

Fire Rated N Male to NEX10 Male Low PIM Cable Using SPF-250 Coax Using Times Microwave Parts 2 Feet



## LCCA31000-FT2

### Configuration

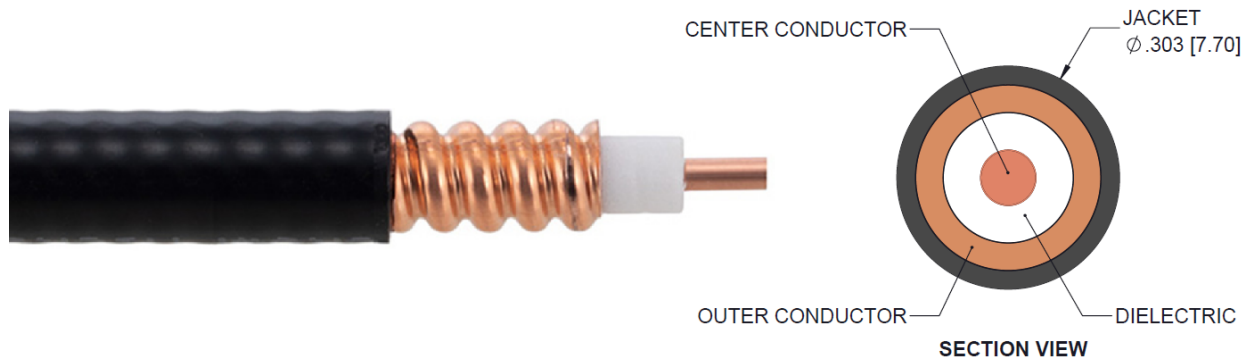
- Connector 1: N Male
- Connector 2: NEX10 Male
- Cable Type: SPF-250-LC

### 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 LCCA31000-FT2 is a fire rated N male to NEX10 male low PIM cable using SPF-250 coax using Times Microwave parts 2 feet and ships same-day. The SPF-250-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 NEX10 cable assembly has a male to male gender configuration with corrugated SPF-250-LC series coax and operates to 5.8 GHz. The jacketed copper shield provides reliable durability. With passive intermodulation levels better than -160 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 LCCA31000-FT2 L-com Fire Rated N Male to NEX10 Male Low PIM Cable Using SPF-250 Coax Using Times Microwave Parts 2 Feet data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

Fire Rated N Male to NEX10 Male Low PIM Cable Using  
SPF-250 Coax Using Times Microwave Parts 2 Feet



## LCCA31000-FT2

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
Passive Intermodulation		-165	-160	dBc
Capacitance		24 [78.74]		pF/ft [pF/m]
Inductance		0.054 [0.18]		uH/ft [uH/m]

### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	0.7	1	2.5	5.8	GHz
Insertion Loss (Max.)	0.22	0.27	0.33	0.53	0.82	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\*SQRT (FGHz) dB per connector.

### Mechanical Specifications

#### Cable Assembly

Length\* 24 in [609.6 mm]

Weight 0.16 lbs [72.57 g]

#### Cable

Cable Type SPF-250-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 0.303 in [7.7 mm]

Fire Rated N Male to NEX10 Male Low PIM Cable Using  
SPF-250 Coax Using Times Microwave Parts 2 Feet



## LCCA31000-FT2

One Time Minimum Bend Radius 1.25 in [31.75 mm]  
Bending Moment 0.5 lbs-ft [0.68 N-m]

### Connectors

Description	Connector 1	Connector 2
Type	N Male	NEX10 Male
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	500
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	200 µin	100 µin
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 µin	100 µin
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	80 µin	100 µin
Torque	9.74 in-lbs 1.1 Nm	13.28 in-lbs 1.5 Nm

### Environmental Specifications

#### Temperature

Operating Range -55 to +200 deg C  
Storage Range -55 to +200 deg C

Environmental Specification Notes:  
CMR (Riser) Fire Rated

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

### Plotted and Other Data

Notes:

- Values at 25°C, sea level.

Fire Rated N Male to NEX10 Male Low PIM Cable Using SPF-250 Coax Using Times Microwave Parts 2 Feet



**LCCA31000-FT2**

**How to Order**

Part Number Configuration:

**LCCA31000 - xx uu**



Example: LCCA31000-12 = 12 inches long cable  
LCCA31000-100cm = 100 cm long cable

Fire Rated N Male to NEX10 Male Low PIM Cable Using SPF-250 Coax Using Times Microwave Parts 2 Feet 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		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	08/19/2022
		APPROVED AGANWANI

LENGTH MEASURED FROM CONTACT TO CONTACT

11 mm HEX

NEX10 MALE

CONTACT

13/16 HEX

2X HEAT SHRINK

N MALE

SPF-250

www.L-COM.com  
LCCA31000  
S/N: XXXXXXXXX

PIM LEVEL  
 $10^{-27}$  dB  
S/N: XXXXXXXXX

SEE NOTE 2

SEE NOTE 1

CONTACT

THIRD-ANGLE PROJECTION

THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF L-COM GLOBAL CONNECTIVITY. ALL RIGHTS RESERVED.

SHEET 1 OF 1

SCALE N/A

REV A

**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

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

TOLERANCES:

.X ± .2 [5.08]	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 ≤ ∞	± 9% [L] / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE A CAGE CODE LCCA31000

ITEM NO. LCCA31000

DRAWN BY DZINN

- 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.
- 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.