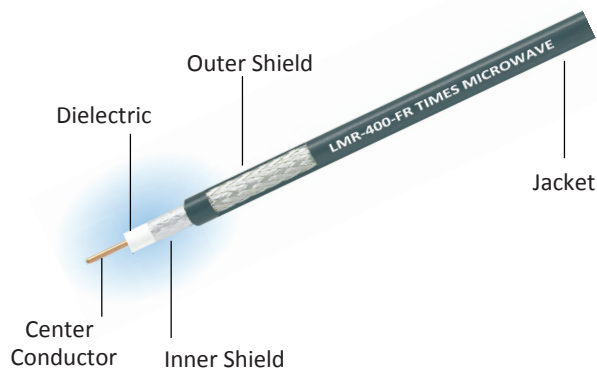


# LMR-FR Cables

## Cable Feature:

Flexibility	Fair
Cost	Low
Attenuation	Low
Power Handling	Medium
Temperature	Medium
Connector Availability	Very Good



	LMR-400-FR	LMR-500-FR	LMR-600-FR	LMR-900-FR	LMR-1200-FR
<b>AA Drawing Number</b>	AA-8120	AA-8121	AA-8122	AA-8123	AA-8124
<b>Part Number</b>	54030	54031	54032	54033	54034
<b>Physical Specifications</b>					
Description	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
Center Conductor	Solid BCCAl	Solid BCCAl	Solid BCCAl	BC Tube	BC Tube
	0.108 (2.74)	0.142 (3.61)	0.176 (4.47)	0.262 (6.65)	0.349 (8.86)
Dielectric	PE	PE	PE	PE	PE
	0.285 (7.24)	0.370 (9.40)	0.455 (11.56)	0.680 (17.27)	0.920 (23.37)
Inner Shield	MT	MT	MT	MT	MT
	0.291 (7.39)	0.376 (9.55)	0.461 (11.71)	0.686 (17.42)	0.926 (23.52)
Interlayer	/	/	/	/	/
Outer Shield	TC	TC	TC	TC	TC
	0.320 (8.13)	0.405 (10.29)	0.490 (12.45)	0.732 (18.59)	0.972 (24.69)
Jacket	FRPE	FRPE	FRPE	FRPE	FRPE
	0.405 (10.29)	0.500 (12.70)	0.590 (14.99)	0.870 (22.10)	1.200 (30.48)
<b>Mechanical Specifications</b>					
Bend Radius	1.0 (25.4)	1.3 (31.8)	1.5 (38.1)	3.0 (76.2)	6.5 (165.1)
Weight	0.068 lb/ft	0.097 lb/ft	0.131 lb/ft	0.266 lb/ft	0.448 lb/ft
Operating Temperature Range	-40/+85 °C	-40/+85 °C	-40/+85 °C	-40/+85 °C	-40/+85 °C
<b>Electrical Specifications</b>					
Impedance	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms
Shielding Effectiveness	90 dB	90 dB	90 dB	90 dB	90 dB
Dielectric Constant	1.38	1.35	1.32	1.32	1.29
Velocity of Propagation	0.85	0.86	0.87	0.87	0.88
Capacitance	23.9pF/ft	23.6pF/ft	23.4pF/ft	23.4pF/ft	23.1pF/ft
DC Voltage (kV)	5	7	8	5	6
<b>Attenuation: dB/100ft (100m) (+25 °C Ambient; Sea Level)</b>					
13.56 MHz	0.46 (1.51)	0.36 (1.17)	0.29 (0.95)	0.19 (0.64)	0.14 (0.46)
50 MHz	0.89 (2.92)	0.69 (2.26)	0.56 (1.85)	0.38 (1.24)	0.27 (0.89)
100 MHz	1.27 (4.15)	0.98 (3.22)	0.80 (2.63)	0.54 (1.77)	0.39 (1.28)
1000 MHz	4.17 (13.68)	3.28 (10.77)	2.69 (8.82)	1.84 (6.03)	1.34 (4.39)
1500 MHz	5.17 (16.97)	4.09 (13.42)	3.36 (11.01)	2.31 (7.56)	1.68 (5.52)
2000 MHz	6.04 (19.81)	4.79 (15.73)	3.93 (12.91)	2.72 (8.91)	1.99 (6.51)
2500 MHz	6.82 (22.36)	5.43 (17.81)	4.46 (14.62)	3.09 (10.13)	2.26 (7.42)
3000 MHz	7.53 (24.71)	6.01 (19.73)	4.94 (16.21)	3.44 (11.27)	2.52 (8.26)
K1	0.124100	0.095640	0.077990	0.051869	0.037474
K2	0.000245	0.000259	0.000224	0.000198	0.000155
<b>Power (Watts) (+25 °C Ambient; Sea Level)</b>					
13.56 MHz	12611	18784	26034	49886	81747
50 MHz	6527	9703	13433	25658	41991
100 MHz	4591	6813	9423	17951	29346
1000 MHz	1398	2050	2816	5267	8547
1500 MHz	1128	1648	2259	4202	6803
2000 MHz	967	1408	1928	3570	5769
2500 MHz	858	1246	1702	3140	5067
3000 MHz	777	1126	1537	2825	4552

\* BCCAl = Bare Copper Clad Aluminum