

# LCCA30096-FT1.5



### Configuration

- Connector 1: SMA Male Right AngleConnector 2: SMA Female Bulkhead
- · Cable Type: LC141TBJ

#### **Features**

- Max Frequency 10 GHz
- Shielding Effectivity > 100dB
- PTFE Dielectric with 70% VoP

#### **Applications**

- General Purpose
- · Laboratory Use

- Hand Formable
- Tin Filled Copper Braid Outer Conductor
- FEP Jacket
- · System Interconnect



#### **Description**

L-com's LCCA30096-FT1.5 is a SMA male right angle to SMA female bulkhead 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 SMA cable assembly has a male to female gender configuration with formable LC141TBJ series coax and operates to 10 GHz. The jacketed tinned copper braid outer conductor is easily formed by hand with an overall diameter of 0.161 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 LC141TBJ 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 LCCA30096-FT1.5 L-com SMA Male Right Angle to SMA Female Bulkhead Cable Assembly using LC141TBJ Coax, 1.5 FT data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.





#### LCCA30096-FT1.5

### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		10	GHz
Velocity of Propagation		70		%
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 Con	ductor	8.23 [27]		Ohms/1000ft [Ohms/Km]
Operating Voltage (AC)			1,900	Vrms
Dielectric Withstanding Vo	oltage (AC)		3,000	Vrms

# **Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2.5	5	10	GHz
Insertion Loss (Max.)	0.33	0.39	0.5	0.68	0.93	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
 18 in [457.2 mm]

 Diameter
 0.032 in [0.81 mm]

#### Cable

Cable TypeLC141TBJImpedance50 OhmsInner Conductor TypeSolidInner Conductor Material and PlatingCopper, SilverDielectric TypePTFE

Dielectric Type PT Number of Shields 0

Outer Conductor Material and Plating Tinned Copper Braid Outer Conductor Diameter 0.139 in [3.53 mm]

Jacket Material FEP

Jacket Diameter 0.161 in [4.09 mm]

One Time Minimum Bend Radius 0.315 in [8 mm]



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Repeated Minimum Bend Radius

1.575 in [40.01 mm]

#### **Connectors**

Description	Connector 1	Connector 2
Туре	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
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 -65 to +150 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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#### **How to Order**



Example: LCCA30096-12 = 12 inches long cable

LCCA30096-100cm = 100 cm long cable

SMA Male Right Angle to SMA Female Bulkhead 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.

# **L-com CAD Drawing**

