Low Loss N Male Right Angle to N Male Weatherproof Cable Assembly with Silicone using SPO-250 Coax with Times Microwave Components

LCCA31017/WP

Configuration

- Connector 1: N Male Right Angle
- Connector 2: N Male
- Cable Type: SPO-250
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Low PIM: -160 dBc Max
- 83% Phase Velocity
- PE Jacket
- Silicone Connector Boot
- IP68 Rated

Description

The L-com LCCA31017/WP is a weatherproof low loss cable assembly that comes with type N male connection with weatherproof boot on one end and type N male with weatherproof boot on the other. L-com's RF coaxial cable assembly products are designed for typical use, production, laboratory test and measurement, defense/military, aerial antenna towers, etc. The low loss cable has a 50 Ohm impedance and is specifically ready for quicker shipment than most in the industry can provide.

This weatherproof low loss RF cable assembly operates at a maximum frequency of 6 GHz. Our RF cable assembly has a PE jacket with 0.303 inches diameter. The type N male to type N male cable assembly LCCA31017/WP is built with SPO-250 coax, which has a flexible design. This RF cable assembly with 0.5 inches diameter has copper clad aluminum as cable's inner conducting material and foam PE dielectric type. The weatherproof boot low loss cable can operate at a temperature range of -40 to 85 degrees C. Additional dimensions, specifications, and CAD drawings for this LCCA31017/WP low loss RF cable are available on our downloadable PDF datasheet.

L-com stocks a wide selection of weatherproof low loss cable assemblies that ship the same business day as ordered from our warehouse. Make your online purchase right now to take advantage of our same-day shipping. For further information on similar products, our expert technical support and knowledgeable sales team can help you get the ideal type N male to type N male cable assembly as per your requirements.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
Passive Intermodulation IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz			-160	dBc
Capacitance		24 [78.74]		pF/ft [pF/m]
Inductance		0.054 [0.18]		uH/ft [uH/m]

Specifications by Frequency

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LCCA31017/WP

Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
		Frequency	500	1000	2500	6000	MHz	
LCCA31017/WP	Custom Lengths Available	Insertion Loss (Typ.)	0.028	0.041	0.068	0.108	dB/ft	
			0.1	0.14	0.23	0.36	dB/m	
LCCA31017/WP-FT1	12 In	Insertion Loss (Typ.)	0.17	0.25	0.39	0.6	dB	0.773
LCCA31017/WP-FT2	24 In	Insertion Loss (Typ.)	0.2	0.29	0.46	0.71	dB	0.82
LCCA31017/WP-FT3	36 In	Insertion Loss (Typ.)	0.23	0.33	0.53	0.82	dB	0.867
LCCA31017/WP-FT5	60 In	Insertion Loss (Typ.)	0.29	0.41	0.66	1.03	dB	0.961
LCCA31017/WP-M0.5	50 CM	Insertion Loss (Typ.)	0.19	0.27	0.43	0.67	dB	0.804

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.1*SQRT(FGHz)	dB
Loss due to Connector 2:	0.1*SQRT(FGHz)	dB
Base Weight:	0.773	pounds
Additional Weight per Inch:	0.00391	pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.773 lbs [350.63 g]

Cable

Cable Type	SPO-250
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper Clad Aluminum
Dielectric Type	Foam PE
Outer Conductor 1 Material and Plating	Copper, Corrugated
Jacket Material	PE
Jacket Diameter	0.303 in [7.7 mm]
One Time Minimum Bend Radius	1 in [25.4 mm]
Bending Moment	0.5 lbs-ft [0.68 N-m]

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LCCA31017/WP

Connectors

Description	Connector 1	Connector 2
Type	N Male Right Angle	N Male
Option	Weatherproof Boot	Weatherproof Boot
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Contact Material and Plating	Brass, Silver	Phosphor Bronze, Silver
Contact Plating Specification	200 µin minimum	196 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 µin minimum	118 µin minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	80 µin minimum	118 µin minimum
Boot Material	Silicone	Silicone

Environmental Specifications

Operating Range Temperature	-40 to +85 deg C
Ingress Protection (IP) Rating	IP68

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:
Values at 25°C, sea level.

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LCCA31017/WP

Typical Performance Data

How to Order

Part Number Configuration: **LCCA31017/WP - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- LCCA31017/WP — Base Number

Example: LCCA31017/WP-12 = 12 inches long cable
LCCA31017/WP-100cm = 100 cm long cable

Low Loss N Male Right Angle to N Male Weatherproof Cable Assembly with Silicone using SPO-250 Coax with Times Microwave Components 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/n-male-n-male-cable-assembly-lcca31017-wp-p.aspx

LCCA31017/WP CAD Drawing

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