

Low Loss Flexible LMR-500 Coax Cable Double Shielded with Black PE Jacket



LMR-500

Times Microwave Systems Coax Cable Specification

Configuration

- Low Loss Flexible Cable
- 2 Shield(s)

Features

- Easily Routed
- Low Loss Cable
- RF Shielding > 90dB
- Designed for Outdoor Use

Applications

- Jumper Assemblies
- Short Antenna Feeder Runs
- Wireless Communications

Description

Pasternack's LMR series RF cables from Times Microwave offer an ideal solution for applications where flexibility is essential. These flexible cables provide low loss with a minimum bend radius of 1.25 in. for installation. Pasternack's LMR cables are designed for use in outdoor applications. The LMR-500's UV resistant polyethylene (PE) jacket has a life expectancy of 20 years. This low loss RF cable is also double shielded to provide greater than 90 dB RF shielding.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
Impedance		50		Ohms
Velocity of Propagation		86		%
Time Delay		1.18 [3.87]		ns/ft [ns/m]
Shielding Effectiveness	90			dB
Dielectric Withstanding Voltage (DC)			3,000	Vdc
Jacket Spark			8,000	Vrms
Inner Conductor DC Resistance			0.82	Ohms/1000ft
Outer Conductor DC Resistance			1.27	Ohms/1000ft
Nominal Capacitance		23.6 [77.43]		pF/ft [pF/m]
Nominal Inductance		0.059 [0.19]		uH/ft [uH/m]
Input Power (Peak)			22	kWatts

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	50	150	220	450	900	MHz
Attenuation, Typ	0.7	1.2	1.5	2.2	3.1	dB/100ft
	2.3	3.94	4.92	7.22	10.17	dB/100m

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Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Input Power (CW), Max	3,393	1,931	1,583	1,088	752	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	1.5	1.8	2	2.5	5.8	GHz
Attenuation, Typ	4.1	4.6	4.8	5.5	8.9	dB/100ft
	13.45	15.09	15.75	18.04	29.2	dB/100m
Input Power (CW), Max	569	515	485	428	264	Watts

Electrical Specification Notes:

Values at 25°C, sea level.//Attenuation = 0.096590*sqrt(FMHz) + 0.000260

Mechanical Specifications

Diameter	0.5 in [12.7 mm]
Weight	0.105 lbs/ft [0.16 kg/m]
Min. Bend Radius (Installation)	1.25 in [31.75 mm]
Min. Bend Radius (Repeated)	5 in [127 mm]
Bending Moment	1.75 lbs-ft [2.37 N-m]
Tensile Strength	260 lbs [117.93 kg]
Flat Plate Crush	50 lbs/in [0.89 kg/mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Aluminum, 1 Strand	0.142 in [3.61 mm]
Conductor Type	Solid	
Dielectric	PE (F)	0.37 in [9.4 mm]
First Shield	Aluminum Tape	0.376 in [9.55 mm]
Second Shield	Tinned Copper	0.405 in [10.29 mm]
Jacket	PE, Black	0.5 in [12.7 mm]

Environmental Specifications

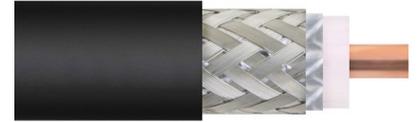
Temperature

Operating Range	-40 to +85 deg C
Installation Range	-40 to +85 deg C
Storage Range	-70 to +85 deg C

Environmental Specification Notes:

Designed for outdoor use

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

Plotted and Other Data

Notes:

Low Loss Flexible LMR-500 Coax Cable Double Shielded with Black PE Jacket from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss Flexible LMR-500 Coax Cable Double Shielded with Black PE Jacket LMR-500](#)

URL: <https://www.pasternack.com/50-ohm-low-loss-lmr-500-pe-jacket-double-shielded-black-lmr-500-p.aspx>

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