

## BNC Female to BNC Female Cable Assembly using LC085TB Coax, 10 FT



### LCCA30129-FT10

#### Configuration

- Connector 1: BNC Female
- Connector 2: BNC Female
- Cable Type: LC085TB

#### Features

- Max Frequency 20 GHz
- Shielding Effectivity > 100dB
- PTFE Dielectric with 69.5% VoP
- Hand Formable
- Tin Filled Copper Composite Braid Outer Conductor

#### Applications

- General Purpose
- Laboratory Use
- System Interconnect



#### Description

L-com's LCCA30129-FT10 is a BNC female to BNC female cable assembly using LC085TB coax, 10 FT and ships same-day. The LC085TB 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 BNC cable assembly has a female to female gender configuration with formable LC085TB series coax and operates to 20 GHz. The tinned copper composite braid outer conductor is easily formed by hand with an overall diameter of 0.085 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 LCCA30129-FT10 L-com BNC Female to BNC Female Cable Assembly using LC085TB Coax, 10 FT data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

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### Electrical Specifications

| Description                   | Minimum | Typical       | Maximum | Units                 |
|-------------------------------|---------|---------------|---------|-----------------------|
| Frequency Range               | DC      |               | 20      | GHz                   |
| Velocity of Propagation       |         | 69.5          |         | %                     |
| RF Shielding                  | 100     |               |         | dB                    |
| Capacitance                   |         | 29.4 [96.46]  |         | pF/ft [pF/m]          |
| DC Resistance Inner Conductor |         | 65.7 [215.55] |         | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor |         | 10.2 [33.46]  |         | Ohms/1000ft [Ohms/Km] |

### Specifications by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 1    | 2    | 4.5  | 9    | 20   | GHz   |
| Insertion Loss (Max.) | 2.45 | 3.26 | 5.29 | 7.79 | 12.2 | 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

|          |                    |
|----------|--------------------|
| Length   | 120 in [304.8 cm]  |
| Diameter | 0.013 in [0.33 mm] |

#### Cable

|                                      |                               |
|--------------------------------------|-------------------------------|
| Cable Type                           | LC085TB                       |
| Impedance                            | 50 Ohms                       |
| Inner Conductor Type                 | Solid                         |
| Inner Conductor Material and Plating | Copper Clad Steel, Silver     |
| Dielectric Type                      | PTFE                          |
| Number of Shields                    | 0                             |
| Outer Conductor Material and Plating | Tinned Copper Composite Braid |
| Outer Conductor Diameter             | 0.085 in [2.16 mm]            |
| Repeated Minimum Bend Radius         | 0.78 in [19.81 mm]            |

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## LCCA30129-FT10

### Connectors

| Description                          | Connector 1   | Connector 2   |
|--------------------------------------|---------------|---------------|
| Type                                 | BNC Female    | BNC Female    |
| Impedance                            | 50 Ohms       | 50 Ohms       |
| Outer Conductor Material and Plating | Brass, Nickel | Brass, Nickel |
| 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.

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## LCCA30129-FT10

### How to Order

Part Number Configuration:

**LCCA30129 - xx uu**



Example: LCCA30129-12 = 12 inches long cable  
LCCA30129-100cm = 100 cm long cable

BNC Female to BNC Female Cable Assembly using LC085TB Coax, 10 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 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 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.

# BNC Female to BNC Female Cable Assembly using LC085TB Coax, 10 FT

## L-com CAD Drawing

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

  

LENGTH MEASURED FROM CONTACT TO CONTACT

THIRD-ANGLE PROJECTION

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

|   |                                    |
|---|------------------------------------|
| TOLERANCES:<br>.X ± .2 [ .008 ]<br>.XX ± .02 [ .51 ]<br>.XXX ± .005 [ .13 ]   | FRACTIONS<br>± 1/32<br>ANGLES ± 1° |
| CABLE LENGTH (L) TOLERANCES:<br>L ≤ 12 [305] = +1 [25] / -0<br>12 [305] < L ≤ 60 [1524] = +2 [61] / -0<br>60 [1524] < L ≤ 120 [3048] = +4 [102] / -0<br>120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 | 300 [7620] < L = +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.

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|----------------------------|--|---|--------------------------------|
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| SIZE A                     | CAGE CODE DRAWN BY 43321 MVEERAPPAN  | LCCA30129   |                                |