

Fire Rated 7/16 DIN Male to 7/16 DIN Male Low PIM Cable Using SPF-250 Coax Using Times Microwave Parts 1 Meter



## LCCA31005-M1

### Configuration

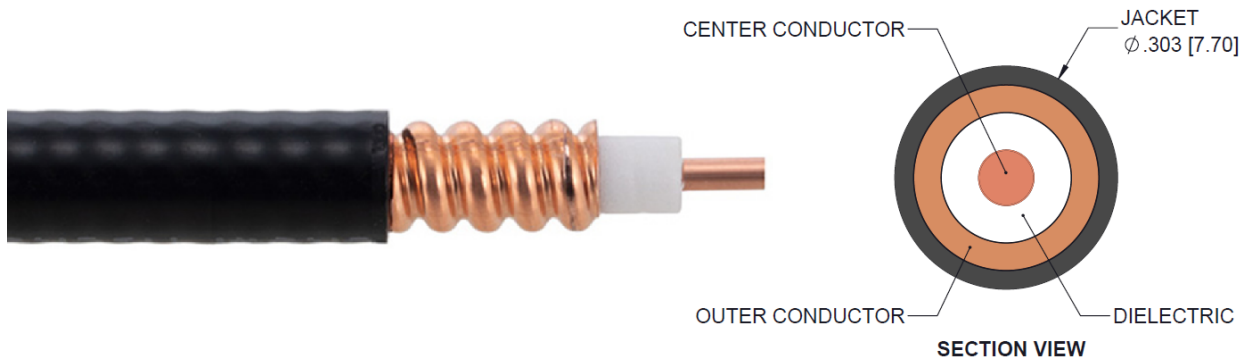
- Connector 1: 7/16 DIN Male
- Connector 2: 7/16 DIN Male
- Cable Type: SPF-250-LC

### 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 LCCA31005-M1 is a fire rated 7/16 DIN male to 7/16 DIN male low PIM cable using SPF-250 coax using Times Microwave parts 1 meter and ships same-day. The SPF-250-LC coax of this 7/16 DIN 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 7/16 DIN to 7/16 DIN cable assembly has a male to male gender configuration with corrugated SPF-250-LC series coax and operates to 5.8 GHz. The jacketed copper shield provides reliable durability. 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 7/16 DIN male to 7/16 DIN 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 LCCA31005-M1 L-com Fire Rated 7/16 DIN Male to 7/16 DIN Male Low PIM Cable Using SPF-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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**LCCA31005-M1**

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
Passive Intermodulation		-165	-160	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	0.33	0.41	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 cable used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1\*SQRT (FGHz) dB per connector

**Mechanical Specifications**

**Cable Assembly**

Length\* 39.37 in [100 cm]  
Weight 0.41 lbs [185.97 g]

**Cable**

Cable Type SPF-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  
Shield Layer 1 Helically Corrugated Copper Tube  
Outer Conductor Material and Plating Copper  
Jacket Material FRPE, Black  
Jacket Diameter 0.303 in [7.7 mm]

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One Time Minimum Bend Radius 1.25 in [31.75 mm]  
Bending Moment 0.5 lbs-ft [0.68 N-m]

### Connectors

Description	Connector 1	Connector 2
Type	7/16 DIN Male	7/16 DIN Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	200 µin	200 µin
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, Nickel	Brass, Nickel
Coupling Nut Plating Specification	80 µin	80 µin
Torque	22.127 ft-lbs 30 Nm	22.127 ft-lbs 30 Nm

### Environmental Specifications

#### Temperature

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

Environmental Specification Notes:  
CMR (Riser) Fire Rated

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

### Plotted and Other Data

Notes:

- Values at 25°C, sea level.

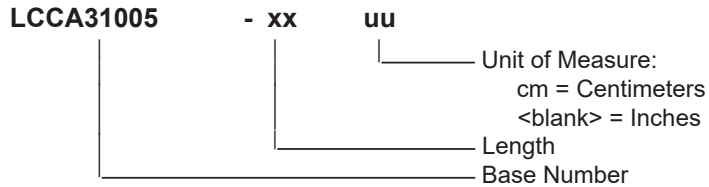
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**LCCA31005-M1**

**How to Order**

Part Number Configuration:



Example: LCCA31005-12 = 12 inches long cable  
LCCA31005-100cm = 100 cm long cable

Fire Rated 7/16 DIN Male to 7/16 DIN Male Low PIM Cable Using SPF-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		DATE	APPROVED
REV.	DESCRIPTION		
A	INITIAL RELEASE	08/23/2022	AGANWANI

LENGTH MEASURED FROM CONTACT TO CONTACT

7/16 DIN MALE CONTACT

7/16 DIN MALE CONTACT

32mm HEX

2X HEAT SHRINK

21mm ACROSS FLATS

SPF-250

www.L-COM.com  
LCCA31005  
S/N: XXXXXXXXXXXX

PIM LEVEL  
-zzzdBc  
S/N: XXXXXXXXXXXX

SEE NOTE 2

SEE NOTE 1

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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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

REV

LCCA31005

ITEM NO.

DRAWN BY DZINN

CAGE CODE A 43321

SIZE A

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 [61] / -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.