

MYLAR/POLYESTER FILM

MLR SERIES

The MLR series is a range of radial lead non-polarized polyester film (Mylar) capacitors dipped in a hard epoxy coating material to provide excellent protection against moisture. These devices are intended for general purpose DC applications.

RATINGS

- Capacitance Range:** .001 μ f to 5.6 μ f
- Voltage Range:** 50V to 630V DC (35V to 250V AC)
- Tolerance:** \pm 10%
- Withstand Voltage:** 175%

PERFORMANCE SPECIFICATIONS

- Operating Temperature Range:**
-55°C to +85°C (-67°F to +185°F)
- Dissipation Factor:** 1% Max
- Capacitance Tolerance (K):** \pm 10%
measured @ +25°C (+77°F), 1kHz, for values up to and including 1 μ f
measured @ +25°C (+77°F), 120Hz, for values above 1 μ f
- Insulation Resistance:**
 - 50V & 100V, .001 μ f – .1 μ f = 30,000M Ω Min
 - .12 μ f – 2.2 μ f = 10,000M Ω Min
 - 250V, .01 μ f – 5.6 μ f = 10,000M Ω Min
 - 400V, .0047 μ f – 4.0 μ f = 10,000M Ω Min
 - 630V, .001 μ f – .008 μ f = 100,000M Ω Min
 - .01 μ f – 3.0 μ f = 10,000M Ω Min
- Life Test:** 1000Hrs @ +85°C (+185°F)
at 150% rated voltage

ORDERING INFORMATION

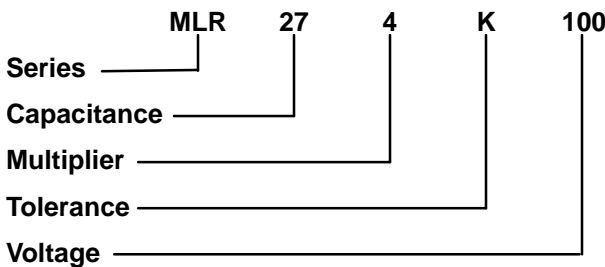
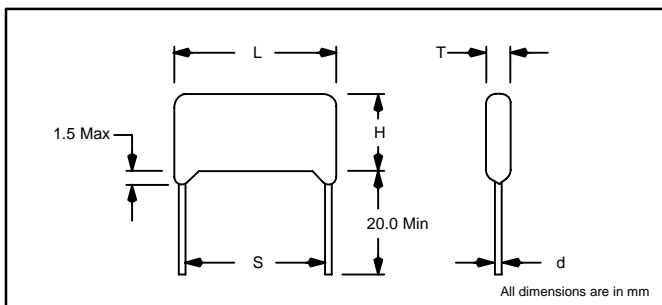


FIGURE 1



MECHANICAL SPECIFICATIONS (Figure 1) 50 Volt (35VAC) Series Dimensions (mm)

Cap μ f	Code	T	H	L	S	d
.001	102	3.0	7.5	5.5	3.5 \pm 1.0	0.5
.0033	332	3.0	7.5	5.5	3.5 \pm 1.0	0.5
.01	103	3.0	7.5	6.0	3.5 \pm 1.0	0.5
.012	123	3.0	9.0	6.0	3.5 \pm 1.0	0.5
.018	183	3.5	9.0	6.5	3.5 \pm 1.0	0.5
.027	273	4.0	9.5	6.5	3.5 \pm 1.0	0.5
.033	333	4.0	9.5	6.5	3.5 \pm 1.0	0.5
.039	393	4.5	9.5	7.5	5.0 \pm 1.5	0.5
.047	473	4.5	9.5	7.5	5.0 \pm 1.5	0.5
.1	104	5.5	10.5	9.0	5.0 \pm 1.5	0.5
.15	154	6.0	10.0	14.0	10.0 \pm 1.5	0.6
.27	274	6.0	11.0	14.0	10.0 \pm 1.5	0.6
.33	334	6.0	12.0	14.0	10.0 \pm 1.5	0.6
1.0	105	9.0	15.0	18.0	15.0 \pm 1.5	0.6

