



MKT 100 SERIES

Formerly MKT 1.60 series

INTRODUCTION:

The MKT 100 Series Metallized Polyester Film Capacitors cover a wide range of values and voltages. These capacitors also have good high frequency characteristics. In addition to some specific applications such as Blocking, By-passing and Coupling, this series is widely used in all General Purpose applications.

FEATURES:

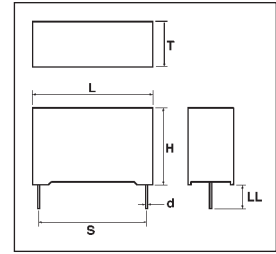
- Wide value and Voltage range
- Flame retardant case and potting
- Consistent dimensions and surface finish due to molded case construction
- Self healing capability

GENERAL SPECIFICATIONS:

Dissipation factor: ≤ 0.0150 at 10K Hz for capacitance $\leq 1.0 \mu F \leq 0.0100$ at 1 K Hz for capacitance $> 1.0 \mu F$
Insulation resistance: For nominal voltage $> 100 V$ DC, $\geq 30,000 M Ohms$ for $C \leq 0.33 \mu F$, $\geq 10,000$ seconds for $C > 0.33 \mu F$, For nominal voltage $\leq 100 V$ DC, $\geq 10,000 M Ohms$ for $C \leq 0.10 \mu F$, $\geq 1,000$ seconds for $C > 0.10 \mu F$ at a temperature of $25 \pm 5 ^\circ C$
Capacitance tolerance: $\pm 5\%$ (J), $\pm 10\%$ (K) and $\pm 20\%$ (M). **Voltage Test:** 1.6 times the rated voltage applied between terminals for 2 seconds at a temperature of $25 \pm 5 ^\circ C$
Temperature range: -55 to $100 ^\circ C$ with derating above $85 ^\circ C$ **Climatic category:** F M D

DIMENSIONS AND TOLERANCES:

"d" - 0.8 mm (0.032")
 "LL" - $6.0 \pm 1.0mm (0.24 \pm 0.04)$
 Tolerance on "s" $\pm 0.4mm (0.016)$



PULSE RISE TIME (dv/dt) Volts per μsec .

RATED VOLTAGE	LEAD SPACING mm (inches)			
	100(0.40)	150(0.60)	225(0.89)	275(1.08)
100	6	3	2	1
160	8	5	3	2
250	11	7	4	3
400	20	10	5.5	5
630	30	15	8	7
1000	60	25	15	10

LIFE TEST DETAILS:

Capacitors shall withstand 125% DC rated voltage or 100% AC rated voltage applied at $85 ^\circ C$ for 1000 hours. After the test:

1. Capacitance change shall remain within $\pm 5\%$.
2. Dissipation Factor shall be within 1.5 times the original limits.
3. Insulation Resistance shall be above 50% of the initial limits.
4. There shall be no remarkable change in the appearance and the marking shall remain legible.

Case Dimensions in Millimeters 100V • 160V • 250V • 400V • 630V • 1000V

Voltage Qa Value	100 V DC / 63 V AC				160 V DC / 90 V AC				250 V DC / 160 V AC				400 V DC / 200 V AC				630 V DC / 220 V AC				1000 V DC / 250 V AC			
	Dimension in Millimeters				Dimension in Millimeters				Dimension in Millimeters				Dimension in Millimeters				Dimension in Millimeters				Dimension in Millimeters			
	L	H	T	S	L	H	T	S	L	H	T	S	L	H	T	S	L	H	T	S	L	H	T	S
0.001																					13.0	9.0	4.0	10.0
0.0015																					13.0	9.0	4.0	10.0
0.0022																					13.0	9.0	4.0	10.0
0.0033																					13.0	9.0	4.0	10.0
0.0047																								
0.0068																					13.0	9.0	4.0	10.0
0.01																					13.0	9.0	4.0	10.0
0.015														13.0	9.0	4.0	10.0				13.0	11.0	5.0	15.0
0.022														13.0	9.0	4.0	10.0				13.0	12.0	6.0	10.0
0.033										13.0	9.0	4.0	10.0	13.0	11.0	5.0	10.0				18.0	11.0	5.0	15.0
0.047										13.0	9.0	4.0	10.0	18.0	11.0	5.0	15.0				18.0	12.0	6.0	15.0
0.068										13.0	9.0	4.0	10.0	18.0	11.0	5.0	15.0				18.0	13.5	7.5	15.0
0.1										13.0	9.0	4.0	10.0	18.0	11.0	5.0	15.0				18.0	13.5	7.5	15.0
0.15	13.0	9.0	4.0	10.0	13.0	9.0	4.0	10.0	18.0	11.0	5.0	15.0	18.0	12.0	6.0	15.0	26.5	15.0	6.0	22.5	26.5	15.0	6.0	22.5
0.22	13.0	11.0	5.0	10.0	13.0	11.0	5.0	10.0	18.0	11.0	5.0	15.0	26.5	15.0	6.0	22.5	26.5	17.0	8.5	22.5	32.0	20.0	11.0	27.5
0.33	18.0	11.0	5.0	15.0	18.0	11.0	5.0	15.0	18.0	12.0	6.0	15.0	26.5	16.0	7.0	22.5	32.0	20.0	11.0	27.5				
0.47	18.0	11.0	5.0	15.0	18.0	12.0	6.0	15.0	26.5	15.0	6.0	22.5	26.5	17.0	8.5	22.5	32.0	22.0	13.0	27.5				
0.68	18.0	12.0	6.0	15.0	18.0	13.5	7.5	15.0	26.5	16.0	7.0	22.5	32.0	17.0	9.0	27.5								
1.0	18.0	13.5	7.5	15.0	18.0	14.5	8.5	15.0	26.5	17.0	8.5	22.5	32.0	20.0	11.0	27.5								
1.5	26.5	16.0	7.0	22.5	26.5	17.0	8.5	22.5	32.0	17.0	9.0	27.5												
2.2	26.5	17.0	8.5	22.5	26.5	18.5	10.0	22.5	32.0	20.0	11.0	27.5												
3.3	26.5	18.5	10.0	22.5	32.0	20.0	11.0	27.5	32.0	22.0	13.0	27.5												
4.7	32.0	20.0	11.0	27.5	32.0	22.0	13.0	27.5																
6.8	32.0	22.0	13.0	27.5																				



