

Outdoor Rated SMA Male to SMA Male Cable Low PIM
Using SPO-250 Coax Using Times Microwave Parts 1 Foot



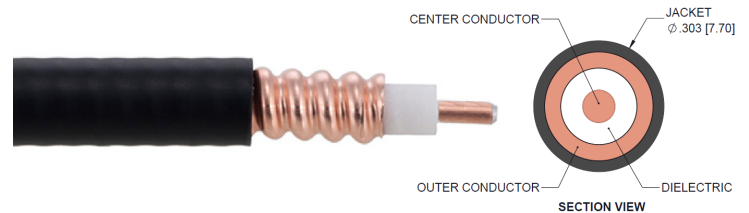
LCCA31016-FT1

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: SPO-250-LC
- Coax Flex Type: Corrugated

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 LCCA31016-FT1 is an outdoor rated SMA male to SMA male cable low PIM using SPO-250 coax using Times Microwave parts 1 foot and ships same-day. The SPO-250-LC coax of this SMA 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 SMA to SMA cable assembly has a male to male gender configuration with corrugated SPO-250-LC series coax and operates to 5.8 GHz. The jacketed copper shield provides reliable durability. With passive intermodulation levels better than -155 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 SMA male to SMA 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 LCCA31016-FT1 L-com Outdoor Rated SMA Male to SMA Male Cable Low PIM Using SPO-250 Coax Using Times Microwave Parts 1 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		83		%
Passive Intermodulation IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz			-155	dBc
Capacitance		24 [78.74]		pF/ft [pF/m]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Inductance		0.054 [0.18]		uH/ft [uH/m]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	0.7	1	2.5	5.8	GHz
Insertion Loss (Max.)	0.18	0.22	0.26	0.42	0.65	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 $0.1 \cdot \sqrt{FGHz}$ dB per connector.

Mechanical Specifications

Cable Assembly

Length	12 in [304.8 mm]
Width/Diameter	0.63 in [16 mm]
Weight	0.048 lbs [21.77 g]

Cable

Cable Type	SPO-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 1 Material and Plating	Copper
Jacket Material	PE, Black
Jacket Diameter	0.303 in [7.7 mm]
One Time Minimum Bend Radius	1.25 in [31.75 mm]
Bending Moment	0.5 lbs-ft [0.68 N-m]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	500
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	200µin	200µin
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 µin	80 µin
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	80 µin	80 µin
Torque	9.74 in-lbs 1.1 Nm	9.74 in-lbs 1.1 Nm

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

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LCCA31016-FT1

Typical Performance Data

How to Order

Part Number Configuration:

