N Male Right Angle to N Female Bulkhead Cable<br>Assembly using LC085TBJ Coax, 10 FT



## Configuration

- Connector 1: N Male Right Angle
- Connector 2: N Female Bulkhead
- Cable Type: LC085TBJ


## Features

- Max Frequency 11 GHz
- Shielding Effectivity > 100dB
- PTFE Dielectric with $69.5 \%$ VoP


## Applications

- General Purpose
- Laboratory Use
- Hand Formable
- Tin Filled Copper Composite Braid Outer Conductor
- FEP Jacket
- System Interconnect



## Description

L-com's LCCA30142-FT10 is a N male right angle to N female bulkhead cable assembly using LC085TBJ coax, 10 FT and ships same-day. The LC085TBJ coax of this N 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 $N$ to $N$ cable assembly has a male to female gender configuration with formable LC085TBJ series coax and operates to 11 GHz . The jacketed tinned copper composite braid outer conductor is easily formed by hand with an overall diameter of 0.105 inches and excellent shielding effectiveness greater than 100 dB . L-com's RF cable assembly with N 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. This right angle N cable interface on the LC085TBJ coax allows for easier connections in tight spaces.
Custom versions of this N male to N 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 LCCA30142-FT10 L-com N Male Right Angle to N Female Bulkhead Cable Assembly using LC085TBJ Coax, 10 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 |  | 11 | GHz |
| Velocity of Propagation |  | 69.5 |  | \% |
| RF Shielding | 100 |  |  | dB |
| Group Delay |  | 1.43 [4.69] |  | $\mathrm{ns} / \mathrm{ft}[\mathrm{ns} / \mathrm{m}]$ |
| 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] |
| Operating Voltage (AC) |  |  | 1,500 | Vrms |

## Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 0.5 | 1 | 2.5 | 5 | 11 | GHz |
| Insertion Loss (Max.) | 1.8 | 2.55 | 3.77 | 5.79 | 8.81 | 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 0.2 dB per right angle connector and 0.1 dB per straight connector.

## Mechanical Specifications

Cable Assembly
Length 120 in [304.8 cm]
Diameter

## Cable

Cable Type
Impedance
Inner Conductor Type
Inner Conductor Material and Plating
Dielectric Type
Number of Shields
Outer Conductor Material and Plating
Outer Conductor Diameter
Jacket Material
Jacket Diameter
One Time Minimum Bend Radius
0.105 in [2.67 mm $]$

LC085TBJ
50 Ohms
Solid
Copper Clad Steel, Silver
PTFE
0
Tinned Copper Composite Braid
0.085 in [2.16 mm]

FEP
0.105 in [2.67 mm]
0.5 in [12.7 mm]


Repeated Minimum Bend Radius
0.787 in [19.99 mm]

## Connectors

| Description | Connector 1 | Connector 2 |
| :--- | :---: | :---: |
| Type | N Male Right Angle | N Female Bulkhead |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Brass, Gold | Phosphor Bronze, Gold over Nickel |
| Dielectric Type | PTFE | PTFE |
| Outer Conductor Material and Plating |  | Brass, Nickel |
| Body Material and Plating | Brass, Nickel | Brass, Nickel |
| Coupling Nut Material and Plating | Brass, Nickel |  |

## Environmental Specifications <br> Temperature <br> Operating Range -55 to +125 deg C

Compliance Certifications (see product page for current document)

## Plotted and Other Data

Notes:

- Values at $25^{\circ} \mathrm{C}$, sea level.



## How to Order

Part Number Configuration: LCCA30142 - xx

Example: LCCA30142-12 = 12 inches long cable LCCA30142-100cm = 100 cm long cable

N Male Right Angle to N Female Bulkhead Cable Assembly using LC085TBJ 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 instock 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.

[^0]L-com CAD Drawing



[^0]:    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.

