

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



### LCCA30502-FT3

#### Configuration

- Connector 1: SMA Female Bulkhead
- Connector 2: TNC Female
- Cable Type: LC141TBJ

#### Features

- Max Frequency 6 GHz
- Shielding Effectivity > 100dB
- PTFE Dielectric with 70.0% VoP
- Hand Formable
- Tin Filled Copper Braid Outer Conductor
- FEP Jacket

#### Applications

- General Purpose
- Laboratory Use
- System Interconnect



#### Description

L-com's LCCA30502-FT3 is a SMA female bulkhead to TNC female cable assembly using LC141TBJ coax, 3 FT and ships same-day. The LC141TBJ coax of this SMA 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 SMA to TNC cable assembly has a female to female gender configuration with formable LC141TBJ series coax and operates to 6 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. L-com's RF cable assembly with SMA bulkhead interface enables system designers to have external connections on their product enclosures or to be used for other rack mount and panel mount applications.

Custom versions of this SMA female to SMA 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 LCCA30502-FT3 L-com SMA Female Bulkhead to TNC 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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## LCCA30502-FT3

### Electrical Specifications

| Description                   | Minimum | Typical      | Maximum | Units                 |
|-------------------------------|---------|--------------|---------|-----------------------|
| Frequency Range               | DC      |              | 6       | 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 |         | 7.28 [23.88] |         | 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    | 2.5  | 6    |    | GHz   |
| Insertion Loss (Typ.) | 0.45 | 0.58 | 0.77 | 1.25 |    | 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]    |
| Diameter | 0.472 in [11.99 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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### Connectors

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

### Environmental Specifications

#### Temperature

Operating Range

-65 to +150 deg C

Storage Range

+10 to +35 deg C

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

### Plotted and Other Data

Notes:

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## LCCA30502-FT3

### How to Order

Part Number Configuration:

**LCCA30502**

- **xx**

**uu**

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

Example: LCCA30502-12 = 12 inches long cable  
LCCA30502-100cm = 100 cm long cable

SMA Female Bulkhead to TNC 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 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.

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L-com CAD Drawing

