

# **GLOBAL CONNECTIVITY SOLUTIONS**

Low Loss N Male to N Female Cable Assembly with Heavy Duty Heat Shrink Boot using LL335i Coax, 1.5 FT

# LCCA30041-FT1.5

### Configuration

- Connector 1: N Male
- Connector 2: N Female
- Cable Type: LL335i

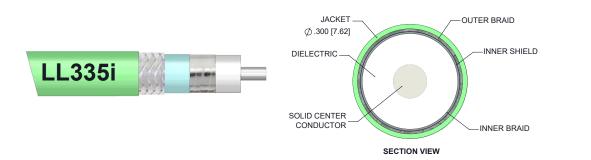
#### **Features**

- Max Frequency 18 GHz
- Shielding Effectivity > 95dB
- Low Loss Expanded PTFE Dielectric with 83% 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

1

L-com's LCCA30041-FT1.5 is a low loss N male to N female cable assembly with heavy duty heat shrink boot using LL335i coax, 1.5 FT and ships sameday. The LL335i coax of this N cable uses the tape wrapped PTFE dielectric with a VoP of 83%, 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 N to N cable assembly has a male to female gender configuration with flexible LL335i series coax and operates to 18 GHz. The triple shield of this N cable is layered by silver plated copper braid over silver plated copper tape providing excellent shielding effectiveness greater than 95dB. Highly durable stainless-steel connectors and heavy-duty booting extend the life of these versatile, flexible N to N cables.

Custom versions of this N male 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 LCCA30041-FT1.5 L-com Low Loss N Male to N Female Cable Assembly with Heavy Duty Heat Shrink Boot using LL335i Coax, 1.5 FT 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      |            | 18      | GHz          |
| VSWR                    |         |            | 1.35:1  |              |
| Velocity of Propagation |         | 83         |         | %            |
| RF Shielding            | 95      |            |         | dB           |
| Capacitance             |         | 25 [82.02] |         | pF/ft [pF/m] |

| Description           | F1   | F2   | F3   | F4   | F5   | Units |  |
|-----------------------|------|------|------|------|------|-------|--|
| Frequency             | 1    | 2    | 4.5  | 9    | 18   | GHz   |  |
| Insertion Loss (Max.) | 0.23 | 0.28 | 0.37 | 0.48 | 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 0.04\*SQRT(FGHz) dB per N male connector and as 0.1 dB per N female connector.

### **Mechanical Specifications**

| <b>Cable Assembly</b><br>Length<br>Diameter  | 18 in [457.2 mm]<br>0.3 in [7.62 mm]  |
|--|---|
| Weight   | 0.109 lbs [49.44 g]   |
| Cable<br>Cable Type<br>Impedance<br>Inner Conductor Type<br>Inner Conductor Material and Plating<br>Dielectric Type<br>Number of Shields<br>Shield Layer 1<br>Shield Layer 2<br>Shield Layer 3<br>Jacket Material<br>Jacket Diameter | LL335i<br>50 Ohms<br>Solid<br>Copper, Silver<br>Tape wrapped PTFE<br>3<br>Silver Plated Copper Tape<br>Aluminum Polyester<br>Silver Plated Copper Braid<br>FEP, Green<br>0.3 in [7.62 mm] |
| Repeated Minimum Bend Radius   | 1.5 in [38.1 mm]  |



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# Connectors

| Description                           | Connector 1                        | Connector 2                 |
|---------------------------------------|------------------------------------|-----------------------------|
| Туре                                  | N Male                             | N Female                    |
| Specification                         |                                    | MIL-STD-348                 |
| mpedance                              | 50 Ohms                            | 50 Ohms                     |
| Contact Material and Plating          | Beryllium Copper, Gold over Nickel | Beryllium Copper, Gold      |
| Contact Plating Specification         | 50 µin minimum                     | ASTM-B488 50 µin minimum    |
| Dielectric Type                       | PTFE                               | 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         | Passivated Stainless Steel  |
| Coupling Nut Plating Specification    | SAE-AMS-2700                       | SAE-AMS-2700                |
| Hex Size                              | 3/4 inch                           |                             |
| Torque                                | 21 in-lbs 2.37 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.



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# LCCA30041-FT1.5

### How to Order

Example:

Part Number Configuration: LCCA30041 - XX uu Unit of Measure: cm = Centimeters <blank> = Inches Length Base Number LCCA30041-12 = 12 inches long cable LCCA30041-100cm = 100 cm long cable

Low Loss N Male to N Female Cable Assembly with Heavy Duty Heat Shrink Boot using LL335i Coax, 1.5 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.

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### L-com CAD Drawing

