

Plenum N Male to N Male Low PIM Cable Using SPP-250-LLPL Coax Using Times Microwave Parts 5 Feet



LCCA31027-FT5

Configuration

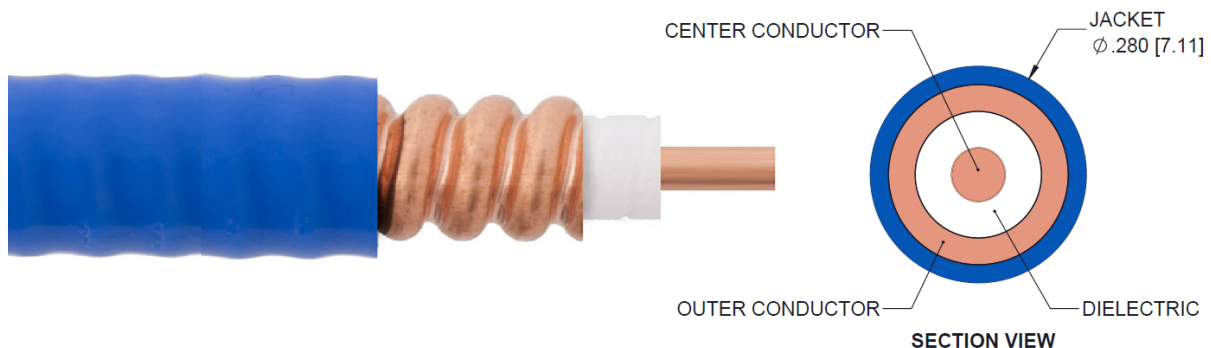
- Connector 1: N Male
- Connector 2: N Male
- Cable Type: SPP-250-LLPL

Features

- 100% Tested with PIM Test Results Marked on Cable
- UL910 Plenum Rated Cable
- Lightweight and Extremely Flexible
- Low Loss with Excellent VSWR
- IP67 (when mated)
- Using Times Microwave Components

Applications

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



Description

L-com's LCCA31027-FT5 is a plenum N male to N male low PIM cable using SPP-250-LLPL coax using Times Microwave parts 5 feet and ships same-day. The SPP-250-LLPL coax of this N cable uses the PTFE dielectric with a VoP of 76%. 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 SPP-250-LLPL series coax and operates to 5.8 GHz. The jacketed copper shield provides reliable durability and excellent shielding effectiveness greater than 100dB. 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 LCCA31027-FT5 L-com Plenum N Male to N Male Low PIM Cable Using SPP-250-LLPL Coax Using Times Microwave Parts 5 Feet data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

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LCCA31027-FT5

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------------|---------|--------------|---------|-----------------------|
| Frequency Range | DC | | 5.8 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 76 | | % |
| RF Shielding | 100 | | | dB |
| Passive Intermodulation | | -165 | -160 | dBc |
| Capacitance | | 27 [88.58] | | pF/ft [pF/m] |
| Inductance | | 0.067 [0.22] | | uH/ft [uH/m] |
| DC Resistance Inner Conductor | | 3 [9.84] | | Ohms/1000ft [Ohms/Km] |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|-----|------|------|-------|
| Frequency | 0.45 | 0.7 | 1 | 2.5 | 5.8 | GHz |
| Insertion Loss (Max.) | 0.34 | 0.42 | 0.5 | 0.84 | 1.32 | dB |

Electrical Specification Notes:

PIM test results vary between cables

The Insertion Loss data above is based on the performance specifications of the coax 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* | 60 in [152.4 cm] |
| Weight | 0.23 lbs [104.33 g] |

Cable

| | |
|--------------------------------------|----------------------------------|
| Cable Type | SPP-250-LLPL |
| Impedance | 50 Ohms |
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Copper |
| Dielectric Type | PTFE |
| Number of Shields | 1 |
| Shield Layer 1 | Helically Corrugated Copper Tube |
| Outer Conductor Material and Plating | Copper |

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| | |
|------------------------------|-----------------------|
| Outer Conductor Diameter | 0.25 in [6.35 mm] |
| Jacket Material | FEP, Blue |
| Jacket Diameter | 0.28 in [7.11 mm] |
| One Time Minimum Bend Radius | 1.25 in [31.75 mm] |
| Bending Moment | 0.8 lbs-ft [1.08 N-m] |

Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------------|-------------------------|-------------------------|
| Type | N Male | N Male |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Phosphor Bronze, Silver | Phosphor Bronze, Silver |
| Contact Plating Specification | 196 µin | 196 µin |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Plating Specification | 118 µin | 118 µin |
| Coupling Nut Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Coupling Nut Plating Specification | 118 µin | 118 µin |
| Torque | 9.74 in-lbs 1.1 Nm | 9.74 in-lbs 1.1 Nm |

Environmental Specifications

Temperature

| | |
|-----------------|-------------------|
| Operating Range | -55 to +200 deg C |
| Storage Range | -55 to +200 deg C |
| Plenum Rating | UL910 |

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

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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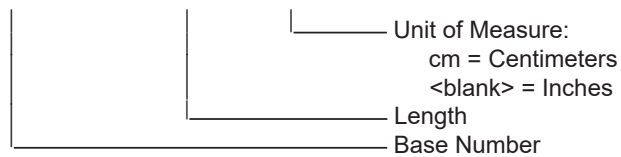


LCCA31027-FT5

How to Order

Part Number Configuration:

LCCA31027 - xx uu



Example: LCCA31027-12 = 12 inches long cable
LCCA31027-100cm = 100 cm long cable

Plenum N Male to N Male Low PIM Cable Using SPP-250-LLPL Coax Using Times Microwave Parts 5 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 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 |
| A | INITIAL RELEASE | 04/09/19 |
| | | APPROVED S. ELLIS |

LENGTH MEASURED FROM CONTACT TO CONTACT

13/16 HEX

2X HEAT SHRINK

www.L-COM.com
LCCA31027
SIN: XXXXXXXXXX

PIM LEVEL
12 [3005]
SIN: XXXXXXXXXX

N MALE

SPP-250-LLPL

CONTACT

CONTACT

SEE NOTE 1

SEE NOTE 2

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.

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 [3005] | ± 1 [25] / -0 |
| 12 [3005] < 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.

| | | |
|--|---|--------------------------------------|
| 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 | THIRD-ANGLE PROJECTION - [Symbol] |
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| SHEET 1 OF 1 | SCALE N/A | REV A |
| SIZE A | CAGE CODE 43321 | ITEM NO. LCCA31027 |
| DRAWN BY DZINN | | |

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