



# Communications Coax Selection Guide Featuring TIMES MICROWAVE SYSTEMS LMR® Flexible Coax



## Attenuation ( dB per 100 feet ; +25C )

Frequency / Size	2 1/4" LDF	1 5/8" LDF	1 1/4" LDF	LMR-1700	7/8" LDF	LMR-1200	LMR-900	1/2" LDF	LMR-600	LMR-500	1/2" SuperFlex	3/8" LDF	LMR-400	3/8" SuperFlex	9913	ULTRA-LINK™	RG213/ RG214	1/4" SuperFlex	LMR-300	LMR-240	RG8X	LMR-200	ULTRA-LINK	LMR-195	RG-58	LMR-100A
30 MHz	0.096*	0.120	0.147	0.149	0.197	0.209	0.288	0.369	0.421	0.54	0.561	0.567	0.7	0.654	0.8	0.7	1.2	0.98	1.1	1.3	2.0	1.8	2.5	2.0	2.5	3.9
50 MHz	0.125*	0.156	0.191	0.195	0.257	0.272	0.374	0.479	0.547	0.70	0.730	0.736	0.9	0.848	0.9	--	1.6	1.27	1.4	1.7	2.5	2.3	--	2.6	3.1	5.1
150 MHz	0.227*	0.280	0.340	0.347	0.458	0.481	0.658	0.845	0.964	1.22	1.29	1.30	1.5	1.49	1.6	1.5	2.8	2.23	2.4	3.0	4.7	4.0	5.1	4.4	6.2	8.9
220 MHz	0.281*	0.345*	0.416*	0.427	0.560*	0.589	0.803	1.05*	1.18	1.49	1.58*	1.59*	1.8	1.82*	--	--	3.5	2.72	2.9	3.7	6.0	4.8	--	5.4	7.4	10.9
450 MHz	0.422	0.515	0.617	0.632	0.834	0.864	1.17	1.51	1.72	2.17	2.32	2.30	2.7	2.66	2.8	2.7	5.2	3.93	4.2	5.3	8.6	7.0	9.5	7.8	10.6	15.8
700 MHz	--	--	--	0.809	--	1.10	1.48	--	2.18	2.77	--	--	3.42	--	--	--	--	--	5.1	6.6	--	8.7	--	9.8	--	20.0
900 MHz	0.641*	0.767*	0.912*	0.936	1.23*	1.27	1.70	2.21*	2.50	3.13	3.41*	3.36*	3.9	3.86*	4.2	4.19	8.0	5.67*	6.1	7.6	12.8	9.9	14.0	11.1	16.5	22.8
1,500 MHz	0.879*	1.050	1.22	1.26	1.66	1.69	2.24	2.93	3.31	4.13	4.57	4.43	5.1	5.12	5.6	--	--	7.47	7.9	9.9	--	12.9	--	14.5	--	30.0
2,000 MHz	1.058*	1.250	1.45	1.50	1.97	1.99	2.63	3.45	3.90	4.84	5.41	5.21	6.0	6.01	6.7	--	--	8.73	9.2	11.5	--	15.0	--	16.9	--	35.0
2,500 MHz	--	1.440	1.68*	1.71	2.27*	2.26	2.98	3.91*	4.42	5.48	6.17*	5.91*	6.8	6.84*	--	6.8*	--	9.85*	10.4	12.9	--	16.9	37.0*	19.0	--	40.0
5,800 MHz	--	--	--	--	--	--	4.90	--	7.30	8.90	--	--	10.8	--	--	--	--	--	16.6	20.4	--	26.4	--	28.3	--	64.1

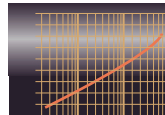
Attenuation at Any Frequency = [ k1 x √ (Fmhz) ] + [ k2 x Fmhz ] or use Performance Calculator at [www.timesmicrowave.com](http://www.timesmicrowave.com)

k1				0.02646		0.03737	0.05177		0.07555	0.09659			0.12229						0.19193	0.24208		0.32090		0.35686		0.70914
k2				0.00016		0.00016	0.00016		0.00026	0.00026			0.00026						0.00033	0.00033		0.00033		0.00047		0.00174
List Price \$/foot	21.24	15.86	11.82	\$ 7.80	6.08	\$ 4.85	\$ 3.70	2.65	\$ 1.30	\$ 1.05	3.88	1.98	\$ .64	2.75	.75	.95	.95/1.60	1.73	\$.53	\$.47	0.55	\$.37	1.10	\$.37	0.40	\$.30