100 Volt (65VAC) Series Dimensions (mm)

Cap μ f	Code	T	H	L	S	d
.001	102	3.0	7.5	5.5	3.5 \pm 1.0	0.5
.0012	122	3.0	7.5	5.5	3.5 \pm 1.0	0.5
.0015	152	3.0	7.5	5.5	3.5 \pm 1.0	0.5
.0018	182	3.0	7.5	5.5	3.5 \pm 1.0	0.5
.002	202	3.0	7.5	5.5	3.5 \pm 1.0	0.5
.0022	222	3.0	7.5	5.5	3.5 \pm 1.0	0.5
.0027	272	3.0	7.5	5.5	3.5 \pm 1.0	0.5
.0033	332	3.0	7.5	5.5	3.5 \pm 1.0	0.5
.0039	392	3.0	7.5	5.5	3.5 \pm 1.0	0.5
.0047	472	3.0	7.5	5.5	3.5 \pm 1.0	0.5
.0056	562	3.0	7.5	5.5	3.5 \pm 1.0	0.5
.0068	682	3.0	7.5	5.5	3.5 \pm 1.0	0.5
.0082	822	3.0	7.5	6.0	3.5 \pm 1.0	0.5
.01	103	3.0	7.5	6.0	3.5 \pm 1.0	0.5
.012	123	3.0	9.0	6.0	3.5 \pm 1.0	0.5
.015	153	3.0	9.0	6.0	3.5 \pm 1.0	0.5
.018	183	3.5	9.0	6.5	3.5 \pm 1.0	0.5
.022	223	3.5	9.0	6.5	3.5 \pm 1.0	0.5
.027	273	4.0	9.5	6.5	3.5 \pm 1.0	0.5
.033	333	4.0	9.5	6.5	3.5 \pm 1.0	0.5
.039	393	4.5	9.5	7.5	5.0 \pm 1.5	0.5
.047	473	4.5	9.5	7.5	5.0 \pm 1.5	0.5
.056	563	4.5	10.5	8.0	5.0 \pm 1.5	0.5
.068	683	4.5	10.5	8.0	5.0 \pm 1.5	0.5
.082	823	5.5	10.5	9.0	5.0 \pm 1.5	0.5
.1	104	5.5	10.5	9.0	5.0 \pm 1.5	0.5
.12	124	6.0	12.0	14.0	10.0 \pm 1.5	0.6
.15	154	6.0	10.0	14.0	10.0 \pm 1.5	0.6
.18	184	6.0	10.0	14.0	10.0 \pm 1.5	0.6
.22	224	6.0	10.0	14.0	10.0 \pm 1.5	0.6
.27	274	6.0	11.0	14.0	10.0 \pm 1.5	0.6
.33	334	6.0	12.0	14.0	10.0 \pm 1.5	0.6
.39	394	6.0	12.0	18.0	15.0 \pm 1.5	0.6
.47	474	6.0	12.0	18.0	15.0 \pm 1.5	0.6
.56	564	7.0	14.0	18.0	15.0 \pm 1.5	0.6
.68	684	7.0	14.0	18.0	15.0 \pm 1.5	0.6
.82	824	9.0	15.0	18.0	15.0 \pm 1.5	0.6
1.0	105	9.0	15.0	18.0	15.0 \pm 1.5	0.6
2.2	225	11.0	20.0	24.0	20.0 \pm 1.5	0.8

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250 Volt (125VAC) Series Dimensions (mm)

