

## **GLOBAL CONNECTIVITY SOLUTIONS**

SMA Male Right Angle to SMA Female Bulkhead Cable Assembly using LC141TB Coax, 1 FT

## LCCA30076-FT1

#### Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: SMA Female Bulkhead
- Cable Type: LC141TB

#### **Features**

- Max Frequency 10 GHz
- Shielding Effectivity > 100dB
- PTFE Dielectric with 69.9% VoP

#### **Applications**

- General Purpose
- Laboratory Use

- Hand Formable
- Tin Filled Copper Braid Outer Conductor
- System Interconnect



#### Description

L-com's LCCA30076-FT1 is a SMA male right angle to SMA female bulkhead cable assembly using LC141TB coax, 1 FT and ships same-day. The LC141TB 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 LC141TB series coax and operates to 10 GHz. The tinned copper braid outer conductor is easily formed by hand with an over-all diameter of 0.141 inches and excellent shielding effectiveness greater than 110dB. 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 LC141TB 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 LCCA30076-FT1 L-com SMA Male Right Angle to SMA Female Bulkhead Cable Assembly using LC141TB 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 LC141TB Coax, 1 FT



## LCCA30076-FT1

#### **Electrical Specifications**

| Minimum | Typical            | Maximum  | Units  |
|---------|--------------------|--|--|
| DC      |                    | 10   | GHz  |
|         | 69.5               |  | %  |
| 110     |                    |  | dB   |
|         | 29.4 [96.46]       |  | pF/ft [pF/m]   |
| uctor   | 7.8 [25.59]        |  | Ohms/1000ft [Ohms/Km]  |
| luctor  | 5.5 [18.04]        |  | Ohms/1000ft [Ohms/Km]  |
|         |                    | 500  | Vrms   |
|         | DC<br>110<br>uctor | DC 69.5<br>110 29.4 [96.46]<br>uctor 7.8 [25.59] | DC 10   69.5   110   29.4 [96.46]   uctor 7.8 [25.59]   Juctor 5.5 [18.04] |

#### **Specifications by Frequency**

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.5  | 1    | 2.5  | 5    | 10   | GHz   |
| Insertion Loss (Max.) | 0.28 | 0.32 | 0.39 | 0.49 | 0.65 | 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 Diameter

#### Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Outer Conductor Material and Plating Outer Conductor Diameter

Repeated Minimum Bend Radius

12 in [304.8 mm] 0.025 in [0.64 mm]

LC141TB 50 Ohms Stranded Copper, Silver PTFE 0 Tinned Copper Braid 0.141 in [3.58 mm]

0.625 in [15.88 mm]



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## LCCA30076-FT1

#### 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

-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 LC141TB Coax, 1 FT

LCCA30076-100cm = 100 cm long cable

## LCCA30076-FT1

#### How to Order

Example:

Part Number Configuration: LCCA30076 - xx uu Unit of Measure: cm = Centimeters <blank> = Inches Length **Base Number** LCCA30076-12 = 12 inches long cable

SMA Male Right Angle to SMA Female Bulkhead Cable Assembly using LC141TB 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.

APPROVED THIRD-ANGLE PROJECTION THE INFORMATION AND DESIGN IN THIS DOCUMENT SELLIS L-COM GLOBAL CONNECTIVI ALL RIGHTS RESERVED. ∢ Ŷ R Ь A/A SMA FEMALE BULKHEAD ~  $( \mathbf{\Phi} )$ 01/31/2020 DATE CALE LCCA30076 50 High Street, West Mill, 3rd Floor, Suite #30 North Andover, MA 01845 USA. Phone: 1.800.341.5266 | 1.978.682.6936 REVISIONS PART NUMBEF E-mail: CustomerService@L-com.com an INFINIT® brand Website: www.L-com.com INITIAL RELEASE DESCRIPTION Fax: 1.978.689.9484 43321 MVEERAPPAN DRAWN BY CAGE CODE REV. ∢ ۷ IZE L = 12 [305] = +1 [25] / -0 12 [305] - L = 200 [314] = -2 [51] / -0 60 [1224] - L = 120 [3048] = +4 [102] / -0 120 [3048] - L = 300 [7620] = +6 [152] / -0 300 [7620] = L = 5% L / -0 ALL DIMENSIONS SHOWN ARE POR REFERENCE ONLY. ± 1/32 ANGLES ± 1° UNLESS OT HERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS ERANCES: 08] | FRACTIONS CABLE LENGTH (L) TOLERANCES. WWW.L-COM.COM  $X = \pm .2$  [5.08]  $XX = \pm .02$  [.51]  $XXX = \pm .005$  [.13] (SEE NOTE 1) L-COM P/N LENGTH MEASURED FROM CONTACT TO FLANGE LABEL LC141TB FORMABLE CABLE 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.  $\phi_{.255}^{.260}$ 6.60 6.48 6.05 5.92 238 RECOMMENDED PANEL CUTOUT CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END, 1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED 6.0" FROM THE FRONT OF THE CONNECTOR. SMA MALE RIGHT ANGLE NOTES:

#### L-com CAD Drawing

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LCCA30328-FT1.5