## Power Handling ( kW ; +40C ; Sea Level )

Frequency / Size	2 1/4" LDF	1 5/8" LDF	1 1/4" LDF	LMR-1700	7/8" LDF	LMR-1200	LMR-900	1/2" LDF	LMR-600	LMR-500	1/2" SuperFlex	3/8" LDF	LMR-400	3/8" SuperFlex	9913	ULTRA-LINK	RG213/ RG214	1/4" SuperFlex	LMR-300	LMR-240	RG8X	LMR-200	ULTRA-LINK	LMR-195	RG-58	LMR-100A
30 MHz	39.5*	28.9	21.1	20.3	14.0	12.6	8.9	6.31	5.5	4.4	5.75	4.14	3.3	3.97	2.2	--	1.8	2.28	2.1	1.49	0.35	1.02	4.0	0.89	0.40	0.23
50 MHz	30.2*	22.1	16.2	15.6	10.7	9.7	6.8	4.85	4.3	3.4	4.42	3.19	2.6	3.06	1.7	--	1.2	1.76	1.6	1.15	0.28	0.79	--	0.68	0.30	0.18
150 MHz	16.7*	12.3	9.09	8.7	6.04	5.5	3.9	2.75	2.4	1.9	2.49	1.81	1.5	1.74	0.90	--	0.62	1.00	0.93	0.66	0.15	0.45	2.0	0.39	0.16	0.10
220 MHz	13.5*	13.5*	7.45*	7.1	4.94*	4.5	3.2	2.23*	1.9	1.6	2.04*	1.49*	1.2	1.44*	--	--	--	0.825*	0.76	0.54	--	0.37	--	0.32	--	0.08
450 MHz	8.91	6.71	5.01	4.8	3.32	3.1	2.2	1.53	1.3	1.1	1.38	1.02	0.83	0.975	0.45	--	0.30	0.567	0.52	0.38	0.08	0.26	1.0	0.22	0.08	0.06
700 MHz	--	--	--	3.8	--	2.4	1.7	--	1.1	0.85	--	--	0.66	--	--	--	--	--	0.43	0.30	--	0.21	--	0.18	--	0.05
900 MHz	5.90*	4.49*	3.39*	3.3	2.24	2.1	1.5	1.05*	0.93	0.75	0.944*	0.703*	0.58	0.674*	0.28	--	0.18	0.393*	0.36	0.26	0.05	0.18	0.65	0.15	0.05	0.040
1,500 MHz	4.29*	3.30	2.52	2.4	1.66	1.6	1.1	0.793	0.70	0.57	0.705	0.530	0.44	0.507	0.20	--	--	0.299	0.28	0.20	--	0.14	--	0.12	--	0.030
2,000 MHz	3.57*	2.76	2.13	2.0	1.40	1.3	1.0	0.673	0.59	0.49	0.597	0.451	0.37	0.431	0.16	--	--	0.256	0.24	0.17	--	0.12	--	0.10	--	0.025
2,500 MHz	--	2.40	1.84*	1.8	1.21*	1.2	0.9	0.594*	0.52	0.43	0.547*	0.398*	0.33	0.379*	--	--	--	0.225*	0.21	0.15	--	0.10	--	0.09	--	0.020
5,800 MHz	--	--	--	--	--	--	0.52	--	0.32	0.26	--	--	0.21	--	--	--	--	--	0.13	0.10	--	0.07	--	0.06	--	0.010



## General Performance Properties

	LMR-1700	LMR-1200	LMR-900	LMR-600	LMR-500	LMR-400	LMR-300	LMR-240	LMR-200	LMR-195	LMR-100A
Conductor: (note 1)	0.527"	0.349"	0.262"	0.176"	0.142"	0.109"	0.070"	0.056"	0.044"	0.037"	0.018"
Dielectric: Cellular PE (note 2)	1.350"	0.920"	0.680"	0.455"	0.370"	0.285"	0.190"	0.150"	0.116"	0.110"	0.060"
Shield: Aluminum Tape (note 3)	1.356"	0.926"	0.686"	0.461"	0.376"	0.291"	0.196"	0.155"	0.121"	0.116"	0.065"
Tinned Copper Braid	1.402"	0.972"	0.732"	0.490"	0.405"	0.320"	0.225"	0.178"	0.144"	0.139"	0.083"
Jacket: Black PE (note 4)	1.670"	1.200"	0.870"	0.590"	0.500"	0.405"	0.300"	0.240"	0.195"	0.195"	0.110"
Bend Radius (note 5)	13.5"	6.5"	3"	1.5"	1.25"	1"	.875"	0.75"	0.50"	0.50"	0.25"
Weight(lbs/foot)	0.736	0.448	0.266	0.131	0.097	0.068	0.055	0.034	0.022	0.022	0.015
Temperature Range	-40°C to +85°C										
Impedance	50 Ohms										
Velocity (%)	89	88	87	87	86	85	85	84	83	80	66
Capacitance (pF per Foot)	22.8	23.1	23.4	23.4	23.6	23.9	24.1	24.2	24.5	24.3	30.8
DC Resistance: center conductor	0.21	0.32	0.54	0.53	0.82	1.39	2.12	3.20	5.36	7.58	81.0
(ohms/1000') : shield	0.27	0.37	0.55	1.20	1.27	1.65	2.21	3.89	4.90	4.90	9.5
Shielding	> 90 db										
Phase Stability	+/- 10 ppm/degC										

### NOTES:

- (1) Center Conductor in LMR-900, LMR-1200 & LMR-1700 is Copper Tube  
Center Conductor in LMR-400, LMR-500 & LMR-600 is Copper Clad Aluminum  
Center Conductor in LMR-195, LMR-200, LMR-240 and LMR-300 is Bare Copper  
LMR-100A is BCCS
- (2) Low loss closed cell polyethylene foam (LMR-100A solid polyethylene)
- (3) Aluminum laminated tape bonded (LMR-100A unbonded) to the Dielectric with a Tinned Copper Overbraid
- (4) Black UV protected polyethylene (LMR-100A black PVC)
- (5) Less than 1 ohm impedance change at bend

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Competitor's Data As Published  
\* = estimated from published data.



## TIMES MICROWAVE SYSTEMS

A Smiths Group, plc company  
358 Hall Avenue / P. O. Box 5039  
Wallingford, CT 06492-5039 USA  
TEL (203) 949-8400 • FAX (203) 949-8423  
[www.timesmicrowave.com](http://www.timesmicrowave.com)