

#### LCCA30030-FT5

# Configuration

· Connector 1: TNC Male

· Connector 2: N Female Bulkhead

· Cable Type: LL142

#### **Features**

Max Frequency 18 GHz

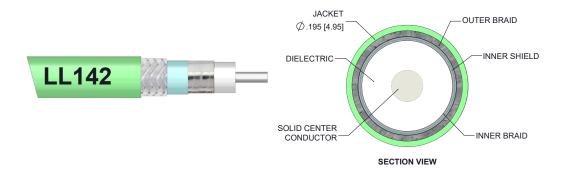
Shielding Effectivity > 95dB

Low Loss Expanded PTFE Dielectric with 80% VoP

#### **Applications**

- General Purpose
- · Laboratory Use
- Flexible RF Interconnect

- FEP Jacket
- Triple Shielded
- · Heavy Duty Heat Shrink Strain Relief Boot
- Automated (ATE) Test Systems
- Antenna Range Applications and Long Cable Runs



#### **Description**

L-com's LCCA30030-FT5 is a low loss TNC male to N female bulkhead cable assembly with heavy duty heat shrink boot using LL142 coax, 5 FT and ships same-day. The LL142 coax of this TNC cable uses the tape wrapped PTFE dielectric with a VoP of 80%, 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 TNC to N cable assembly has a male to female gender configuration with flexible LL142 series coax and operates to 18 GHz. The triple shield of this TNC cable is layered by silver plated copper braid over silver plated copper tape providing excellent shielding effectiveness greater than 95dB. 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. Highly durable stainless-steel connectors and heavy-duty booting extend the life of these versatile, flexible TNC to N cables.

Custom versions of this TNC male to TNC 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 LCCA30030-FT5 L-com Low Loss TNC Male to N Female Bulkhead Cable Assembly with Heavy Duty Heat Shrink Boot using LL142 Coax, 5 FT data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.



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#### LCCA30030-FT5

# **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR			1.35:1	
Velocity of Propagation		80		%
RF Shielding	95			dB
Capacitance		25 [82.02]		pF/ft [pF/m]

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Max.)	0.54	0.73	1.1	1.57	2.29	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 0.05\*SQRT(FGHz) dB per TNC male connector and as 0.04\*SQRT(FGHz) dB per N female bulkhead connector.

# **Mechanical Specifications**

# **Cable Assembly**

 Length
 60 in [152.4 cm]

 Diameter
 0.195 in [4.95 mm]

 Weight
 0.187 lbs [84.82 g]

# Cable

Cable TypeLL142Impedance50 OhmsInner Conductor TypeSolidInner Conductor Material and PlatingCopper, SilverDielectric TypeTape wrapped

Dielectric Type Tape wrapped PTFE
Number of Shields 3
Shield Layer 1 Silver Plated Copper Tape
Shield Layer 2 Aluminum Polyester
Shield Layer 3 Silver Plated Copper Braid
Jacket Material FEP, Green

Jacket Diameter 0.195 in [4.95 mm]

Repeated Minimum Bend Radius 0.975 in [24.77 mm]





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## **Connectors**

Description	Connector 1	Connector 2	
Туре	TNC Male	N Female Bulkhead	
Specification	MIL-STD-348	MIL-STD-348	
Impedance	50 Ohms	50 Ohms	
Contact Material and Plating	Beryllium Copper, Gold over Nickel	Beryllium Copper, Gold over Nickel	
Contact Plating Specification	50 μin minimum	50 μin minimum	
Dielectric Type	PEI	PEI	
Outer Conductor Material and Plating		Passivated Stainless Steel	
Outer Conductor Plating Specification		SAE-AMS-2700	
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel	
Body Plating Specification	SAE-AMS-2700	SAE-AMS-2700	
Coupling Nut Material and Plating	Passivated Stainless Steel		
Coupling Nut Plating Specification	SAE-AMS-2700		
Hex Size	9/16 inch		
Torque	15 in-lbs 1.7 Nm	25 in-lbs 2.83 Nm	
Boot Material	Heavy Duty Heat Shrink Boot	Heavy Duty Heat Shrink Boot	

# **Environmental Specifications**

**Temperature** 

Operating Range

-55 to +200 deg C

Compliance Certifications (see product page for current document)

## **Plotted and Other Data**

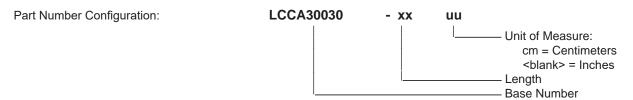
Notes:

• Values at 25°C, sea level.



# LCCA30030-FT5

#### **How to Order**



Example: LCCA30030-12 = 12 inches long cable

LCCA30030-100cm = 100 cm long cable

Low Loss TNC Male to N Female Bulkhead Cable Assembly with Heavy Duty Heat Shrink Boot using LL142 Coax, 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**

