

SMA Male to N Female Bulkhead Cable Using 402SS Series Coax with Heavy Duty Boot, 1.0 ft



LCCA30009-FT1

Configuration

- Connector 1: SMA Male
- Connector 2: N Female Bulkhead
- 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 LCCA30009 is an SMA male to N female bulkhead, 1.0 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 SMA to N cable assembly has a male to female gender configuration with 50 ohm flexible 402SS Series coax and operates to 18 GHz. Our RF cable assembly with N bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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		18	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	18		GHz
Insertion Loss (Max.)	0.404	0.524	0.767	1.065		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 $0.03 \cdot \sqrt{\text{FGHz}}$ dB for the SMA Male connector and $0.07 \cdot \sqrt{\text{FGHz}}$ dB for the N Female Bulkhead connector.

Mechanical Specifications

Cable Assembly

Length	12 in [304.8 mm]
Diameter	0.315 in [8 mm]
Weight	0.15 lbs [68.04 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	SMA Male	N Female Bulkhead
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:

LCCA30009 - xx uu



Example: LCCA30009-12 = 12 inches long cable
LCCA30009-100cm = 100 cm long cable

SMA Male to N Female Bulkhead Cable Using 402SS Series Coax with Heavy Duty Boot, 1.0 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		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	10/09/2019
		APPROVED SELLIS

RECOMMENDED
PANEL CUTOUT

.543
.532
[13.79]
[13.51]

Ø .645
.630
[16.38]
[16.00]

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

SMA MALE

402SS SERIES

TYPE N FEMALE
BULKHEAD

LENGTH MEASURED FROM
CONTACT TO FLANGE

2X HEAVY DUTY
SHRINK TUBE

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:

.X = ±.2	[.08]	FRACTIONS
.XX = ±.02	[.01]	± 1/32
.XXX = ±.005	[.13]	ANGLES ± 1°

OVERALL CABLE LENGTH (L) TOLERANCES:

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

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE [CAGE CODE] DRAWN BY PART NUMBER

A 43321 DFRISIELLO LCCA30009

NOTES:

1. 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.

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T.Rw.C