

SMA Male to SMA Female Cable Assembly using LC085TBJ Coax, 1 FT



**LCCA30134-FT1**

**Configuration**

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

**Features**

- Max Frequency 18 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 LCCA30134-FT1 is a SMA male to SMA female cable assembly using LC085TBJ coax, 1 FT and ships same-day. The LC085TBJ coax of this SMA 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 SMA to SMA cable assembly has a male to female gender configuration with formable LC085TBJ series coax and operates to 18 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 SMA male to SMA 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 LCCA30134-FT1 L-com SMA Male to SMA Female Cable Assembly using LC085TBJ Coax, 1 FT data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

SMA Male to SMA Female Cable Assembly using LC085TBJ Coax, 1 FT



## LCCA30134-FT1

### Electrical Specifications

| Description                   | Minimum | Typical       | Maximum | Units                 |
|-------------------------------|---------|---------------|---------|-----------------------|
| Frequency Range               | DC      |               | 18      | 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             | 1    | 2    | 4.5  | 9    | 18   | GHz   |
| Insertion Loss (Max.) | 0.43 | 0.51 | 0.71 | 0.96 | 1.33 | 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 12 in [304.8 mm]  
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]

SMA Male to SMA Female Cable Assembly using LC085TBJ Coax, 1 FT



## LCCA30134-FT1

Repeated Minimum Bend Radius 0.787 in [19.99 mm]

### Connectors

| Description                          | Connector 1                | Connector 2                        |
|--------------------------------------|----------------------------|------------------------------------|
| Type                                 | SMA Male                   | SMA 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, Gold over Nickel            |
| Body Material and Plating            | Brass, Gold over Nickel    | Brass, Gold over Nickel            |
| Coupling Nut Material and Plating    | Passivated Stainless Steel |                                    |
| Hex Size                             | 5/16 inch                  |                                    |
| Torque                               | 10 in-lbs 1.13 Nm          |                                    |

### 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.

SMA Male to SMA Female Cable Assembly using LC085TBJ Coax, 1 FT



## LCCA30134-FT1

### How to Order

Part Number Configuration:

**LCCA30134 - xx uu**



Example: LCCA30134-12 = 12 inches long cable  
LCCA30134-100cm = 100 cm long cable

SMA Male to SMA Female Cable Assembly using LC085TBJ Coax, 1 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 to SMA Female Cable Assembly using LC085TBJ Coax, 1 FT

## L-com CAD Drawing

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

  

[WWW.L-COM.COM](http://WWW.L-COM.COM)  
 L-COMP/N  
 (SEE NOTE 1)

  

|   |  |
|---|--|
| <p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p><b>TOLERANCES:</b></p> <p>.X ± .2 [ .51 ]     FRACTIONS ± 1/32<br/>         .XX ± .02 [ .51 ]     ANGLES ± 1°<br/>         .XXX ± .005 [ .13 ]     CABLE LENGTH (L) TOLERANCES:<br/>           L ≤ 12 [305] = ± 1 [25] / -0<br/>           12 [305] &lt; L ≤ 60 [1524] = ± 2 [51] / -0<br/>           60 [1524] &lt; L ≤ 120 [3048] = ± 4 [102] / -0<br/>           120 [3048] &lt; L ≤ 300 [7620] = ± 6 [152] / -0<br/>           300 [7620] &lt; L = +5%L / -0</p> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p> | <p style="text-align: center;"><b>L-com</b><sup>TM</sup><br/>an INFINITE brand</p> <p>50 High Street, West Mill, 3rd Floor, Suite #30<br/>         North Andover, MA 01845 USA.<br/>         Phone: 1.800.341.5266   1.978.682.6936<br/>         Fax: 1.978.689.9484<br/>         Website: www.L-com.com<br/>         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> |
| <p>SIZE A</p> <p>CAGE CODE [DRAWN BY] 43321</p> <p>PART NUMBER [REV] MVEERAPPAN LCCA30134 A</p>   | <p>REV 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 FRONT OF THE CONNECTOR.

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.