

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



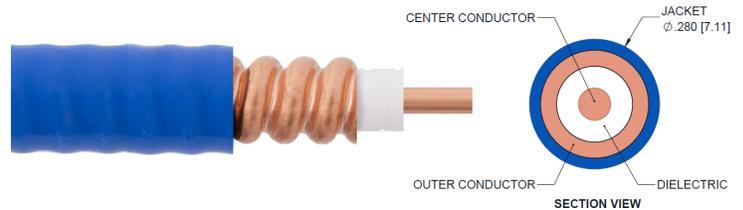
LCCA31048-FT3

Configuration

- Connector 1: 4.3-10 Male TC-250-4310M-LP
- Connector 2: 4.3-10 Female TC-250-4310F-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 LCCA31048-FT3 is a plenum 4.3-10 male to 4.3-10 female low PIM cable using SPP-250-LLPL coax using Times Microwave parts 3 foot 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 4.3-10 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. 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 4.3-10 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 LCCA31048-FT3 L-com Plenum 4.3-10 Male to 4.3-10 Female Low PIM Cable Using SPP-250-LLPL Coax Using Times Microwave Parts 3 Foot 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 | | | | |

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



LCCA31048-FT3

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.) | 0.26 | 0.33 | 0.38 | 0.61 | 0.95 | 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 $0.1 \cdot \sqrt{\text{FGHz}}$ dB per connector.

Mechanical Specifications

Cable Assembly

| | |
|----------------|---------------------|
| Length | 36 in [914.4 mm] |
| Width/Diameter | 0.5 in [12.7 mm] |
| Weight | 0.44 lbs [199.58 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] |

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



LCCA31048-FT3

Connectors

| Description | Connector 1 | Connector 2 |
|---------------------------------------|-------------------------|-------------------------|
| Type | 4.3-10 Male | 4.3-10 Female |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Straight |
| Contact Material and Plating | Phosphor Bronze, Silver | Phosphor Bronze, Silver |
| Contact Plating Specification | 200μ in | 200μ in |
| Dielectric Type | PTFE | PTFE |
| Outer Conductor Material and Plating | | Brass, Tri-Metal |
| Outer Conductor Plating Specification | | 80μ in |
| Body Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Plating Specification | 80μ in | 80μ in |
| Coupling Nut Material and Plating | Brass, Tri-Metal | |
| Coupling Nut Plating Specification | 80μ in | |
| Torque | 44.25 in-lbs 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.

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



LCCA31048-FT3

Typical Performance Data

How to Order

Part Number Configuration:

LCCA31048

- **xx**

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: LCCA31048-12 = 12 inches long cable
LCCA31048-100cm = 100 cm long cable

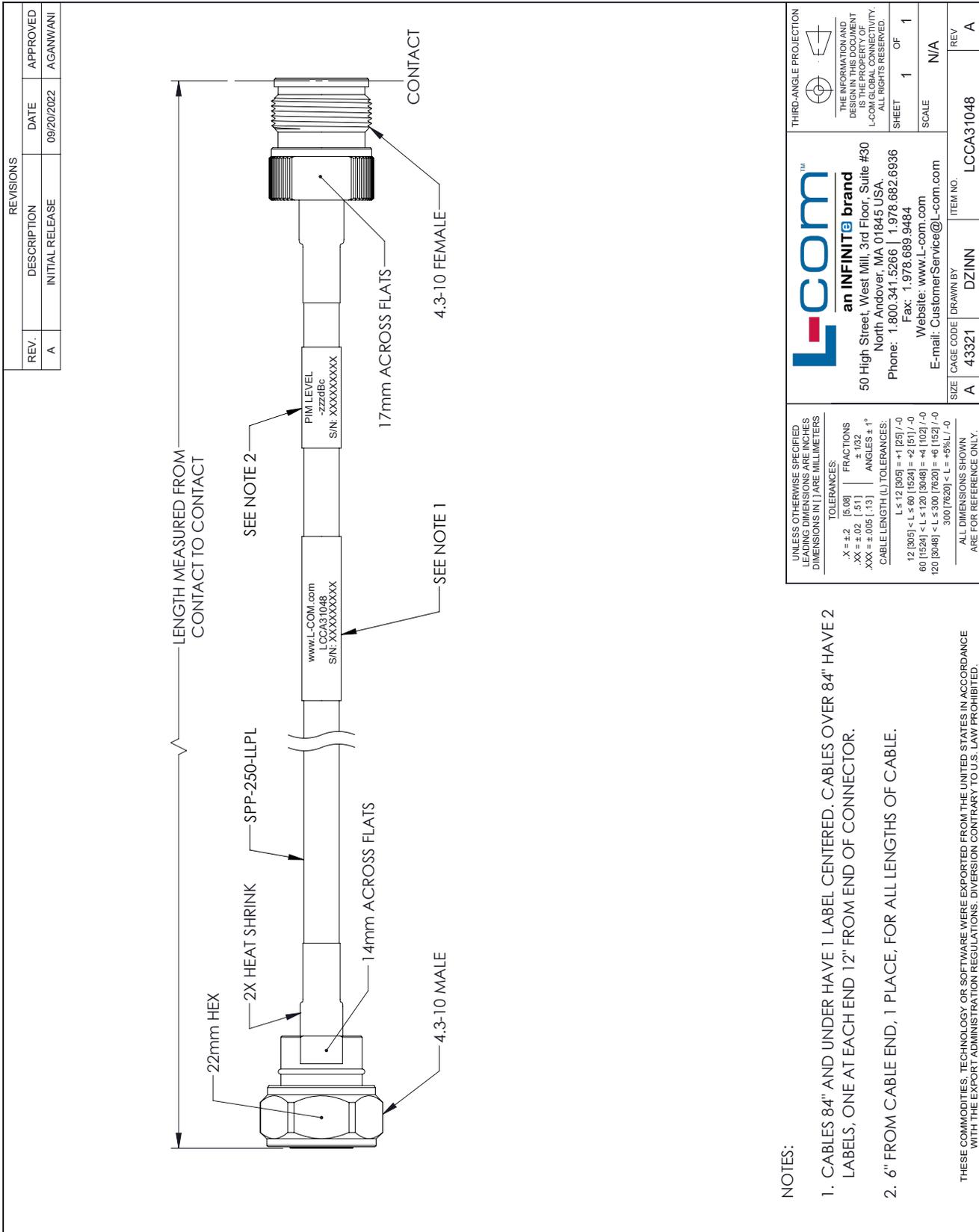
Plenum 4.3-10 Male to 4.3-10 Female Low PIM Cable Using SPP-250-LLPL Coax Using Times Microwave Parts 3 Foot from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge 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-4.3-10-female-cable-lcca31048-FT3-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.

LCCA31048-FT3 CAD Drawing

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



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.

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

TOLERANCES:
.X = ±.2 [5.08] | FRACTIONS ±.132
.XX = ±.02 [5.1] | 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 = +5%L / -0

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION



THE INFORMATION AND
DESIGN REPRESENTED
HEREIN IS THE PROPERTY
OF L-COM GLOBAL CONNECTIVITY.
ALL RIGHTS RESERVED.

SHEET 1 OF 1

SCALE N/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

SIZE A | CAGE CODE 43321 | DRAWN BY DZINN | ITEM NO. LCCA31048
REV A

T-Rev/D