Cap μ f	Code	T	H	L	S	d
.01	103	6.0	10.0	14.0	10 \pm 1.5	0.6
.015	153	6.0	10.0	14.0	10 \pm 1.5	0.6
.022	223	6.0	10.0	14.0	10 \pm 1.5	0.6
.027	273	6.0	10.0	14.0	10 \pm 1.5	0.6
.033	333	6.0	10.0	14.0	10 \pm 1.5	0.6
.047	473	6.0	10.0	14.0	10 \pm 1.5	0.6
.068	683	6.0	10.0	14.0	10 \pm 1.5	0.6
.082	823	7.0	10.0	14.0	10 \pm 1.5	0.6
.1	104	7.0	10.0	14.0	10 \pm 1.5	0.6
.12	124	7.0	11.0	14.0	10 \pm 1.5	0.6
.15	154	7.0	11.0	18.0	15 \pm 1.5	0.6
.18	184	7.0	12.0	18.0	15 \pm 1.5	0.6
.22	224	7.0	12.0	18.0	15 \pm 1.5	0.6
.27	274	7.0	13.0	18.0	15 \pm 1.5	0.6
.33	334	7.0	13.0	18.0	15 \pm 1.5	0.6
.39	394	8.0	15.0	18.0	15 \pm 1.5	0.8
.47	474	8.0	15.0	24.0	20 \pm 1.5	0.8
.56	564	9.0	15.5	24.0	20 \pm 1.5	0.8
.68	684	9.0	15.5	24.0	20 \pm 1.5	0.8
.82	824	10.0	17.0	24.0	20 \pm 1.5	0.8
1.0	105	10.0	17.0	24.0	20 \pm 1.5	0.8
1.2	125	10.0	19.5	24.0	20 \pm 1.5	0.8
1.5	155	10.0	19.5	31.0	27.5 \pm 1.5	0.8
1.8	185	11.0	20.0	31.0	27.5 \pm 1.5	0.8
2.2	225	13.0	22.0	31.0	27.5 \pm 1.5	0.8
3.3	335	16.0	26.0	31.0	27.5 \pm 1.5	0.8
4.7	475	16.0	26.0	35.0	27.5 \pm 1.5	0.8
5.6	565	16.0	26.0	35.0	27.5 \pm 1.5	0.8

630 Volt (250VAC) Series Dimensions (mm)

Cap μ f	Code	T	H	L	S	d
.001	102	5.54	8.28	17.63	13.84 \pm 1.3	0.6
.0012	122	5.87	8.62	17.63	13.84 \pm 1.3	0.6
.0015	152	5.61	8.36	17.63	13.84 \pm 1.3	0.6
.0018	182	5.95	8.69	17.63	13.84 \pm 1.3	0.6
.0022	222	6.38	9.12	17.63	13.84 \pm 1.3	0.6
.0025	252	7.12	9.61	17.63	13.84 \pm 1.3	0.8
.0027	272	7.12	9.61	17.63	13.84 \pm 1.3	0.8
.003	302	6.38	9.55	17.63	13.84 \pm 1.3	0.8
.0033	332	6.38	9.55	17.63	13.84 \pm 1.3	0.8
.0039	392	6.76	9.94	17.63	13.84 \pm 1.3	0.8
.0047	472	7.20	10.39	17.63	13.84 \pm 1.3	0.8
.005	502	7.68	10.85	17.63	13.84 \pm 1.3	0.8
.0056	562	7.68	10.85	17.63	13.84 \pm 1.3	0.8
.0068	682	7.95	11.79	17.63	13.84 \pm 1.3	0.8
.0082	822	8.53	12.37	17.63	13.84 \pm 1.3	0.8
.01	103	6.00	10.00	14.00	10.00 \pm 1.5	0.6
.012	123	6.00	11.00	14.00	10.00 \pm 1.5	0.6
.015	153	6.50	11.50	14.00	10.00 \pm 1.5	0.6
.018	183	7.00	12.00	14.00	10.00 \pm 1.5	0.6
.022	223	7.00	12.50	14.00	10.00 \pm 1.5	0.6
.027	273	6.00	11.00	18.00	15.00 \pm 1.5	0.6
.033	333	7.00	12.00	18.00	15.00 \pm 1.5	0.6
.039	393	7.00	12.50	18.00	15.00 \pm 1.5	0.6
.047	473	7.50	12.50	18.00	15.00 \pm 1.5	0.6
.05	503	7.50	12.50	18.00	15.00 \pm 1.5	0.6
.056	563	8.50	14.50	18.00	15.00 \pm 1.5	0.6
.068	683	8.50	14.50	18.00	15.00 \pm 1.5	0.6
.082	823	9.00	15.50	18.00	15.00 \pm 1.5	0.8
.1	104	9.00	14.00	24.00	20.00 \pm 1.5	0.8
.12	124	10.00	17.00	24.00	20.00 \pm 1.5	0.8
.15	154	10.00	17.00	24.00	20.00 \pm 1.5	0.8
.18	184	11.00	20.00	24.00	20.00 \pm 1.5	0.8
.22	224	11.00	20.00	24.00	20.00 \pm 1.5	0.8
.25	254	11.00	20.00	24.00	20.00 \pm 1.5	0.8
.27	274	12.00	20.00	24.00	20.00 \pm 1.5	0.8
.33	334	11.00	20.00	24.00	27.50 \pm 1.5	0.8
.39	394	13.00	22.00	30.00	27.50 \pm 1.5	0.8
.47	474	13.00	22.00	30.00	27.50 \pm 1.5	0.8
.5	504	13.00	22.00	30.00	27.50 \pm 1.5	0.8
.56	564	14.00	23.00	31.00	27.50 \pm 1.5	0.8
.68	684	15.00	26.00	31.00	27.50 \pm 1.5	0.8
1.0	105	17.00	30.00	31.00	27.50 \pm 1.5	0.8
1.5	155	20.00	30.00	37.00	31.00 \pm 1.5	0.8
1.8	185	19.00	28.00	46.00	41.00 \pm 1.5	0.8
2.0	205	20.50	30.00	46.00	41.00 \pm 1.5	0.8
3.0	305	21.00	35.00	45.00	38.00 \pm 1.5	0.8