MKT 100 SERIES CASE DIMENSIONS CONTINUED

Case Dimensions in Inches 100V • 160V• 250V• 400V• 630V• 1000V

Voltage Qa Value h uF	100 V DC / 63 V AC				160 V DC / 90 V AC				250 V DC / 160 V AC				400 V DC / 200 V AC				630 V DC / 220 V AC				1000 V DC / 250 V AC				
	Dimension h Inches				Dimension h Inches				Dimension h Inches				Dimension h Inches				Dimension h Inches				Dimension h Inches				
	L	H	T	S	L	H	T	S	L	H	T	S	L	H	T	S	L	H	T	S	L	H	T	S	
0.001																					0.512	0.354	0.157	0.394	
0.0015																					0.512	0.354	0.157	0.394	
0.0022																					0.512	0.354	0.157	0.394	
0.0033																					0.512	0.354	0.157	0.394	
0.0047																	0.512	0.354	0.157	0.394	0.512	0.433	0.197	0.394	
0.0068																0.512	0.354	0.157	0.394	0.512	0.472	0.236	0.394		
0.001																0.512	0.354	0.157	0.394	0.512	0.433	0.197	0.591		
0.015													0.512	0.354	0.157	0.394	0.512	0.433	0.197	0.394	0.709	0.433	0.197	0.591	
0.022													0.512	0.354	0.157	0.394	0.512	0.472	0.236	0.394	0.709	0.531	0.295	0.591	
0.033										0.512	0.354	0.157	0.394	0.512	0.433	0.197	0.394	0.709	0.433	0.197	0.591	1.043	0.591	0.236	0.886
0.047										0.512	0.354	0.157	0.394	0.709	0.433	0.197	0.591	0.709	0.472	0.236	0.591	1.043	0.591	0.236	0.886
0.068										0.512	0.354	0.157	0.394	0.709	0.433	0.197	0.591	0.709	0.531	0.295	0.591	1.043	0.630	0.276	0.886
0.1					0.512	0.354	0.157	0.394	0.709	0.433	0.197	0.591	0.709	0.472	0.236	0.591	1.043	0.591	0.236	0.886	1.043	0.728	0.394	0.886	
0.15	0.512	0.354	0.157	0.394	0.512	0.433	0.197	0.394	0.709	0.433	0.197	0.591	0.709	0.531	0.295	0.591	1.043	0.630	0.276	0.886	1.260	0.787	0.433	1.083	
0.22	0.512	0.433	0.197	0.394	0.512	0.433	0.197	0.394	0.709	0.433	0.197	0.591	1.043	0.591	0.236	0.886	1.043	0.669	0.335	0.886	1.260	0.866	0.512	1.083	
0.33	0.709	0.433	0.197	0.591	0.709	0.433	0.197	0.591	0.709	0.472	0.236	0.591	1.043	0.630	0.276	0.886	1.260	0.787	0.433	1.083					
0.47	0.709	0.433	0.197	0.591	0.709	0.472	0.236	0.591	1.043	0.591	0.236	0.886	1.043	0.669	0.335	0.886	1.260	0.866	0.512	1.083					
0.68	0.709	0.472	0.236	0.591	0.709	0.531	0.295	0.591	1.043	0.630	0.276	0.886	1.260	0.669	0.354	1.083									
1.0	0.709	0.531	0.295	0.591	0.709	0.571	0.335	0.591	1.043	0.669	0.335	0.886	1.260	0.787	0.433	1.083									
1.5	1.043	0.630	0.276	0.886	1.043	0.669	0.335	0.886	1.260	0.669	0.354	1.083													
2.2	1.043	0.669	0.335	0.886	1.043	0.728	0.394	0.886	1.260	0.787	0.433	1.083													
3.3	1.043	0.728	0.394	0.886	1.260	0.787	0.433	1.083	1.260	0.866	0.512	1.083													
4.7	1.260	0.787	0.433	1.083	1.260	0.866	0.512	1.083																	
6.8	1.260	0.866	0.512	1.083																					