

N Female to SMA Female Cable Assembly using LC141TB Coax, 3 FT



LCCA30417-FT3

Configuration

- Connector 1: N Female
- Connector 2: SMA Female
- Cable Type: LC141TB

Features

- Max Frequency 10 GHz
- Shielding Effectivity > 100dB
- PTFE Dielectric with 69.9% VoP
- Hand Formable
- Tin Filled Copper Braid Outer Conductor

Applications

- General Purpose
- Laboratory Use
- System Interconnect



Description

L-com's LCCA30417-FT3 is a N female to SMA female cable assembly using LC141TB coax, 3 FT and ships same-day. The LC141TB 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 female gender configuration with formable LC141TB series coax and operates to 10 GHz. The outer conductor is easily formed by hand with an overall diameter of inches and excellent shielding effectiveness greater than 110dB.

Custom versions of this N female to N 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 LCCA30417-FT3 L-com N Female to SMA Female Cable Assembly using LC141TB Coax, 3 FT data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

N Female to SMA Female Cable Assembly using LC141TB Coax, 3 FT



LCCA30417-FT3

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		10	GHz
VSWR			1.45:1	
Velocity of Propagation		69.5		%
RF Shielding	110			dB
Capacitance		29 [95.14]		pF/ft [pF/m]
DC Resistance Inner Conductor		7.8 [25.59]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		5.5 [18.04]		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.)	0.44	0.56	0.75	1.07	1.55	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	36 in [914.4 mm]
Diameter	0.63 in [16 mm]

Cable

Cable Type	LC141TB
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Number of Shields	1
Shield Layer 1	Tinned Copper Braid
Repeated Minimum Bend Radius	0.625 in [15.88 mm]

N Female to SMA Female Cable Assembly using LC141TB Coax, 3 FT



LCCA30417-FT3

Connectors

Description	Connector 1	Connector 2
Type	N Female	SMA Female
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Phosphor Bronze, Gold over Nickel	Beryllium Copper, Gold over Nickel
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Gold over Nickel

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.

N Female to SMA Female Cable Assembly using LC141TB Coax, 3 FT



LCCA30417-FT3

How to Order

Part Number Configuration:

LCCA30417 - xx uu



Example: LCCA30417-12 = 12 inches long cable
LCCA30417-100cm = 100 cm long cable

N Female to SMA Female Cable Assembly using LC141TB Coax, 3 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 Female Cable Assembly using LC141TB Coax, 3 FT

L-com CAD Drawing

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	04/28/2020	SELLIS

LENGTH MEASURED FROM CONTACT TO CONTACT

.51 [13] ACROSS FLATS

.28 [7] ACROSS FLATS

SMA FEMALE

LC141TB

SOLDER

N FEMALE

WWW.L-COM.COM
L-COMP/N
SEE NOTE 1

SOLDER

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

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

ITEM NO. LCCA30417

SIZE A

CAGE CODE 43321

DRAWN BY DZINN

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

TOLERANCES:

.X ± .2 [.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:

1. 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.

T-Rev D