0	<p style="text-align: center;"><b>L-com™</b> an INFINITE brand</p> <p>50 High Street, West Mill, 3rd Floor, Suite #30 North Andover, MA 01845 USA Phone: 1.800.341.5266   1.978.682.6936 Fax: 1.978.689.9484 Website: www.L-com.com E-mail: CustomerService@L-com.com</p> <p style="text-align: center;">THIRD-ANGLE PROJECTION</p> <p style="font-size: small;">THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF L-COM GLOBAL CONNECTIVITY. ALL RIGHTS RESERVED.</p> <p style="text-align: center;">SHEET 1 OF 1 SCALE N/A</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>SIZE</td> <td>CAGE CODE</td> <td>DRAWN BY</td> <td>ITEM NO.</td> </tr> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">43321</td> <td style="text-align: center;">DFRISIELLO</td> <td style="text-align: center;">LCCA30470</td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: center;">REV A</td> </tr> </table>	SIZE	CAGE CODE	DRAWN BY	ITEM NO.	A	43321	DFRISIELLO	LCCA30470				REV A
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**NOTES:**

- 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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