

N Female to SMA Male Cable Assembly using LC085TB Coax, 1.5 FT



**LCCA30541-FT1.5**

**Configuration**

- Connector 1: N Female
- Connector 2: SMA Male
- Cable Type: LC085TB

**Features**

- Max Frequency 10 GHz
- Shielding Effectivity > 100dB
- PTFE Dielectric with 69.5% VoP
- Hand Formable
- Tin Filled Copper Composite Braid Outer Conductor

**Applications**

- General Purpose
- Laboratory Use
- System Interconnect



**Description**

L-com's LCCA30541-FT1.5 is a N female to SMA male cable assembly using LC085TB coax, 1.5 FT and ships same-day. The LC085TB 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 female to male gender configuration with formable LC085TB series coax and operates to 10 GHz. The tin plated copper outer conductor can be easily formed by hand and has an overall diameter of 0.085 inches.

Custom versions of this N female 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 LCCA30541-FT1.5 L-com N Female to SMA Male Cable Assembly using LC085TB Coax, 1.5 FT data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

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## LCCA30541-FT1.5

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		10	GHz
VSWR			1.45:1	
Velocity of Propagation		69.5		%
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.)	0.43	0.55	0.73	1.02	1.41	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	LC085TB
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	Copper, Tin
Outer Conductor Diameter	0.085 in [2.16 mm]
Repeated Minimum Bend Radius	0.78 in [19.81 mm]

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## LCCA30541-FT1.5

### Connectors

Description	Connector 1	Connector 2
Type	N Female	SMA Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Phosphor Bronze, Gold	Brass, Gold over Nickel
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Gold over Nickel
Coupling Nut Material and Plating		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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## LCCA30541-FT1.5

### How to Order

Part Number Configuration:

**LCCA30541 - xx uu**

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

Example: LCCA30541-12 = 12 inches long cable  
LCCA30541-100cm = 100 cm long cable

N Female to SMA Male Cable Assembly using LC085TB 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 implement 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 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 implement 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 SMA Male Cable Assembly using LC085TB Coax, 1.5 FT

## L-com CAD Drawing

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	05/29/2020
		APPROVED SELLIS

  

LENGTH MEASURED FROM CONTACT TO CONTACT

SMA MALE

N FEMALE

SOLDER

SOLDER

LC085TB

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><b>TOLERANCES:</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">.X ± .2 [5.08]</td> <td style="width: 50%;">FRACTIONS ± 1/32</td> </tr> <tr> <td>.XX ± .02 [.51]</td> <td>ANGLES ± 1°</td> </tr> <tr> <td>.XXX ± .005 [.13]</td> <td></td> </tr> </table> <p><b>CABLE LENGTH (L) TOLERANCES:</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">L ≤ 12 [305] = +1 [25] / -0</td> <td style="width: 50%;">12 [305] &lt; L ≤ 60 [1524] = +2 [61] / -0</td> </tr> <tr> <td>60 [1524] &lt; L ≤ 120 [3048] = +4 [102] / -0</td> <td>120 [3048] &lt; L ≤ 300 [7620] = +6 [152] / -0</td> </tr> <tr> <td>300 [7620] &lt; L = +5%L / -0</td> <td></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]		L ≤ 12 [305] = +1 [25] / -0	12 [305] < L ≤ 60 [1524] = +2 [61] / -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;"><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>
.X ± .2 [5.08]	FRACTIONS ± 1/32												
.XX ± .02 [.51]	ANGLES ± 1°												
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300 [7620] < L = +5%L / -0													
SIZE A	CAGE CODE 43321	DRAWN BY BPUCHASKI	ITEM NO. LCCA30541										
			REV A										

  

**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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