



# LCCA30322-FT5

# Configuration

· Connector 1: BNC Male

Connector 2: N Female Bulkhead

· Cable Type: LMR-400-DB

#### **Features**

Using Times Microwave Components

Max Frequency 6 GHz

• Shielding Effectivity > 90 dB

• 85% Phase Velocity

## **Applications**

- General Purpose
- · Laboratory Use
- Antenna Installations

- PE Jacket
- · Low Insertion Loss
- · Bend Radius of 4 Inches
- · Land Mobile Radio & Other Communication Systems
- · Cellular & Wi-Fi Systems



## Description

L-com's LCCA30322-FT5 is a low loss BNC male to N female bulkhead cable assembly using LMR-400-DB coax, 5 FT with Times Microwave components and ships same-day. The LMR-400-DB coax of this BNC cable uses the PE (F) dielectric with a VoP of 85%, resulting in very low insertion loss compared to solid dielectrics. These flexible RF cable assemblies are ideal for applications where flexure is required. Our L-com BNC to N cable assembly has a male to female gender configuration with flexible LMR-400-DB series coax and operates to 6 GHz. The double shield of this BNC cable is layered by tinned copper braid over aluminum tape providing shielding effectiveness greater than 90dB. L-com's RF cable assembly with N 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. \*LMR<sup>TM</sup> is a trademark of Times Microwave Systems.

Custom versions of this BNC male to BNC 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 LCCA30322-FT5 L-com Low Loss BNC Male to N Female Bulkhead Cable Assembly using LMR-400-DB Coax, 5 FT with Times Microwave Components data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.





# LCCA30322-FT5

# **Electrical Specifications**

Velocity of Propagation         85           RF Shielding         90           Group Delay         1.2 [3.94]         ns/ft           Capacitance         23.9 [78.41]         pF/ft           Inductance         0.06 [0.2]         uH/ft           DC Resistance Inner Conductor         1.39 [4.56]         Ohms/1000	escription	Minimum	Typical	Maximum	Units
RF Shielding       90         Group Delay       1.2 [3.94]       ns/ft         Capacitance       23.9 [78.41]       pF/ft         Inductance       0.06 [0.2]       uH/ft         DC Resistance Inner Conductor       1.39 [4.56]       Ohms/1000	equency Range	DC		6	GHz
Group Delay         1.2 [3.94]         ns/ft           Capacitance         23.9 [78.41]         pF/ft           Inductance         0.06 [0.2]         uH/ft           DC Resistance Inner Conductor         1.39 [4.56]         Ohms/1000	locity of Propagation		85		%
Capacitance         23.9 [78.41]         pF/ft           Inductance         0.06 [0.2]         uH/ft           DC Resistance Inner Conductor         1.39 [4.56]         Ohms/1000	Shielding	90			dB
Inductance         0.06 [0.2]         uH/ft           DC Resistance Inner Conductor         1.39 [4.56]         Ohms/1000	oup Delay		1.2 [3.94]		ns/ft [ns/m]
DC Resistance Inner Conductor 1.39 [4.56] Ohms/1000	pacitance		23.9 [78.41]		pF/ft [pF/m]
• •	ductance		0.06 [0.2]		uH/ft [uH/m]
DC Pagistanas Outer Conductor 1 CF IF 441 Ohma/4000	Resistance Inner Condu	ıctor	1.39 [4.56]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor 1.05 [5.41] Onlins/1000	Resistance Outer Condu	uctor	1.65 [5.41]		Ohms/1000ft [Ohms/Km]
Jacket Spark 8,000 V	cket Spark			8,000	Vrms

# **Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units	
Frequency	0.25	0.5	1	2.5	6	GHz	
Insertion Loss (Typ.)	0.3	0.34	0.4	0.54	0.75	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 60 in [152.4 cm]
Diameter 0.875 in [22.23 mm]

#### Cable

Cable TypeLMR-400-DBImpedance50 OhmsInner Conductor TypeSolid

Inner Conductor Material and Plating Copper Clad Aluminum

Dielectric Type PE (F)
Number of Shields 2

Shield Layer 1 Aluminum Tape
Shield Layer 2 Tinned Copper Braid





# LCCA30322-FT5

Jacket Material Jacket Diameter

One Time Minimum Bend Radius Repeated Minimum Bend Radius Bending Moment Flat Plate Crush Tensile Strength PE, Black

0.405 in [10.29 mm]

1 in [25.4 mm] 4 in [101.6 mm] 0.5 lbs-ft [0.68 N-m] 40 lbs/in [0.71 Kg/mm] 160 lbs [72.57 Kg]

# **Connectors**

Description	Connector 1	Connector 2
Туре	BNC Male	N Female Bulkhead
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	50 microns	
Dielectric Type	PTFE	Teflon
Body Material and Plating	Brass, Tri-Metal	Brass, Nickel
Body Plating Specification	80 microns	
Coupling Nut Material and Plating	Brass, Tri-Metal	
Coupling Nut Plating Specification	80 microns	

## **Environmental Specifications**

**Temperature** 

Operating Range -40 to +85 deg C Storage Range -70 to +85 deg C

Compliance Certifications (see product page for current document)

## **Plotted and Other Data**

Notes:





## LCCA30322-FT5

## **How to Order**



Example: LCCA30322-12 = 12 inches long cable

LCCA30322-100cm = 100 cm long cable

Low Loss BNC Male to N Female Bulkhead Cable Assembly using LMR-400-DB Coax, 5 FT with Times Microwave Components 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**

