

Plenum N Male to N Female Bulkhead Low PIM Cable Using SPP-250-LLPL Coax Using Times Microwave Parts 1 Meter



## LCCA31047-M1

### Configuration

- Connector 1: N Male
- Connector 2: N Female Bulkhead
- 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 LCCA31047-M1 is a plenum N male to N female bulkhead low PIM cable using SPP-250-LLPL coax using Times Microwave parts 1 meter 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 female 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. L-com's RF cable assembly with N bulkhead interface enables system designers to have external connections on their product enclosures or to be used for other rack mount and panel mount applications. 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 female 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 LCCA31047-M1 L-com Plenum N Male to N Female Bulkhead Low PIM Cable Using SPP-250-LLPL 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		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.)	0.3	0.35	0.39	0.57	0.84	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 for the male connector and 0.1 for the female connector.

### Mechanical Specifications

#### Cable Assembly

Length	39.3701 in [100 cm]
Diameter	0.5 in [12.7 mm]
Weight	0.4 lbs [181.44 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 Female Bulkhead
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Phosphor Bronze, Silver	Phosphor Bronze, Silver
Contact Plating Specification	196 $\mu$ in	196 $\mu$ in
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Tri-Metal
Outer Conductor Plating Specification		118 $\mu$ in
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	118 $\mu$ in	118 $\mu$ in
Coupling Nut Material and Plating	Brass, Tri-Metal	
Coupling Nut Plating Specification	118 $\mu$ in	
Torque	9.74 in-lbs 1.1 Nm	10 in-lbs 1.13 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.

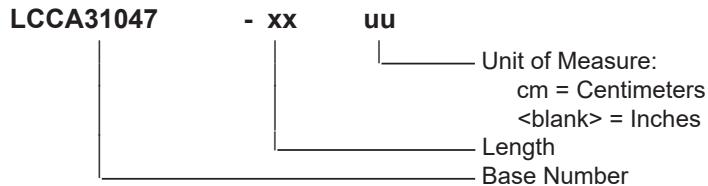
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**How to Order**

Part Number Configuration:



Example: LCCA31047-12 = 12 inches long cable  
LCCA31047-100cm = 100 cm long cable

Plenum N Male to N Female Bulkhead Low PIM Cable Using SPP-250-LLPL 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.

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**L-com CAD Drawing**

