

SMA Male Right Angle to TNC Male Right Angle Cable Assembly using LC141TBJ Coax, 1.5 FT



LCCA30493-FT1.5

Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: TNC Male Right Angle
- Cable Type: LC141TBJ

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 100dB
- PTFE Dielectric with 69.9% VoP
- Hand Formable
- Tin Filled Copper Braid Outer Conductor

Applications

- General Purpose
- Laboratory Use
- System Interconnect



Description

L-com's LCCA30493-FT1.5 is a SMA male right angle to TNC male right angle cable assembly using LC141TBJ coax, 1.5 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 male to male gender configuration with formable LC141TBJ series coax and operates to 6 GHz. The jacketed outer conductor is easily formed by hand with an overall diameter of 0.161 inches and excellent shielding effectiveness greater than 100dB. This right angle SMA and TNC cable interface on the LC141TBJ coax allows for easier connections in tight spaces.

Custom versions of this SMA male to SMA male 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 LCCA30493-FT1.5 L-com SMA Male Right Angle to TNC Male Right Angle 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		8.23 [27]		Ohms/1000ft [Ohms/Km]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2.5	6		GHz
Insertion Loss (Max.)	0.32	0.38	0.48	0.68		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	0.591 in [15.01 mm]

Cable

Cable Type	LC141TBJ
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	1
Shield Layer 1	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 Male Right Angle	TNC Male Right Angle
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold over Nickel	Brass, Gold over Nickel
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Gold over Nickel	Brass, Nickel
Coupling Nut Material and Plating	Passivated Stainless Steel	Brass, Nickel
Hex Size	5/16 inch	
Torque	8 in-lbs 0.9 Nm	

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:

- Values at 25°C, sea level.

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LCCA30493-FT1.5

How to Order

Part Number Configuration:

LCCA30493

- **xx**

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

Example: LCCA30493-12 = 12 inches long cable
LCCA30493-100cm = 100 cm long cable

SMA Male Right Angle to TNC Male Right Angle 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.

SMA Male Right Angle to TNC Male Right Angle Cable Assembly using LC141TBJ Coax, 1.5 FT

L-com CAD Drawing

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	04/30/2020
		APPROVED SELLIS

LENGTH MEASURED FROM CONTACT TO CONTACT

TNC MALE RIGHT ANGLE

SMA MALE RIGHT ANGLE

5/16" HEX

2X HEAT SHRINK SLEEVE

LC141TBJ

LABEL

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>TOLERANCES:</p> <table style="width: 100%; border: none;"> <tr> <td>X = ± .2</td> <td>[.06]</td> <td>FRACTIONS</td> </tr> <tr> <td>.XX = ± .02</td> <td>[.51]</td> <td>± 1/32</td> </tr> <tr> <td>.XXX = ± .005</td> <td>[.13]</td> <td>ANGLES ± 1°</td> </tr> </table> <p>CABLE LENGTH (L) TOLERANCES:</p> <table style="width: 100%; border: none;"> <tr> <td>L ≤ 12 [305]</td> <td>± .1 [25] / -0</td> </tr> <tr> <td>12 [305] < L ≤ 60 [1524]</td> <td>± .2 [51] / -0</td> </tr> <tr> <td>60 [1524] < L ≤ 120 [3048]</td> <td>± .4 [102] / -0</td> </tr> <tr> <td>120 [3048] < L ≤ 300 [7620]</td> <td>± .6 [152] / -0</td> </tr> <tr> <td>300 [7620] < L</td> <td>± .5% L / -0</td> </tr> </table> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>	X = ± .2	[.06]	FRACTIONS	.XX = ± .02	[.51]	± 1/32	.XXX = ± .005	[.13]	ANGLES ± 1°	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	<p style="text-align: center;">L-comTM 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 SCALE N/A</p>
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300 [7620] < L	± .5% L / -0																			

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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