

Times Microwave LMR-900-FR Low Loss Flexible Coax Cable Black FRPE Jacket



LMR-900-FR

Configuration

- Low Loss, UL/CSA RATED CMR/MPR (PCC-FT4) Flexible Cable
- 2 Shield(s)

Features

- Max Operating Frequency of 6 GHz
- Phase Velocity 88% VoP
- Non-halogen, low-smoke, fire-retardant jacket

Applications

- Laboratory Applications

Description

The LMR-900-FR part number from Pasternack is a low-loss coax cable that is flexible. Pasternack flexible coax RF cable has an impedance of 50 Ohm and a foam polyethylene dielectric. Our LMR-900-FR coax cable is constructed with a 0.87-inch jacket made of polyethylene. This coaxial cable has a dielectric withstanding voltage of 4000 Vdc. This black-colored low-loss coax cable has a nominal capacitance of 23.1 pF/Ft. It features a non-halogen, low-smoke, fire-retardant jacket and meets stringent safety certifications, including UL/ NEC CMR, CSA FT4, FAA FAR 25, and MSHA-P.

This LMR-900-FR flexible RF cable has a shield count of 2 and RF shielding of 90 dB. Our coax cable from Pasternack has a maximum frequency of 6 GHz. Additional specifications for this LMR-900-FR double-shielded RF coaxial cable are on our downloadable PDF datasheet above. This low-loss RF cable has a one-time minimum bend radius of 3 inches and a repeat minimum bend radius of 9 inches. Our flexible 50 Ohm coax cable has a peak power rating of 62000 watts.

Our LMR-900-FR coax cable can operate at temperatures ranging from -40 to 85 degrees C. The LMR-900-FR flexible RF cable has a solid copper tube center conductor.

Pasternack LMR-900-FR low-loss coax cables are part of our RF, microwave, and millimeter wave components. These flexible cables and our other RF parts are available for same-day shipping worldwide. Custom RF cable assemblies using LMR-900-FR, or other coax can be built and shipped the same business day as well.

LMR® is a registered trademark of Times Microwave Systems.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
Impedance		50		Ohms
Velocity of Propagation		88		%
Time Delay		1.17 [3.84]		ns/ft [ns/m]
Shielding Effectiveness	90			dB
Operating Voltage (DC)			5,000	Vdc
Dielectric Withstanding Voltage (DC)			4,000	Vdc
Jacket Spark			8,000	Vrms
Inner Conductor DC Resistance			0.54	Ohms/1000ft

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Outer Conductor DC Resistance			0.55	Ohms/1000ft
Nominal Capacitance		23.1 [75.79]		pF/ft [pF/m]
Nominal Inductance		0.058 [0.19]		uH/ft [uH/m]
Input Power (Peak)			62	kWatts

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	30	50	150	220	450	MHz
Attenuation, Max	0.29	0.37	0.66	0.8	1.17	dB/100ft
	0.95	1.21	2.17	2.62	3.84	dB/100m
Input Power (CW), Typ	11.17	8.6	4.92	4.12	2.75	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	0.9	1.5	2	2.5		GHz
Attenuation, Max	1.7	2.24	2.63	2.98		dB/100ft
	5.58	7.35	8.63	9.78		dB/100m
Input Power (CW), Typ	1.9	1.43	1.23	1.08		Watts

Mechanical Specifications

Diameter	0.87 in [22.1 mm]
Weight	0.266 lbs/ft [0.4 kg/m]
Min. Bend Radius (Installation)	3 in [76.2 mm]
Min. Bend Radius (Repeated)	9 in [228.6 mm]
Bending Moment	9 lbs-ft [12.2 N-m]
Tensile Strength	750 lbs [340.19 kg]
Flat Plate Crush	100 lbs/in [1.79 kg/mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Tube, 1 Strand	0.262 in [6.65 mm]
Conductor Type	Solid	
Dielectric	PE (F)	0.68 in [17.27 mm]
First Shield	Tinned Copper	
Outer Conductor	Aluminum Tape	
Jacket	FRPE, Black	0.87 in [22.1 mm]

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Environmental Specifications

Temperature

Operating Range

-40 to +85 deg C

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

Plotted and Other Data

Notes:

Times Microwave LMR-900-FR Low Loss Flexible Coax Cable Black FRPE Jacket from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Times Microwave LMR®-900-FR Low Loss Flexible Coax Cable Black FRPE Jacket LMR-900-FR](#)

URL: <https://www.fairviewmicrowave.com/low-loss-flexible-lmr900-pe-jacket-tinned-copper-outer-conductor-double-shielded-lmr-900-fr>

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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

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