

N Female to SMA Male Cable Using 402SS Series
Coax with Heavy Duty Boot, 3.0 ft



LCCA30007-FT3

Configuration

- Connector 1: N Female
- 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 Cable Assembly LCCA30007 is an N female to SMA male, 3.0 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 female 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 110dB.

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.

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		11	GHz
VSWR			1.4:1	
Velocity of Propagation		70		%
RF Shielding	110			dB
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			500	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	3	5	10			GHz
Insertion Loss (Max.)	0.842	1.068	1.545			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 $0.1 \cdot \sqrt{\text{FGHz}}$ dB for the N Type Female connector and $0.03 \cdot \sqrt{\text{FGHz}}$ dB for the SMA Male connector.

Mechanical Specifications

Cable Assembly

Length	36 in [914.4 mm]
Diameter	0.315 in [8 mm]
Weight	0.22 lbs [99.79 g]

Cable

Cable Type	402SS Series
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver Plated Copper Tape
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	FEP, Tan
Jacket Diameter	0.163 in [4.14 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]

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Connectors

Description	Connector 1	Connector 2
Type	N Female	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 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 µin minimum	100 µin 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°C, sea level.

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How to Order

Part Number Configuration:

LCCA30007 - xx uu



Example: LCCA30007-12 = 12 inches long cable
LCCA30007-100cm = 100 cm long cable

N Female to SMA Male Cable Using 402SS Series Coax with Heavy Duty Boot, 3.0 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

REVISIONS		DATE	APPROVED
REV.	DESCRIPTION		
A	INITIAL RELEASE	10/09/2019	SELLIS

TYPE N FEMALE

2X HEAVY DUTY SHRINK TUBE

402SS SERIES

LENGTH MEASURED FROM CONTACT TO CONTACT

WWW.L-COM.COM
L-COM P/N
(SEE NOTE 1)

SMA MALE

NOTES:

- CABLES 36" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END, 6.0" FROM THE FRONT OF THE CONNECTOR.

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

<p>an INFINITE brand</p> <p>50 High Street, West Mill, 3rd Floor, Suite #30 North Andover, MA 01845, USA Phone: 1.800.341.5266 1.978.682.6936 Fax: 1.978.689.9484 www.L-com.com e-mail: CustomerService@L-com.com</p>	<p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF L-COM GLOBAL CONNECTIVITY. ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> <p>SCALE N/A</p>	<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <table style="width: 100%; border: none;"> <tr> <td style="border: none;">.X = ±.2 [.08]</td> <td style="border: none;">FRACTIONS ± 1/32</td> </tr> <tr> <td style="border: none;">.XX = ±.02 [.51]</td> <td style="border: none;">ANGLES ± 1°</td> </tr> <tr> <td style="border: none;">.XXX = ±.005 [.13]</td> <td style="border: none;"></td> </tr> </table> <p>OVERALL CABLE LENGTH (L) TOLERANCES:</p> <table style="width: 100%; border: none;"> <tr> <td style="border: none;">L ≤ 12 [305] = ±1 [25] / -0</td> </tr> <tr> <td style="border: none;">12 [305] < L ≤ 60 [1524] = +2 [51] / -0</td> </tr> <tr> <td style="border: none;">60 [1524] < L ≤ 120 [3048] = +4 [102] / -0</td> </tr> <tr> <td style="border: none;">120 [3048] < L ≤ 300 [7620] = +6 [152] / -0</td> </tr> <tr> <td style="border: none;">300 [7620] < L = +5%L / -0</td> </tr> </table> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>	.X = ±.2 [.08]	FRACTIONS ± 1/32	.XX = ±.02 [.51]	ANGLES ± 1°	.XXX = ±.005 [.13]		L ≤ 12 [305] = ±1 [25] / -0	12 [305] < L ≤ 60 [1524] = +2 [51] / -0	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0	120 [3048] < L ≤ 300 [7620] = +6 [152] / -0	300 [7620] < L = +5%L / -0
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<p>SIZE A</p> <p>CAGE CODE 43321</p> <p>DRAWN BY DFRSIELLO</p> <p>PART NUMBER LCCA30007</p>	<p>REV A</p>												