

## Configuration

- Connector 1: N Male
- Connector 2: SMA Male Right Angle
- 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

L-com's LCCA30046-FT2 is a low loss N male to SMA male right angle cable assembly with heavy duty heat shrink boot using LL335i coax, 2 FT and ships same-day. 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 SMA cable assembly has a male to male 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. This right angle SMA cable interface on the LL335i coax allows for easier connections in tight spaces. Highly durable stainless-steel connectors and heavy-duty booting extend the life of these versatile, flexible $N$ to SMA cables.

Custom versions of this N male to N male 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 LCCA30046-FT2 L-com Low Loss N Male to SMA Male Right Angle Cable Assembly with Heavy Duty Heat Shrink Boot using LL335i Coax, 2 FT data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

Low Loss N Male to SMA Male Right Angle Cable Assembly with Heavy Duty Heat Shrink Boot using LL335i Coax, 2 FT

LCCA30046-FT2


## Electrical Specifications

| Description | Minimum | Typical | Maximum |  |
| :--- | :---: | :---: | :---: | :---: |
| Frequency Range | DC |  | 18 | Units |
| VSWR |  | 83 | $1.35: 1$ | GHz |
| Velocity of Propagation |  |  |  |  |
| RF Shielding | 95 | $25[82.02]$ | $\mathrm{pF} / \mathrm{ft}[\mathrm{pF} / \mathrm{m}]$ |  |
| Capacitance |  |  |  |  |

## Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 1 | 2 | 4.5 | 9 | 18 | GHz |
| Insertion Loss (Max.) | 0.36 | 0.42 | 0.53 | 0.66 | 0.87 | 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 ( $F G H z$ ) dB per $N$ male connector and as 0.2 dB per SMA male right angle connector.

## Mechanical Specifications

## Cable Assembly

Length 24 in [609.6 mm]
Diameter
0.3 in [7.62 mm]

Weight
$0.139 \mathrm{lbs}[63.05 \mathrm{~g}]$

## Cable

Cable Type
LL335i
Impedance 50 Ohms
Inner Conductor Type
Solid
Inner Conductor Material and Plating
Dielectric Type
Number of Shields
Shield Layer 1
Shield Layer 2
Copper, Silver
Tape wrapped PTFE

Shield Layer 3
Silver Plated Copper Tape

Jacket Material
Aluminum Polyester
Silver Plated Copper Braid
Jacket Diameter
FEP, Green
0.3 in [7.62 mm]

Repeated Minimum Bend Radius
1.5 in [38.1 mm]

Low Loss N Male to SMA Male Right Angle Cable Assembly with Heavy Duty Heat Shrink Boot using LL335i Coax, 2 FT

LCCA30046-FT2


## Connectors

| Description | Connector 1 | Connector 2 |
| :--- | :---: | :---: |
| Type | N Male | SMA Male Right Angle |
| Specification | 50 Ohms | MIL-STD-348 |
| Impedance | Beryllium Copper, Gold over Nickel | 50 Ohms |
| Contact Material and Plating | 50 in minimum | Beryllium Copper, Gold |
| Contact Plating Specification | PTFE | ASTM-B488 50 $\mu$ in |
| Dielectric Type | Passivated Stainless Steel | PTFE |
| Body Material and Plating | SAE-AMS-2700 | Passivated Stainless Steel |
| Body Plating Specification | Sassivated Stainless Steel | SAE-AMS-2700 |
| Coupling Nut Material and Plating | $3 / 4$ inch | Passivated Stainless Steel |
| Coupling Nut Plating Specification | 21 in-lbs 2.37 Nm | SAE-AMS-2700 |
| Hex Size |  | $5 / 16$ Inch |
| Torque | Heavy Duty Heat Shrink Boot | Silicone Rubber |
| Seal Gasket Material |  | Heavy Duty Heat Shrink Boot |
| Boot Material |  |  |

## Environmental Specifications

## Temperature

Operating Range
Compliance Certifications (see product page for current document)

## Plotted and Other Data

Notes:

- Values at $25^{\circ} \mathrm{C}$, sea level.
an INFINITE brand



## How to Order

Part Number Configuration: LCCA30046 - xx

Example: LCCA30046-12 = 12 inches long cable LCCA30046-100 cm = 100 cm long cable

Low Loss N Male to SMA Male Right Angle Cable Assembly with Heavy Duty Heat Shrink Boot using LL335i Coax, 2 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.

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## L-com CAD Drawing




[^0]:    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.