400 Volt (200VAC) Series Dimensions (mm)

Cap μ f	Code	T	H	L	S	d
.0047	472	6.0	10.0	14.0	10 \pm 1.5	0.6
.01	103	6.0	10.0	14.0	10 \pm 1.5	0.6
.015	153	6.0	10.0	14.0	10 \pm 1.5	0.6
.022	223	6.0	10.0	14.0	10 \pm 1.5	0.6
.033	333	6.0	10.0	14.0	10 \pm 1.5	0.6
.047	473	8.0	11.0	14.0	10 \pm 1.5	0.6
.056	563	8.0	13.0	14.0	10 \pm 1.5	0.6
.068	683	6.0	13.0	18.0	15 \pm 1.5	0.6
.082	823	6.0	13.0	18.0	15 \pm 1.5	0.6
.1	104	6.0	13.0	18.0	15 \pm 1.5	0.6
.12	124	7.0	14.0	18.0	15 \pm 1.5	0.6
.15	154	7.0	14.0	18.0	15 \pm 1.5	0.6
.18	184	8.0	16.0	18.0	15 \pm 1.5	0.8
.22	224	8.0	16.0	24.0	20 \pm 1.5	0.8
.27	274	9.0	16.0	24.0	20 \pm 1.5	0.8
.33	334	9.0	16.0	24.0	20 \pm 1.5	0.8
.39	394	9.5	17.0	24.0	20 \pm 1.5	0.8
.47	474	10.0	18.0	24.0	20 \pm 1.5	0.8
.56	564	10.5	18.0	30.0	27.5 \pm 1.5	0.8
.68	684	10.5	18.0	30.0	27.5 \pm 1.5	0.8
.82	824	12.0	22.0	30.0	27.5 \pm 1.5	0.8
1.0	105	12.0	22.0	30.0	27.5 \pm 1.5	0.8
1.5	155	15.0	24.5	30.0	26.5 \pm 1.5	0.8
2.0	205	18.0	26.5	30.0	26.5 \pm 1.5	0.8
3.0	305	19.0	28.5	37.0	31 \pm 1.5	0.8
4.0	405	23.5	32.0	37.0	31 \pm 1.5	0.8