

N Male to SMA Male Right Angle Cable Assembly using LC085TBJ Coax, 4 FT



## LCCA30609-FT4

### Configuration

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

### Features

- Max Frequency 10 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 LCCA30609-FT4 is a N male to SMA male right angle cable assembly using LC085TBJ coax, 4 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 SMA cable assembly has a male to male gender configuration with formable LC085TBJ series coax and operates to 10 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. This right angle SMA cable interface on the LC085TBJ coax allows for easier connections in tight spaces.

Custom versions of this N male to N 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 LCCA30609-FT4 L-com N Male to SMA Male Right Angle Cable Assembly using LC085TBJ Coax, 4 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		10	GHz
VSWR			1.4:1	
Velocity of Propagation		69.5		%
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		65.7 [215.55]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		10.2 [33.46]		Ohms/1000ft [Ohms/Km]

### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2.5	5	10	GHz
Insertion Loss (Typ.)	0.9	1.22	1.7	2.5	3.5	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 for the straight connector and 0.2 dB for the right angle connector.

### Mechanical Specifications

#### Cable Assembly

Length 48 in [121.92 cm]  
Diameter 0.79 in [20.07 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 1  
Outer Conductor Material and Plating Tinned Copper Composite Braid  
Jacket Material FEP, Black  
Jacket Diameter 0.105 in [2.67 mm]  
  
One Time Minimum Bend Radius 0.5 in [12.7 mm]  
Repeated Minimum Bend Radius 0.787 in [19.99 mm]

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### Connectors

Description	Connector 1	Connector 2
Type	N Male	SMA Male Right Angle
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold over Nickel	Brass, Gold over Nickel
Contact Plating Specification		8 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Gold over Nickel
Body Plating Specification		4 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Passivated Stainless Steel
Hex Size		5/16 inch
Torque		8 in-lbs 0.9 Nm

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

### Plotted and Other Data

Notes:

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**LCCA30609-FT4**

**How to Order**

Part Number Configuration:

**LCCA30609 - xx uu**



Example: LCCA30609-12 = 12 inches long cable  
LCCA30609-100cm = 100 cm long cable

N Male to SMA Male Right Angle Cable Assembly using LC085TBJ Coax, 4 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 Male to SMA Male Right Angle Cable Assembly using LC085TBJ Coax, 4 FT

## L-com CAD Drawing

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	5/4/2020
		APPROVED S.ELLIS

  

**LENGTH MEASURED FROM CONTACT TO CONTACT**

**CONTACT**

**N MALE**

**CONTACT**

**SMA MALE RA**

**5/16 HEX**

**2X HEAT SHRINK SLEEVE**

**LC085TBJ**

**WWW.L-COM.COM L-COM P/N (SEE NOTE 1)**

**THIRD-ANGLE PROJECTION**

<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p><b>TOLERANCES:</b></p> <p>.X = ±.2 [ .08 ]    FRACTIONS ± 1/32</p> <p>.XX = ±.02 [ .51 ]    ANGLES ± 1°</p> <p>.XXX = ±.005 [ .13 ]</p> <p><b>CABLE LENGTH (L) TOLERANCES:</b></p> <p>L ≤ 12 [ 005 ] = ±1 [ 25 ] / -0</p> <p>12 [ 005 ] &lt; L ≤ 60 [ 1524 ] = -2 [ 51 ] / -0</p> <p>60 [ 1524 ] &lt; L ≤ 120 [ 3048 ] = -4 [ 102 ] / -0</p> <p>120 [ 3048 ] &lt; L ≤ 300 [ 7620 ] = -6 [ 152 ] / -0</p> <p>300 [ 7620 ] &lt; L = +5% / -0</p> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>	<p><b>an INFINITE brand</b></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>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>
<p>SIZE [ CAGE CODE ] DRAWN BY</p> <p>A 43321 K.DANG</p>	<p>ITEM NO.</p> <p>LCCA30609</p>	<p>REV</p> <p>A</p>

**NOTES:**

- CABLES 36" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END 6.0" FROM THE END OF THE CONNECTOR.

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