

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



## LCCA31016-M1

### Configuration

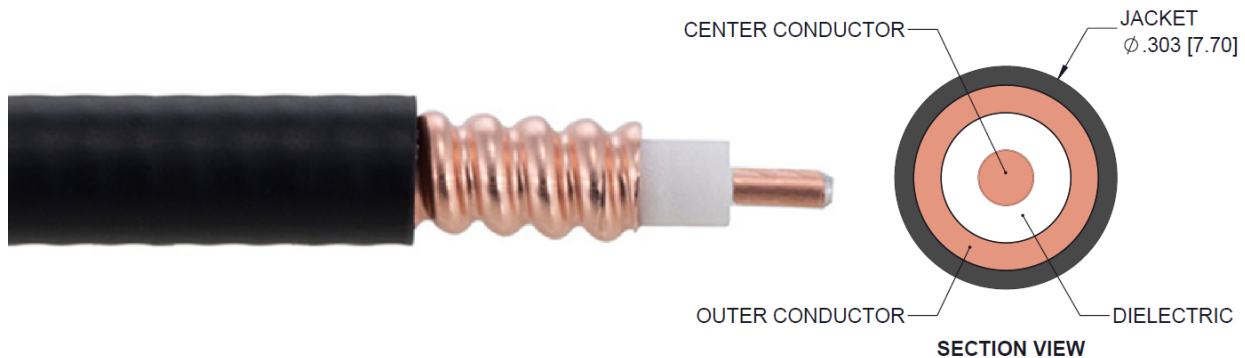
- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: SPO-250-LC

### 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-M1 is an outdoor rated SMA male to SMA male cable low PIM using SPO-250 coax using Times Microwave parts 1 meter 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-M1 L-com Outdoor Rated SMA Male to SMA Male Cable Low PIM Using SPO-250 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		83		%
Passive Intermodulation			-155	dBc
Capacitance		24 [78.74]		pF/ft [pF/m]
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.)	0.27	0.34	0.4	0.66	1.03	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\* 39.3701 in [100 cm]

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 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]

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Bending Moment

0.5 lbs-ft [0.68 N-m]

### Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male
Impedance	50 Ohms	50 Ohms
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

#### Temperature

Operating Range

-40 to +85 deg C

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

### Plotted and Other Data

Notes:

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**LCCA31016-M1**

**How to Order**

Part Number Configuration:

**LCCA31016 - xx uu**



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 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 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.ontained 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.

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L-com CAD Drawing

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

LENGTH MEASURED FROM CONTACT TO CONTACT

2X HEAT SHRINK

SMA MALE

SPO-250

www.L-COM.com  
LCCA31016  
S/N: XXXXXXXXXX

PIM LEVEL  
-zzdBc  
S/N: XXXXXXXXXX

SMA MALE

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 ±1/32
.XX = ±.02 [.51]	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

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SHEET 1 OF 1

SCALE N/A

REV A

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SIZE A