

## N Female to TNC Female Cable Assembly using LC141TBJ Coax, 1.5 FT



### LCCA30520-FT1.5

#### Configuration

- Connector 1: N Female
- 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 LCCA30520-FT1.5 is a N female to TNC female cable assembly using LC141TBJ coax, 1.5 FT and ships same-day. The LC141TBJ coax of this N 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 N 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.

Custom versions of this N female 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 LCCA30520-FT1.5 L-com N Female to TNC Female Cable Assembly using LC141TBJ Coax, 1.5 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
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.)	0.33	0.39	0.49	0.73		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 18 in [457.2 mm]  
Diameter 0.63 in [16 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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## LCCA30520-FT1.5

### Connectors

Description	Connector 1	Connector 2
Type	N Female	TNC Female
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Phosphor Bronze, Gold over Nickel	Beryllium Copper, Gold over Nickel
Dielectric Type	PTFE	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:

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**LCCA30520-FT1.5**

**How to Order**

Part Number Configuration:

**LCCA30520 - xx uu**



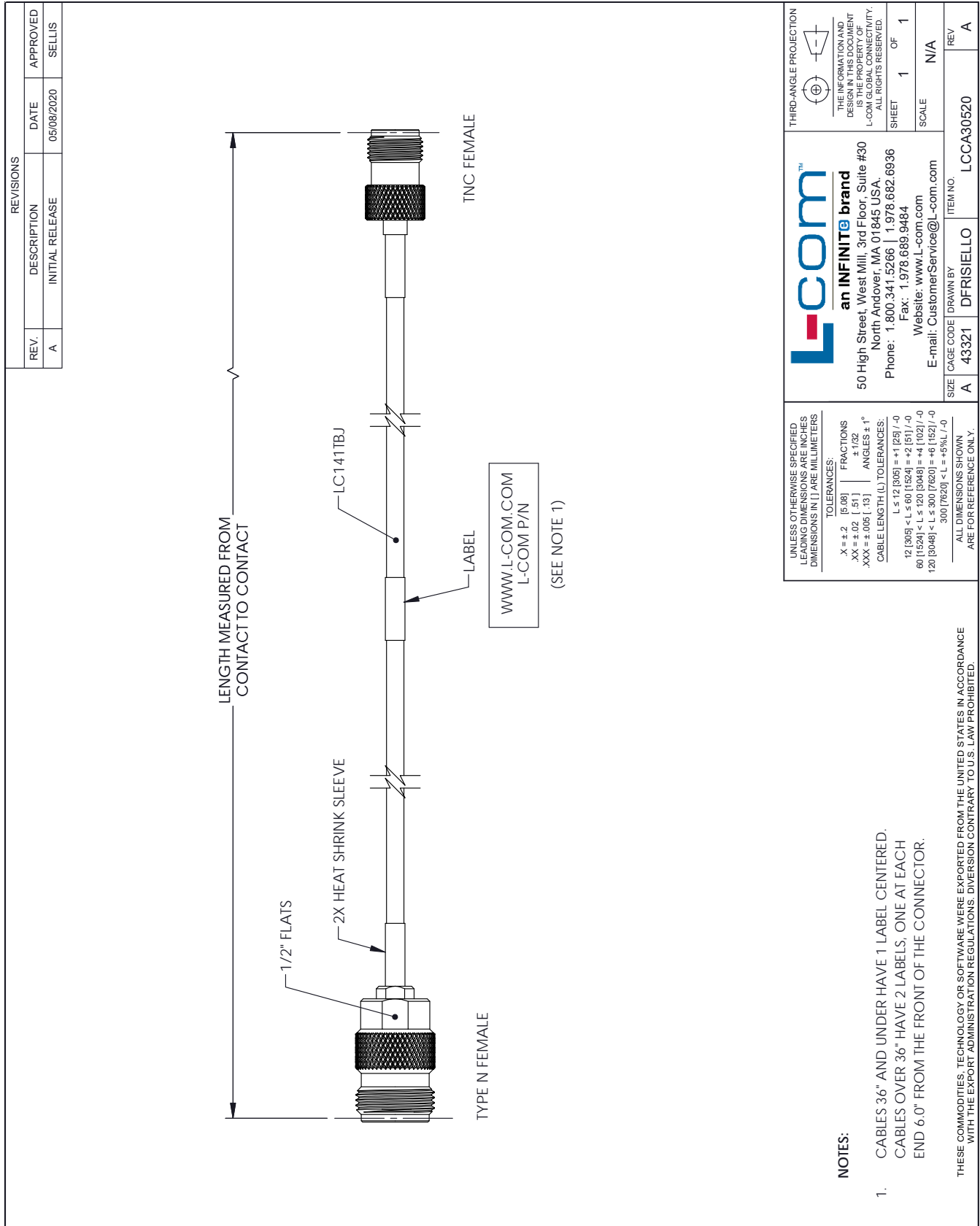
Example: LCCA30520-12 = 12 inches long cable  
LCCA30520-100cm = 100 cm long cable

N Female to TNC Female Cable Assembly using LC141TBJ Coax, 1.5 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.

# N Female to TNC Female Cable Assembly using LC141TBJ Coax, 1.5 FT

## L-com CAD Drawing



REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	05/08/2020
		APPROVED
		SELLIS

**L-com**  
an INFINITE brand

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1  
SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	43321	DFRISIELLO	LCCA30520
			REV A

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

TOLERANCES:

X = ± .2	[.06]	FRACTIONS
.XX = ± .02	[.51]	± 1/32
.XXX = ± .005	[.13]	ANGLES ± 1°

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	± .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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