

Fire Rated Low PIM 7/16 DIN Male to RA N Male Cable
SPF-250 Coax Using Times Microwave Parts 1 Meter



LCCA31001-M1

Configuration

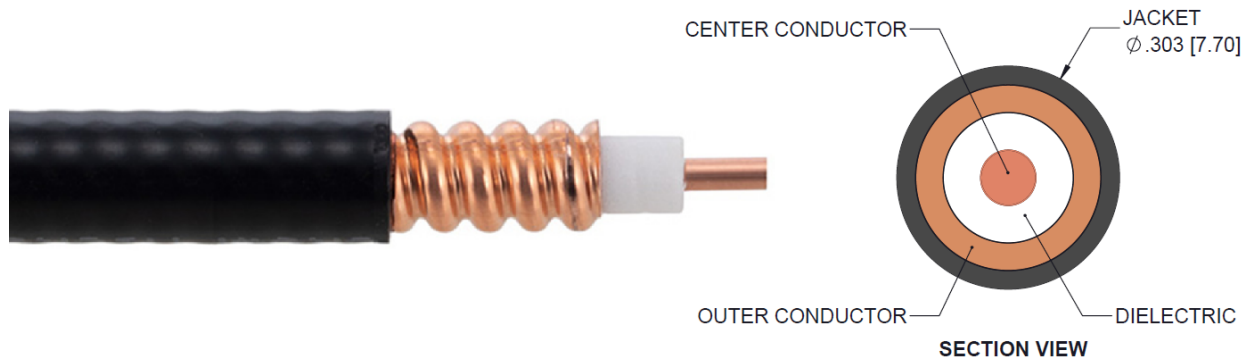
- Connector 1: N Male Right Angle
- Connector 2: 7/16 DIN Male
- Cable Type: SPF-250-LC

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 LCCA31001-M1 is a fire rated low PIM 7/16 DIN male to RA N male cable SPF-250 coax using Times Microwave parts 1 meter 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 7/16 DIN 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. This right angle N cable interface on the SPF-250-LC coax allows for easier connections in tight spaces. 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 LCCA31001-M1 L-com Fire Rated Low PIM 7/16 DIN Male to RA N Male Cable SPF-250 Coax Using Times Microwave Parts 1 Meter 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 | | 5.8 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 83 | | % |
| Passive Intermodulation | | | -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 | 0.25 | 0.5 | 1 | 2.5 | 5.8 | GHz |
| Insertion Loss (Max.) | 0.21 | 0.28 | 0.41 | 0.66 | 1.03 | 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* 39.37 in [100 cm]

Weight 0.3155 lbs [143.11 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

Outer Conductor Material and Plating Copper

Jacket Material FRPE, Black

Jacket Diameter 0.303 in [7.7 mm]

One Time Minimum Bend Radius 1.25 in [31.75 mm]

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Bending Moment

0.5 lbs-ft [0.68 N-m]

Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------------|--------------------|---------------------|
| Type | N Male Right Angle | 7/16 DIN Male |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Brass, Silver | Brass, Silver |
| Contact Plating Specification | 200 µin | 196 µin |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Plating Specification | 80 µin | 118 µin |
| Coupling Nut Material and Plating | Brass, Tri-Metal | Brass, Nickel |
| Coupling Nut Plating Specification | 80 µin | 118 µin |
| Torque | 9.74 in-lbs 1.1 Nm | 13.28 in-lbs 1.5 Nm |

Environmental Specifications

Temperature

Operating Range

-40 to +85 deg C

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

Plotted and Other Data

Notes:

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LCCA31001-M1

How to Order

Part Number Configuration:

