

Low Loss Flexible LMR-100A-FR Fire Rated Rated Coax Cable Double Shielded with Black FRPE Jacket



LMR-100A-FR-LC-BULK

Times Microwave Systems Coax Cable Specification

Configuration

- Low Loss, Outdoor Flexible Cable
- 2 Shield(s)

Features

- FRPE Jacket
- Max Operating Temperature +85°C
- Min Install Bend Radius of 0.25 inches
- Phase Velocity 66% VoP
- Max Operating Frequency of 8 GHz
- CMR Fire Rated Coax

Applications

- In-Building Riser Runs
- Antenna Installations
- RF Test Systems
- General Purpose RF Interconnect
- Laboratory Applications

Description

LMR-100A-FR-LC-BULK coax cable from L-com is only one of a large number of radio frequency coaxial cable types specifically stocked to be ready for quick shipment. L-com LMR-100A-FR-LC-BULK coax cable is manufactured in a flexible design and has a 50 Ohm impedance. This low loss flexible 50 Ohm coax cable LMR-100A-FR-LC-BULK is constructed with a 0.110 inch diameter and Black FRPE jacket.

LMR-100A-FR-LC-BULK flexible 50 Ohm coax cable with PVC jacket is rated for a 8 GHz maximum operating frequency. This 50 Ohm 0.110 inch diameter and low loss flexible coax cable is built with a double shield count and RF shielding of 90 dB. L-com LMR-100A-FR-LC-BULK coax is constructed with PE dielectric and a maximum operating temperature of +85 degrees C. Times Microwave LMR-100A-FR-LC-BULK coax cable specs for this wire properties can be found on its RF coax cable LMR-100A-FR-LC-BULK datasheet.

LMR-100A-FR-LC-BULK cable is part of more than one million RF, microwave parts in stock at L-com. This Times Microwave low loss LMR-100A-FR-LC-BULK coax cable is ready to buy and can be shipped worldwide. L-com also maintains a wide selection of other radio frequency coaxial cable types that ship same-day from our warehouse as with the rest of our other RF/microwave components.

* LMR™ is a trademark of Times Microwave Systems.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
Impedance		50		Ohms
Velocity of Propagation		66		%
Time Delay		1.54 [5.05]		ns/ft [ns/m]
Shielding Effectiveness	90			dB
Dielectric Withstanding Voltage (DC)			500	Vdc
Jacket Spark			2,000	Vrms
Inner Conductor DC Resistance			81	Ohms/1000ft
Outer Conductor DC Resistance			9.5	Ohms/1000ft
Nominal Capacitance	30.8 [101.05]			pF/ft [pF/m]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Nominal Inductance		0.077 [0.25]		uH/ft [uH/m]
Input Power (Peak)			600	Watts

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	50	150	220	450	900	MHz
Attenuation, Typ	5.1	8.9	10.9	15.8	22.8	dB/100ft
	16.73	29.2	35.76	51.84	74.8	dB/100m

Description	F6	F7	F8	F9	F10	Units
Frequency	1.5	1.8	2	2.5	5.8	GHz
Attenuation, Typ	30.1	33.2	35.2	39.8	64.1	dB/100ft
	98.75	108.92	115.49	130.58	210.3	dB/100m

Mechanical Specifications

Diameter	0.11 in [2.79 mm]
Weight	0.0092 lbs/ft [0.01 kg/m]
Min. Bend Radius (Installation)	0.25 in [6.35 mm]
Min. Bend Radius (Repeated)	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Tensile Strength	15 lbs [6.8 kg]
Flat Plate Crush	10 lbs/in [0.18 kg/mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, 1 Strand	0.018 in [0.46 mm]
Conductor Type	Solid	
Dielectric	PE	0.06 in [1.52 mm]
First Shield	Aluminum Tape	
Second Shield	Tinned Copper	
Jacket	FRPE, Black	0.11 in [2.79 mm]

Environmental Specifications

Temperature	
Operating Range	-40 to +85 deg C

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Installation Range
Storage Range

-40 to +85 deg C
-70 to +85 deg C

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

Plotted and Other Data

Notes:

Low Loss Flexible LMR-100A-FR Fire Rated Rated Coax Cable Double Shielded with Black FRPE Jacket 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/low-loss-flexible-lmr-100a-fr-fire-rated-rated-coax-cable-double-shielded-black-frpe-jacket-by-the-foot-lmr-100a-fr-lc-bulk-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.

LMR-100A-FR-LC-BULK CAD Drawing

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