LCCA31016

- xx

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

Example: LCCA31016-12 = 12 inches long cable
LCCA31016-100cm = 100 cm long cable

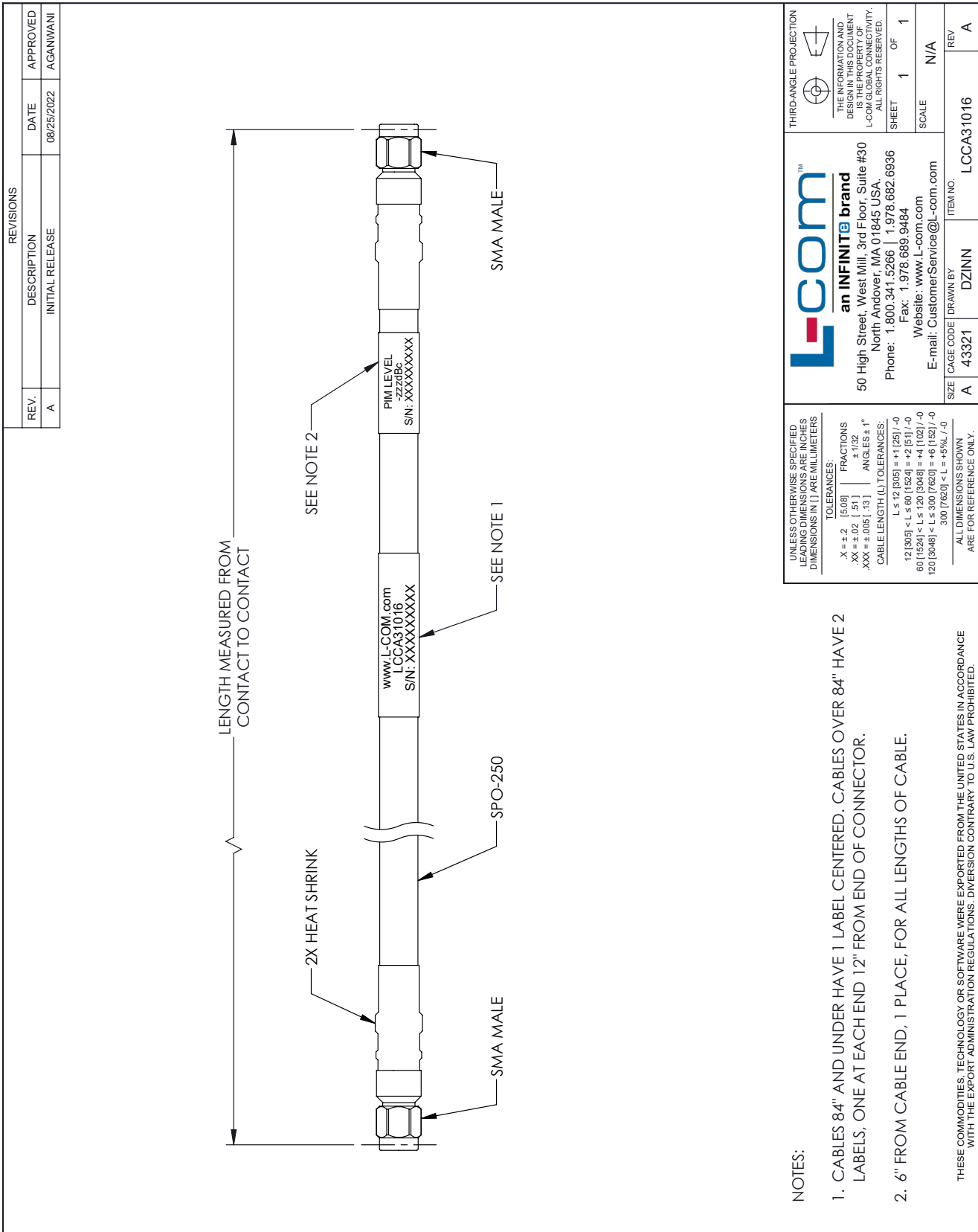
Outdoor Rated SMA Male to SMA Male Cable Low PIM Using SPO-250 Coax Using Times Microwave Parts 1 Foot from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

URL: <https://www.l-com.com/sma-male-sma-male-cable-assembly-spo250-lcca31016-ft1-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 impliment 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.

LCCA31016-FT1 CAD Drawing

Outdoor Rated SMA Male to SMA Male Cable Low PIM Using SPO-250 Coax Using Times Microwave Parts 1 Foot



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	08/25/2022	AGANIWANI

L-com
an INFINITE brand

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THIRD-ANGLE PROJECTION

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

TOLERANCES:
X = ±.2 [5.08] FRACTIONS ±.005 [0.127] ANGLES ± 1°
.XX = ±.02 [0.51] ±.001 [0.025] ANGLES ± 1°
XXX = ±.005 [0.127] ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:
L ≤ 12 [305] = ±1 [25] / -0
12 [305] < L ≤ 60 [1524] = ±4 [102] / -0
60 [1524] < L ≤ 120 [3048] = ±6 [152] / -0
120 [3048] < L ≤ 300 [7620] = ±6 [152] / -0
300 [7620] < L = +5%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SHEET 1 OF 1

ITEM NO. LCCA31016

REV. A

CAGE CODE 43321

DRAWN BY DZINN

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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