LCCA31001

- **xx**

uu

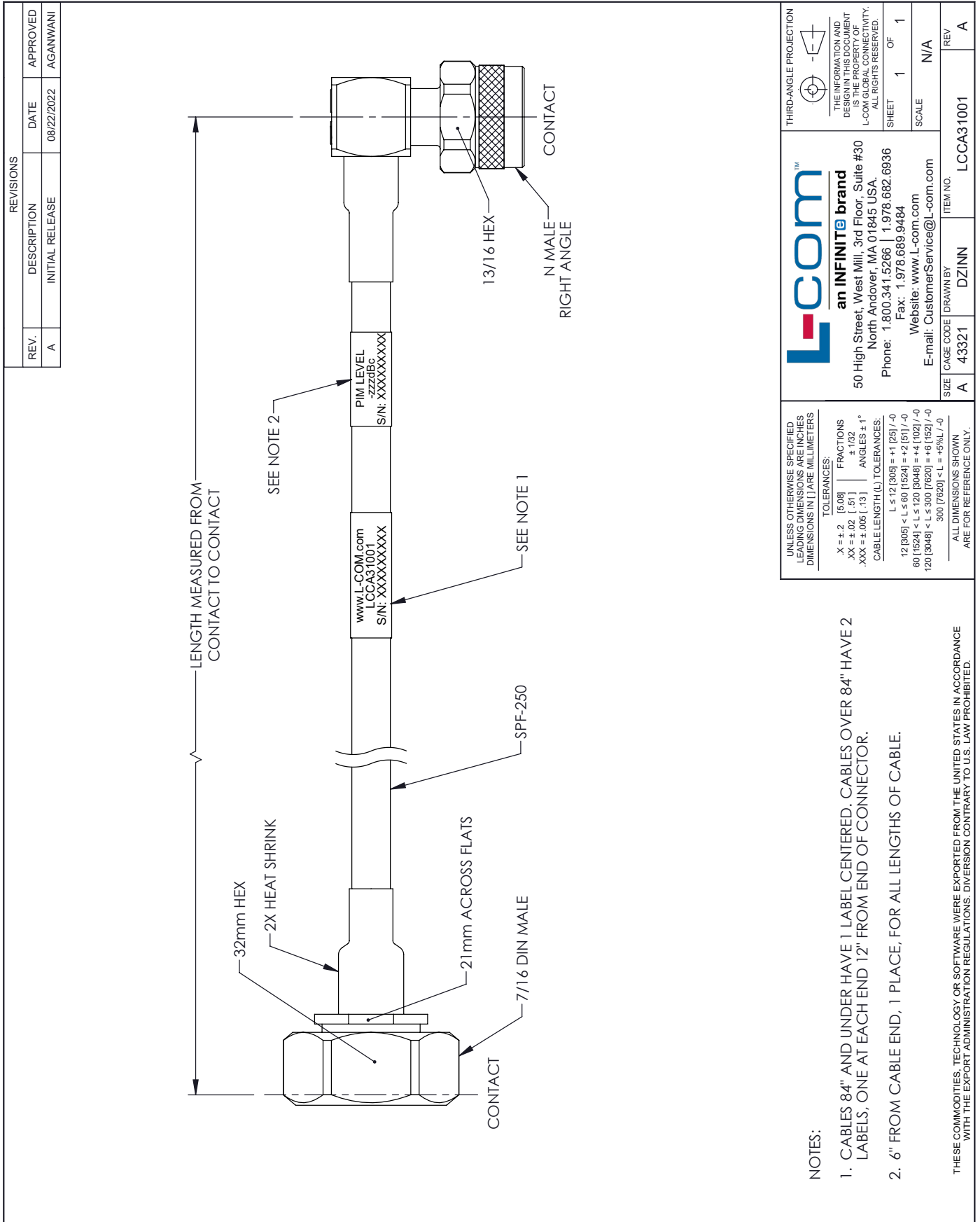
Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: LCCA31001-12 = 12 inches long cable
LCCA31001-100cm = 100 cm long cable

Fire Rated Low PIM 7/16 DIN Male to RA N Male Cable SPF-250 Coax Using Times Microwave Parts 1 Meter 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 implement 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 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 implement 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 | APPROVED |
| A | INITIAL RELEASE | 08/22/2022 | AGANWANI |

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1
 SCALE N/A

| | | | |
|------|-----------|----------|-----------|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. |
| A | 43321 | DZINN | LCCA31001 |

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

TOLERANCES:

| | | |
|-------------|--------|-------------|
| .X ± .2 | [5.08] | FRACTIONS |
| .XX ± .02 | [.51] | ± 1/32 |
| .XXX ± .005 | [.13] | ANGLES ± 1° |

CABLE LENGTH (L) TOLERANCES:

| | |
|-----------------------------|----------------|
| L ≤ 12 [305] | ± 1 [25] / -0 |
| 12 [305] < L ≤ 60 [1524] | ± 2 [61] / -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.

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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