N Male to SMA Male Cable Using 402SS Series<br>Coax with Heavy Duty Boot, 1.5 ft

LCCA30005-FT1.5


## Configuration

- Connector 1: N Male
- Connector 2: SMA Male
- Cable Type: 402SS Series


## Features

- Max Frequency 18 GHz
- Shielding Effectivity > 110dB
- 70\% Phase Velocity
- Double Shielded
- FEP Jacket
- Wire Braid over Spiral Strip Shield
- Flexible Alternative to 141 Semi-Rigid
- Heavy Duty Heat Shrink Strain Relief Boot
- Precision Stainless Steel Connectors


## Applications

- General Purpose
- Laboratory Use
- Flexible RF Interconnect
- Automated (ATE) Test Systems



## Description

L-com's LCCA30005-FT1.5 is a N male to SMA male cable using 402SS series coax with heavy duty boot, 1.5 ft and ships same-day. The 402 SS series coax of this N cable uses the PTFE dielectric with a VoP of $70 \%$. 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 402 SS series series coax and operates to 18 GHz . The double shield of this $N$ cable is layered by silver plated copper braid over silver plated copper tape providing excellent shielding effectiveness greater than 110dB. L-com's Cable Assembly LCCA30005 is an N male to SMA male, 1.5 ft cable using 402SS Series coax with Heavy Duty Boot that ships same-day. L-com's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This L-com N to SMA cable assembly has a male to male gender configuration with 50 ohm flexible 402SS Series coax and operates to 18 GHz . Highly durable stainless-steel connectors and heavy-duty booting extend the life of this versatile flexible cable assembly. The double shield includes a silver plated copper braid over a silver plated copper spiral strip providing excellent shielding effectiveness greater than 110 dB .

Custom versions of this cable assembly along with the rest of L-com's RF cable assemblies can be built and shipped same day. Other available RF cable assembly value added services 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 custom cable quotes.
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

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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 LCCA30005-FT1.5 L-com N Male to SMA Male Cable Using 402SS Series Coax with Heavy Duty Boot, 1.5 ft data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

## Electrical Specifications

| Description | Minimum | Typical | Maximum |
| :--- | :---: | :---: | :---: | :---: |
| Frequency Range | DC |  | 18 |
| VSWR |  | 70 | $1.4: 1$ |
| Velocity of Propagation | 110 | $29.4[96.46]$ | GHz |
| RF Shielding |  | dB |  |
| Capacitance |  | 500 | $\mathrm{pF} / \mathrm{ft}[\mathrm{pF} / \mathrm{m}]$ |
| Operating Voltage $(\mathrm{AC})$ |  | Vrms |  |

Specifications by Frequency

| Description | $F 1$ | $F 2$ | $F 3$ | $F 4$ | F5 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Frequency | 3 | 5 | 10 | 18 | GHz |
| Insertion Loss (Max.) | 0.497 | 0.618 | 0.87 | 1.188 | 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 $0.1^{*}$ SQRT(FGHz) dB for the N Type Male connector and $0.03 *$ SQRT(FGHz) dB for the SMA Male connector.

## Mechanical Specifications

Cable Assembly

Length
Diameter
Weight

## Cable

Cable Type
Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields
Shield Layer 1

18 in [457.2 mm]
0.315 in [8 mm]
0.19 lbs [86.18 g]

402SS Series
50 Ohms
Stranded
Copper, Silver
PTFE
2
Silver Plated Copper Tape


| Shield Layer 2 | Silver Plated Copper Braid |
| :--- | :--- |
| Jacket Material | FEP, Blue |
| Jacket Diameter | 0.163 in $[4.14 \mathrm{~mm}]$ |
|  |  |
| Repeated Minimum Bend Radius | 1 in $[25.4 \mathrm{~mm}]$ |

## Connectors

| Description | Connector 1 | Connector 2 |
| :---: | :---: | :---: |
| Type | N Male | SMA Male |
| Specification | MIL-STD-348A | MIL-STD-348A |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Brass, Gold | Brass, Gold |
| Contact Plating Specification | 50 Hin minimum | 50 بin minimum |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Brass, Nickel | Brass, Nickel |
| Body Plating Specification | 100 uin minimum | 100 uin minimum |
| Coupling Nut Material and Plating | Brass, Nickel | Brass, Nickel |
| Coupling Nut Plating Specification | 100 min minimum | 100 بin minimum |
| Hex Size | 5/16 inch |  |
| Torque | 12 in -lbs 1.36 Nm |  |
| Boot Material | Heavy Duty Heat Shrink Boot | Heavy Duty Heat Shrink Boot |

## Environmental Specifications

## Temperature

Operating Range -55 to +165 deg C
Compliance Certifications (see product page for current document)

## Plotted and Other Data

Notes:

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



## How to Order

Part Number Configuration: LCCA30005 - xx

Example: LCCA30005-12 = 12 inches long cable LCCA30005-100 cm = 100 cm long cable

N Male to SMA Male Cable Using 402SS Series Coax with Heavy Duty Boot, 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.

[^0]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.

