

SMA Male Right Angle to SMA Female Bulkhead Cable Assembly using LC085TB Coax, 1 FT



**LCCA30116-FT1**

**Configuration**

- Connector 1: SMA Male Right Angle
- Connector 2: SMA Female Bulkhead
- 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 LCCA30116-FT1 is a SMA male right angle to SMA female bulkhead cable assembly using LC085TB coax, 1 FT and ships same-day. The LC085TB 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 LC085TB series coax and operates to 10 GHz. The tinned copper composite braid outer conductor is easily formed by hand with an overall diameter of 0.085 inches and excellent shielding effectiveness greater than 100dB. L-com's RF cable assembly with SMA bulkhead interface enables system designers to have external connections on their product enclosures or to be used for other rack mount and panel mount applications. This right angle SMA cable interface on the LC085TB coax allows for easier connections in tight spaces.

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 LCCA30116-FT1 L-com SMA Male Right Angle to SMA Female Bulkhead Cable Assembly using LC085TB Coax, 1 FT data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

SMA Male Right Angle to SMA Female Bulkhead Cable  
Assembly using LC085TB Coax, 1 FT



**LCCA30116-FT1**

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		10	GHz
Velocity of Propagation		69.5		%
RF Shielding	100			dB
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]

**Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2.5	5	10	GHz
Insertion Loss (Max.)	0.45	0.53	0.65	0.85	1.12	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 0.2 dB per right angle connector and 0.1 dB per straight connector.

**Mechanical Specifications**

**Cable Assembly**

Length 12 in [304.8 mm]  
Diameter 0.013 in [0.33 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 0  
Outer Conductor Material and Plating Tinned Copper Composite Braid  
Outer Conductor Diameter 0.085 in [2.16 mm]  
  
Repeated Minimum Bend Radius 0.78 in [19.81 mm]

SMA Male Right Angle to SMA Female Bulkhead Cable  
Assembly using LC085TB Coax, 1 FT



## LCCA30116-FT1

### Connectors

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	SMA Female Bulkhead
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold over Nickel	Beryllium Copper, Gold over Nickel
Contact Plating Specification	8 µin minimum	
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
Body Plating Specification	4 µin minimum	
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.

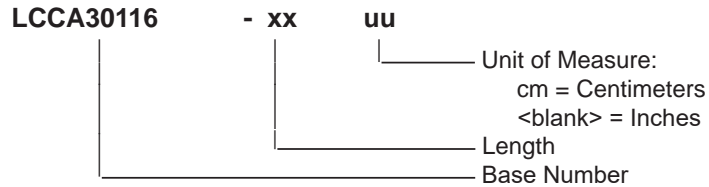
SMA Male Right Angle to SMA Female Bulkhead Cable Assembly using LC085TB Coax, 1 FT



**LCCA30116-FT1**

**How to Order**

Part Number Configuration:



Example: LCCA30116-12 = 12 inches long cable  
LCCA30116-100cm = 100 cm long cable

SMA Male Right Angle to SMA Female Bulkhead Cable Assembly using LC085TB 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 Right Angle to SMA Female Bulkhead Cable Assembly using LC085TB Coax, 1 FT

## L-com CAD Drawing

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

LENGTH MEASURED FROM CONTACT TO FLANGE

LC085TB FORMABLE CABLE

SMA MALE RIGHT ANGLE

SMA FEMALE BULKHEAD

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

THIRD-ANGLE PROJECTION

THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF L-COM GLOBAL CONNECTIVITY. ALL RIGHTS RESERVED.

SHEET 1 OF 1

SCALE: N/A

REV: A

**L-com**  
an INFINITE brand

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

CAGE CODE: DRAWN BY: PART NUMBER: LCCA30116

SIZE: A 43321 MVEERAPPAN

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

**TOLERANCES:**

.X ± .2 [5.08] | FRACTIONS ± 1/32  
.XX ± .02 [ .51] | ANGLES ± 1°  
.XXX ± .005 [ .13] | 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.
- 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.