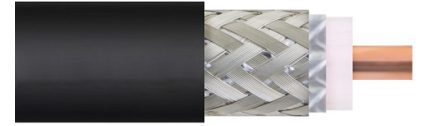


Low Loss Flexible LMR-500-DB Outdoor/Watertight Rated Coax Cable Double Shielded with Black PE Jacket



LMR-500-DB

Times Microwave Systems Coax Cable Specification

Configuration

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

Features

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

Applications

- Jumper Assemblies
- Short Antenna Feeder Runs
- Wireless Communications

Description

LMR-500-DB part number from Pasternack is a LMR-500-DB coax cable that is flexible. Pasternack LMR-500-DB flexible coax cable is 50 Ohm and has a PE (F) dielectric. Our LMR-500-DB coax is constructed with a 0.5 jacket made of PE. LMR-500-DB coax has a shield count of 2, a RF shielding of 90 dB and the maximum frequency for this Pasternack cable is 8 GHz. LMR-500-DB coax cable has an attenuation at 1 GHz of 3.1 dB.

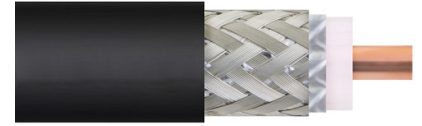
Electrical Specifications

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

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Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
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
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 = $0.096590 \cdot \sqrt{\text{FMHz}} + 0.000260$

Mechanical Specifications

Diameter	0.5 in [12.7 mm]
Weight	0.102 lbs/ft [0.15 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:

Outdoor/Watertight

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LMR-500-DB

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

Plotted and Other Data

Notes:

Low Loss Flexible LMR-500-DB Outdoor/Watertight Rated 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-DB Outdoor/Watertight Rated Coax Cable Double Shielded with Black PE Jacket LMR-500-DB](#)

URL: <https://www.pasternack.com/50-ohm-low-loss-lmr-500-db-pe-jacket-doubleshieldedblack-lmr-500-db-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. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.