

TNC Male to TNC Female Cable Assembly using LC085TBJ Coax, 6 FT



**LCCA30146-FT6**

**Configuration**

- Connector 1: TNC Male
- Connector 2: TNC Female
- Cable Type: LC085TBJ

**Features**

- Max Frequency 6 GHz
- Shielding Effectivity > 100dB
- PTFE Dielectric with 69.5% VoP
- Hand Formable
- Tin Filled Copper Composite Braid Outer Conductor
- FEP Jacket

**Applications**

- General Purpose
- Laboratory Use
- System Interconnect



**Description**

L-com's LCCA30146-FT6 is a TNC male to TNC female cable assembly using LC085TBJ coax, 6 FT and ships same-day. The LC085TBJ coax of this TNC 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 TNC to TNC cable assembly has a male to female gender configuration with formable LC085TBJ series coax and operates to 6 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 100dB.

Custom versions of this TNC male to TNC 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 LCCA30146-FT6 L-com TNC Male to TNC Female Cable Assembly using LC085TBJ Coax, 6 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		6	GHz
Velocity of Propagation		69.5		%
RF Shielding	100			dB
Group Delay		1.43 [4.69]		ns/ft [ns/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	0.25	0.5	1	2.5	6	GHz
Insertion Loss (Max.)	0.88	1.1	1.55	2.29	3.82	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	72 in [182.88 cm]
Diameter	0.105 in [2.67 mm]

#### Cable

Cable Type	LC085TBJ
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]
Jacket Material	FEP
Jacket Diameter	0.105 in [2.67 mm]

One Time Minimum Bend Radius	0.5 in [12.7 mm]
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## LCCA30146-FT6

Repeated Minimum Bend Radius

0.787 in [19.99 mm]

### Connectors

Description	Connector 1	Connector 2
Type	TNC Male	TNC Female
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold over Nickel	Beryllium Copper, 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

#### 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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**LCCA30146-FT6**

**How to Order**

Part Number Configuration:

**LCCA30146 - xx uu**



Example: LCCA30146-12 = 12 inches long cable  
LCCA30146-100cm = 100 cm long cable

TNC Male to TNC Female Cable Assembly using LC085TBJ 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.

# TNC Male to TNC Female Cable Assembly using LC085TBJ Coax, 6 FT

## L-com CAD Drawing

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

  

**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: none;"> <tr> <td>.X ± .2</td> <td>[5.08]</td> <td>FRACTIONS</td> <td>± 1/32</td> </tr> <tr> <td>.XX ± .02</td> <td>[.51]</td> <td>ANGLES</td> <td>± 1°</td> </tr> <tr> <td>.XXX ± .005</td> <td>[.13]</td> <td colspan="2">CABLE LENGTH (L) TOLERANCES:</td> </tr> <tr> <td></td> <td></td> <td>L ≤ 12 [305]</td> <td>± 1 [25] / -0</td> </tr> <tr> <td></td> <td></td> <td>12 [305] &lt; L ≤ 60 [1524]</td> <td>± 2 [51] / -0</td> </tr> <tr> <td></td> <td></td> <td>60 [1524] &lt; L ≤ 120 [3048]</td> <td>± 4 [102] / -0</td> </tr> <tr> <td></td> <td></td> <td>120 [3048] &lt; L ≤ 300 [7620]</td> <td>± 6 [152] / -0</td> </tr> <tr> <td></td> <td></td> <td>300 [7620] &lt; L</td> <td>± 6 [152] / -0</td> </tr> </table> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>	.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	± 6 [152] / -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>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF L-COM GLOBAL CONNECTIVITY. ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> <p>SCALE N/A</p>
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SIZE A	CAGE CODE A 43321	DRAWN BY MVEERAPPAN	PART NUMBER LCCA30146																														
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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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