

# **GLOBAL CONNECTIVITY SOLUTIONS**

Low Loss BNC Male to N Female Cable Assembly using LMR-400-DB Coax, 6 FT with Times Microwave Components

# LCCA30321-FT6

#### Configuration

- Connector 1: BNC Male
- Connector 2: N Female
- Cable Type: LMR-400-DB

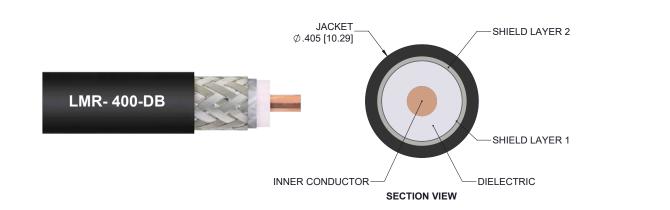
#### Features

- 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 LCCA30321-FT6 is a low loss BNC male to N female cable assembly using LMR-400-DB coax, 6 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. \*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 LCCA30321-FT6 L-com Low Loss BNC Male to N Female Cable Assembly using LMR-400-DB Coax, 6 FT with Times Microwave Components data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.



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## **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
Velocity of Propagation		85		%
RF Shielding	90			dB
Group Delay		1.2 [3.94]		ns/ft [ns/m]
Capacitance		23.9 [78.41]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Cond	ductor	1.39 [4.56]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Con	ductor	1.65 [5.41]		Ohms/1000ft [Ohms/Km]
Jacket Spark			8,000	Vrms

## **Specifications by Frequency**

Frequency 0.25 0.5 1 2.5 6 GHz	Description	F1	F2	F3	F4	F5	Units	
	Frequency	0.25	0.5	1	2.5	6	GHz	
Insertion Loss (Typ.) 0.32 0.36 0.44 0.6 0.86 dB	Insertion Loss (Typ.)	0.32	0.36	0.44	0.6	0.86	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 Diameter

#### Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Shield Layer 1 Shield Layer 2 72 in [182.88 cm] 0.63 in [16 mm]

LMR-400-DB 50 Ohms Solid Copper Clad Aluminum PE (F) 2 Aluminum Tape Tinned Copper Braid



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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

Connector 1	Connector 2		
BNC Male	N Female		
	MIL-STD-348		
50 Ohms	50 Ohms		
500			
Brass, Gold	Copper, Gold		
50 microns			
PTFE	PTFE		
Brass, Tri-Metal	Brass, Tri-Metal		
80 microns			
Brass, Tri-Metal	Brass, Tri-Metal		
80 microns			
	BNC Male 50 Ohms 500 Brass, Gold 50 microns PTFE Brass, Tri-Metal 80 microns Brass, Tri-Metal		

### **Environmental Specifications**

**Temperature** Operating Range Storage Range

-40 to +85 deg C -70 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

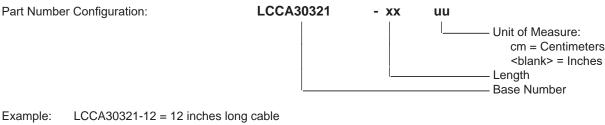




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### How to Order



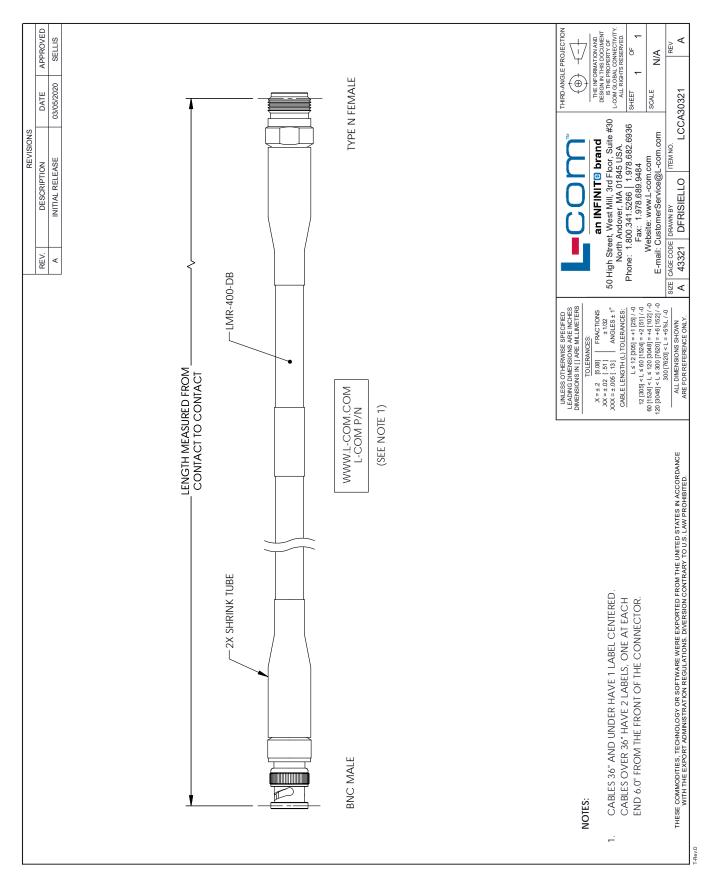
Example: LCCA30321-12 = 12 inches long cable LCCA30321-100cm = 100 cm long cable

Low Loss BNC Male to N Female Cable Assembly using LMR-400-DB Coax, 6 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 warranty regarding the suitability of 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.

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## L-com CAD Drawing



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