

## Plenum 4.3-10 Male to NEX10 Male Low PIM Cable Using SPP-250-LLPL Coax Using Times Microwave Parts 3 Meter



### LCCA31039-M3

#### Configuration

- Connector 1: 4.3-10 Male TC-250-4310M-LP
- Connector 2: NEX10 Male TC-250-NX10M-LP
- Cable Type: SPP-250-LLPL
- Coax Flex Type: Corrugated

#### 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 LCCA31039-M3 is a plenum 4.3-10 male to NEX10 male low PIM cable using SPP-250-LLPL coax using Times Microwave parts 3 meter and ships same-day. The SPP-250-LLPL coax of this 4.3-10 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 4.3-10 to NEX10 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 4.3-10 male to NEX10 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 LCCA31039-M3 L-com Plenum 4.3-10 Male to NEX10 Male Low PIM Cable Using SPP-250-LLPL Coax Using Times Microwave Parts 3 Meter data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

#### 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   |
| IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz |         |         |         |       |

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**Electrical Specifications**

| Description                   | Minimum | Typical      | Maximum | Units                 |
|-------------------------------|---------|--------------|---------|-----------------------|
| 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.) | 0.51 | 0.64 | 0.77 | 1.25 | 1.94 | 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  $0.1 * \text{SQRT}(F\text{GHz})$  dB per connector.

**Mechanical Specifications**

**Cable Assembly**

|                |                      |
|----------------|----------------------|
| Length         | 118.11 in [300 cm]   |
| Width/Diameter | 0.5 in [12.7 mm]     |
| Weight         | 0.847 lbs [384.19 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 1 Material and Plating | Copper                           |
| 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]            |

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### Connectors

| Description                        | Connector 1             | Connector 2         |
|------------------------------------|-------------------------|---------------------|
| Type                               | 4.3-10 Male             | NEX10 Male          |
| Impedance                          | 50 Ohms                 | 50 Ohms             |
| Configuration                      | Straight                | Straight            |
| Mating Cycles                      |                         | 500                 |
| Contact Material and Plating       | Phosphor Bronze, Silver | Brass, Silver       |
| Contact Plating Specification      | 200 $\mu$ in            | 100 $\mu$ in        |
| Dielectric Type                    | PTFE                    | PTFE                |
| Body Material and Plating          | Brass, Tri-Metal        | Brass, Tri-Metal    |
| Body Plating Specification         | 80 $\mu$ in             | 100 $\mu$ in        |
| Coupling Nut Material and Plating  | Brass, Tri-Metal        | Brass, Tri-Metal    |
| Coupling Nut Plating Specification | 80 $\mu$ in             | 100 $\mu$ in        |
| Torque                             | 44.25 in-lbs 5 Nm       | 13.28 in-lbs 1.5 Nm |

### Environmental Specifications

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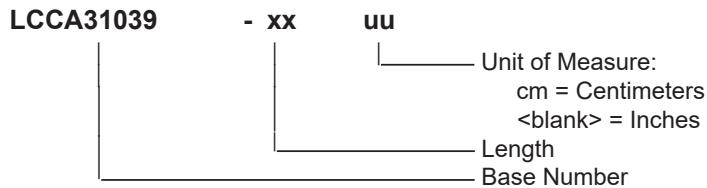


## LCCA31039-M3

### Typical Performance Data

### How to Order

Part Number Configuration:



Example: LCCA31039-12 = 12 inches long cable  
LCCA31039-100cm = 100 cm long cable

Plenum 4.3-10 Male to NEX10 Male Low PIM Cable Using SPP-250-LLPL Coax Using Times Microwave Parts 3 Meter from L-com has same day shipment for domestic and International orders. 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.

URL: <https://www.l-com.com/4.3-10-male-nex10-male-cable-assembly-lcca31039-M3-p.aspx>

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.

# LCCA31039-M3 CAD Drawing

Plenum 4.3-10 Male to NEX10 Male Low PIM Cable Using SPP-250-LLPL Coax Using Times Microwave Parts 3 Meter

