TIMES MICROWAVE SYSTEMS

LMR®-500-LLPX
Flexible Low Loss Plenum Coax

Ideal for...

- Indoor/Outdoor Plenum Feeder runs
- UL/NEC/CSA rated CMP/FT6
- Any wireless application (e.g. LMDS, MMDS, WLL, GPS, LMR, WLAN, WISP, WiMax, SCADA, Cellular, PCS, Paging) requiring an easily routed, low loss RF cable for in-building systems

Part Description

Part Number	Application	Jacket	Color	Stock Code
LMR-500-LLPX	Indoor/Outdoor Plenum CMP/FT6	Fluoropolymer	Red	54460

Construction Specifications

Description	Material	In.	(mm)
Inner Conductor	Solid BCCAl	0.121	(3.07)
Dielectric	Low density PTFE	0.370	(9.40)
Outer Conductor	Aluminum Tape	0.376	(9.55)
Overall Braid	Tinned Copper	0.405	(10.29)
Jacket	Red Fluoropolymer	.465	(11.81)

Electrical Specifications

Performance Property	Units	US	(metric)
Velocity of Propagation	%	76	
Dielectric Constant	NA	1.73	
Time Delay	nS/ft (nS/m)	1.34	(4.40)
Impedance	ohms	50	
Capacitance	pF/ft (pF/m)	26.7	(87.6)
Inductance	uH/ft (uH/m)	0.067	(0.22)
Shielding Effectiveness	dB	>90	
DC Resistance			
Inner Conductor	ohms/1000ft (/km)	1.09	(3.6)
Outer Conductor	ohms/1000ft (/km)	1.27	(4.2)
Voltage Withstand	Volts DC	3000	
Jacket Spark	Volts RMS	8000	
Peak Power	kW	11.6	

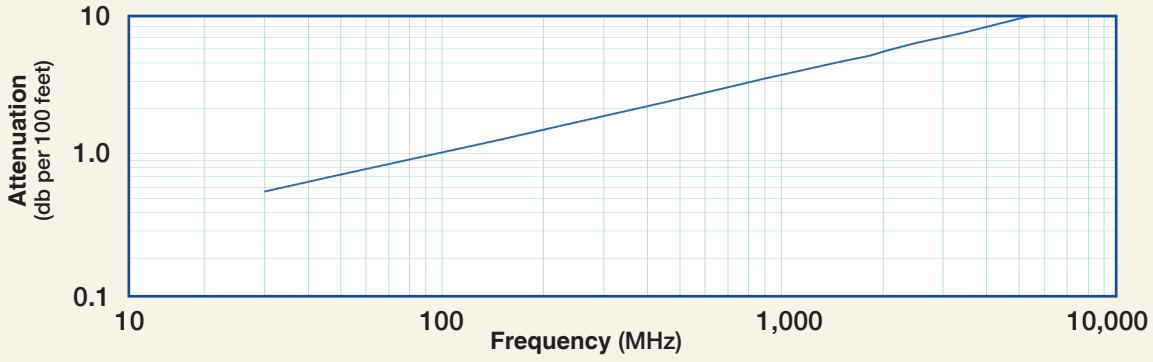
Mechanical Specifications

Performance Property	Units	US	(metric)
Bend Radius: installation	in. (mm)	1.25	(31.8)
Bend Radius: repeated	in. (mm)	5.0	(127.0)
Weight	lb/ft (kg/m)	0.170	(0.25)
Tensile Strength	lb (kg)	195	(88.5)
Flat Plate Crush	lb/in. (kg/mm)	200	(3.57)

Environmental Specifications

Performance Property	°F	°C
Installation Temperature Range	-40/+257	-40/+125
Storage Temperature Range	-40/+257	-40/+125
Operating Temperature Range	-40/+257	-40/+125

Attenuation vs. Frequency (typical)



Frequency (MHz)	30	50	150	220	450	900	1500	1800	2000	2500	3400	5800	8000
Attenuation dB/100 ft	0.6	0.7	1.3	1.5	2.2	3.1	4.1	4.5	4.8	5.4	6.4	8.5	10.4
Attenuaiton dB/100 m	1.8	2.4	4.1	5.0	7.2	10.3	13.5	14.8	15.7	17.7	20.9	27.9	34.1
Avg. Power kW	8.9	6.9	3.9	3.2	2.2	1.5	1.2	1.1	1.0	0.91	0.81	0.60	0.50

Calculate Attenuation = (0.100260) • $\sqrt{\text{FMHz}}$ + (0.000150) • FMHz (interactive calculator available at http://www.timesmicrowave.com/cable_calculators)
Attenuation: VSWR=1.0 ; Ambient = +25°C (77°F) **Power:** VSWR=1.0; Ambient = +40°C; Jacket = +75°C (167°F); Sea Level; dry air; atmospheric pressure; no solar loading

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