

BNC Female to N Female Cable Assembly using LC141TB Coax, 6 FT



LCCA30441-FT6

Configuration

- Connector 1: BNC Female
- Connector 2: N Female
- Cable Type: LC141TB

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 LCCA30441-FT6 is a BNC female to N female cable assembly using LC141TB coax, 6 FT and ships same-day. The LC141TB coax of this BNC cable uses the PTFE dielectric with a VoP of 69.5%. 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 N cable assembly has a female to female gender configuration with formable LC141TB series coax and operates to 2 GHz. The tinned copper braid outer conductor is easily formed by hand with an overall diameter of inches and excellent shielding effectiveness greater than 110dB.

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 LCCA30441-FT6 L-com BNC Female to N Female Cable Assembly using LC141TB Coax, 6 FT data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

BNC Female to N Female Cable Assembly using LC141TB Coax, 6 FT



LCCA30441-FT6

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------------|---------|-------------|---------|-----------------------|
| Frequency Range | DC | | 2 | GHz |
| VSWR | | | 1.45:1 | |
| Velocity of Propagation | | 69.5 | | % |
| RF Shielding | 110 | | | dB |
| Capacitance | | 29 [95.14] | | pF/ft [pF/m] |
| DC Resistance Inner Conductor | | 7.8 [25.59] | | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor | | 5.5 [18.04] | | Ohms/1000ft [Ohms/Km] |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|----|----|-------|
| Frequency | 0.5 | 1 | 2 | | | GHz |
| Insertion Loss (Max.) | 0.68 | 0.92 | 1.16 | | | 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 72 in [182.88 cm]

Cable

Cable Type LC141TB
 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
 Repeated Minimum Bend Radius 0.625 in [15.88 mm]

BNC Female to N Female Cable Assembly using LC141TB Coax, 6 FT



LCCA30441-FT6

Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------|---------------|-----------------------------------|
| Type | BNC Female | N Female |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | | Phosphor Bronze, Gold over Nickel |
| Dielectric Type | | PTFE |
| Body Material and Plating | Brass, Nickel | Brass, Nickel |

Environmental Specifications

Temperature

Operating Range -55 to +125 deg C

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

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

BNC Female to N Female Cable Assembly using LC141TB Coax, 6 FT



LCCA30441-FT6

How to Order

Part Number Configuration:

LCCA30441 - xx uu

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

Example: LCCA30441-12 = 12 inches long cable
LCCA30441-100cm = 100 cm long cable

BNC Female to N Female Cable Assembly using LC141TB Coax, 6 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 N Female Cable Assembly using LC141TB Coax, 6 FT

L-com CAD Drawing

| REVISIONS | | DATE | APPROVED |
|-----------|-----------------|------------|----------|
| REV. | DESCRIPTION | | |
| A | INITIAL RELEASE | 04/27/2020 | SELLIS |

LENGTH MEASURED FROM CONTACT TO CONTACT

.51 [13] ACROSS FLATS

.28 [7] ACROSS FLATS

SOLDER

LC141TB

N FEMALE

7/16 HEX

BNC FEMALE

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

SOLDER

L-com
an INFINITE brand

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

THIRD-ANGLE PROJECTION

THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF L-COM GLOBAL CONNECTIVITY. ALL RIGHTS RESERVED.

SHEET 1 OF 1

SCALE N/A

| | |
|-----|-----|
| REV | REV |
| A | A |

ITEM NO. LCCA30441

DRAWN BY DZINN

CAGE CODE A 43321

SIZE A

DRAWN BY

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:

| | |
|-------------------|------------------|
| .X ± .2 [5.08] | FRACTIONS ± 1/32 |
| .XX ± .02 [.51] | ANGLES ± 1° |
| .XXX ± .005 [.13] | |

CABLE LENGTH (L) TOLERANCES:

| | |
|-----------------------------|----------------|
| 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 | ± 9.5% L / -0 |

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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.

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

T-Rev D