

Fire Rated N Male to N Male Low PIM Cable Using
SPF-500 Coax Using Times Microwave Parts 3 Meters



LCCA31010-M3

Configuration

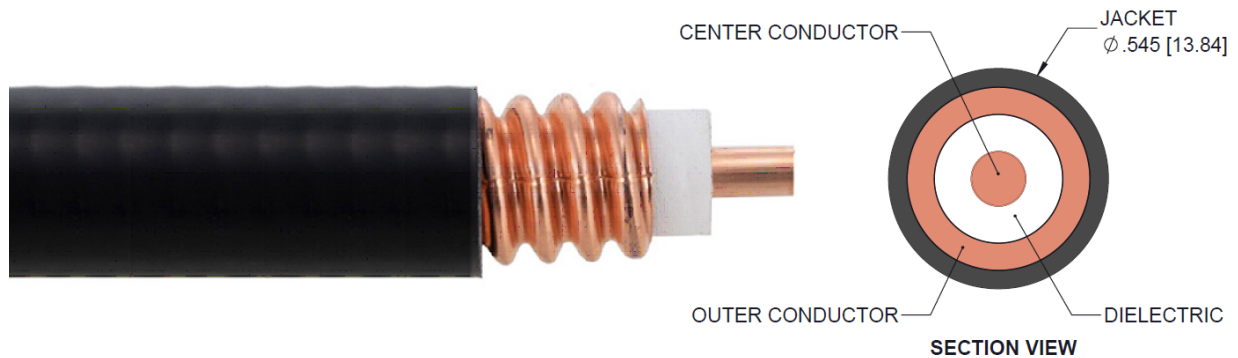
- Connector 1: N Male
- Connector 2: N Male
- Cable Type: SPF-500-LC

Features

- 100% Tested with PIM Test Results Marked on Cable
- Lightweight and Extremely Flexible
- Low Loss with Excellent VSWR
- IP67 (when mated)
- Using Times Microwave Components

Applications

- Distributed Antenna Systems (DAS)
- Multi-Carrier Communication Systems
- PIM Testing



Description

L-com's LCCA31010-M3 is a fire rated N male to N male low PIM cable using SPF-500 coax using Times Microwave parts 3 meters and ships same-day. The SPF-500-LC coax of this N cable uses the foam PE dielectric with a VoP of 83%. These corrugated RF cable assemblies are extremely durable and ideal for high power applications. Our L-com N to N cable assembly has a male to male gender configuration with corrugated SPF-500-LC series coax and operates to 6 GHz. The jacketed copper shield provides reliable durability. With passive intermodulation levels better than -158 dBc, our cable assembly design is ideal where low PIM is desired. Times Microwave cable is used in each assembly and TMS components are used to form connections with the super flexible low PIM cable. These cable assemblies are expertly built to satisfy your specific need with high quality Times Microwave Systems manufactured parts.

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 LCCA31010-M3 L-com Fire Rated N Male to N Male Low PIM Cable Using SPF-500 Coax Using Times Microwave Parts 3 Meters 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		6	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
Passive Intermodulation			-158	dBc
Capacitance		24 [78.74]		pF/ft [pF/m]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	6	GHz
Insertion Loss (Max.)	0.43	0.38	0.55	1.43	1.44	dB

Electrical Specification Notes:

PIM test results vary between cables

The insertion Loss data above is based on the performance specifications of the coax cable used in this assembly. The Insertion Loss includes an estimated insertion loss of $0.1 \cdot \sqrt{F(\text{GHz})}$ dB per connector.

Mechanical Specifications

Cable Assembly

Length* 118.11 in [300 cm]

Cable

Cable Type SPF-500-LC
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper Clad Aluminum
 Dielectric Type Foam PE
 Number of Shields 1
 Shield Layer 1 Helically Corrugated Copper Tube
 Outer Conductor Material and Plating Copper
 Jacket Material FRPE, Black
 Jacket Diameter 0.545 in [13.84 mm]

One Time Minimum Bend Radius 2.25 in [57.15 mm]

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Connectors

Description	Connector 1	Connector 2
Type	N Male	N Male
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	500
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	200 µin	200 µin
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 µin	80 µin
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	80 µin	80 µin
Torque	6 in-lbs 0.68 Nm	6 in-lbs 0.68 Nm

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

Environmental Specification Notes:
CMR (Riser) Fire Rated

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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LCCA31010-M3

How to Order

Part Number Configuration:

LCCA31010 - xx uu



Example: LCCA31010-12 = 12 inches long cable
LCCA31010-100cm = 100 cm long cable

Fire Rated N Male to N Male Low PIM Cable Using SPF-500 Coax Using Times Microwave Parts 3 Meters 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.

L-com CAD Drawing

REVISIONS		DATE	APPROVED
REV.	DESCRIPTION	08/23/2022	AGANWANI
A	INITIAL RELEASE		

LENGTH MEASURED FROM CONTACT TO CONTACT

13/16 HEX

2X HEAT SHRINK

www.L-COM.com
LCCA31010
S/N: XXXXXXXXXX

PIM LEVEL
-zzzdBc
S/N: XXXXXXXXXX

N MALE

SPF-500

N MALE

CONTACT

CONTACT

SEE NOTE 1

SEE NOTE 2

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

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

TOLERANCES:
 .X ± .2 [.08] FRACTIONS ± 1/32
 .XX ± .02 [.51] ANGLES ± 1°
 .XXX ± .005 [.13] 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.

L-com™
an INFINITE brand
 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
 Website: www.L-com.com
 E-mail: CustomerService@L-com.com

SIZE A CAGE CODE 43321 DRAWN BY DZINN ITEM NO. LCCA31010
 REV A

NOTES:

- CABLES 84" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 84" HAVE 2 LABELS, ONE AT EACH END 12" FROM END OF CONNECTOR.
- 6" FROM CABLE END, 1 PLACE, FOR ALL LENGTHS OF CABLE.

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