

MKTD01 SERIES

Formerly MPD 1 series

INTRODUCTION:

The MKTD01 Series Metallized Polyester Film Capacitors cover a wide range of values and voltages. They are suitable for applications such as Blocking, By-passing and Coupling and are widely used in General communication equipment.

FEATURES:

- Wide value and Voltage range
- Self healing capability
- Flame retardant powder epoxy encapsulation
- Minimum overall dimensions due to dip coated construction

GENERAL SPECIFICATIONS:

Dissipation factor: < 0.0100 at 1 K Hz for capacitance ≤ 1.0 μF, < 0.0150 at 1 K Hz for capacitance > 1.0 μF **Insulation resistance:** For 100 VDC rated parts; ≥ 9,000 M Ohms for C ≤ 0.33 μF ≥ 3,000 seconds for C > 0.33 μF, at a temperature of 25 ± 5 °C, For 250 to 630 VDC rated parts; ≥ 15,000 M Ohms for C ≤ 0.33 μF, ≥ 5,000 seconds for C > 0.33 μF, at a temperature of 25 ± 5 °C.

Capacitance tolerance: ±5%(J), ±10%(K) and ±20%(M) (Special parts with close tolerance of ±1% and ±2% available on request) **Voltage Test :** 1.6 times the rated voltage applied between terminals for 2 seconds. at a temperature of 25 ± 5 °C

Temperature range: -55 to 85 °C **Climatic category:** F M F

LIFE TEST DETAILS:

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

1. Capacitance change shall remain within ±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.

DIMENSIONS AND TOLERANCES:

d - 0.6 mm (0.024")
for

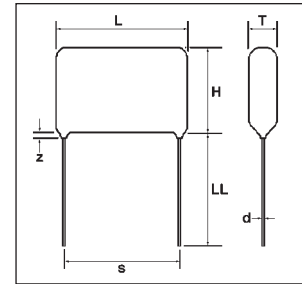
Lead Spacing "s" =
10.0 mm (0.40")
d - 0.8 mm (0.032")
for

Lead Spacing "s" >
10.0 mm (0.40")

z - 1.5mm (0.06")
max.

LL" - 20.0 mm min.(0.78")

Tolerance on "s" ± 1.0mm (0.04")

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

Rated Voltage	LEAD SPACING mm (inches)			
	10.0 (0.40)	15.0 (0.60)	22.5 (0.89)	27.0 (1.06)
100	6	3	2	1
250	11	7	4	3
400	20	10	5.5	5
630	30	15	8	7

MKTD01 SERIES CASE DIMENSIONS**Case Dimensions in Millimeters 100V • 250V • 400V • 630V**

Capacitance in μF	VOLTAGE DC/AC							
	100 V DC / 63 V AC				250 V DC / 160 V AC			
	Dimensions in Millimeters				Dimensions in Millimeters			
	L	H	T	S	L	H	T	S
0.01					12.5	8.5	4.5	10.0
0.015					12.5	9.0	4.5	10.0
0.022					12.5	9.0	4.5	10.0
0.033					12.5	9.0	4.5	10.0
0.047					12.5	9.5	5.0	10.0
0.068					12.5	9.5	5.0	10.0
0.1	12.5	9.5	5.0	10.0	12.5	10.0	5.5	10.0
0.15	12.5	10.0	5.0	10.0	18.0	10.5	5.5	15.0
0.22	12.5	10.0	5.5	10.0	18.0	11.5	6.5	15.0
0.33	18.0	10.5	5.5	15.0	18.0	12.5	7.0	15.0
0.47	18.0	11.5	6.0	15.0	26.0	12.5	7.0	22.5
0.68	18.0	12.0	6.5	15.0	26.0	14.5	8.0	22.5
1.0	18.0	14.0	7.5	15.0	26.0	16.0	9.0	22.5
1.5	26.0	14.0	7.5	22.5	31.0	17.0	9.5	27.0
2.2	26.0	16.0	9.0	22.5	31.0	19.0	11.5	27.0
3.3	26.0	19.0	11.0	22.5	31.0	23.0	14.0	27.0
4.7	31.0	23.0	12.0	27.0	31.0	27.0	16.5	27.0
6.8	31.0	25.0	14.0	27.0				

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

Capacitance in μF	VOLTAGE DC/AC							
	100 V DC / 63 V AC				250 V DC / 160 V AC			
	Dimensions in Inches				Dimensions in Inches			
	L	H	T	S	L	H	T	S
0.01					0.492	0.335	0.177	0.394
0.015					0.492	0.354	0.177	0.394
0.022					0.492	0.354	0.177	0.394
0.033					0.492	0.354	0.177	0.394
0.047					0.492	0.374	0.197	0.394
0.068					0.492	0.374	0.197	0.394
0.1	0.492	0.374	0.197	0.394	0.492	0.394	0.217	0.394
0.15	0.492	0.394	0.197	0.394	0.709	0.413	0.217	0.591
0.22	0.492	0.394	0.217	0.394	0.709	0.453	0.256	0.591
0.33	0.709	0.413	0.217	0.591	0.709	0.492	0.276	0.591
0.47	0.709	0.453	0.236	0.591	1.024	0.492	0.276	0.886
0.68	0.709	0.472	0.256	0.591	1.024	0.571	0.315	0.886
1.0	0.709	0.551	0.295	0.591	1.024	0.630	0.354	0.886
1.5	1.024	0.551	0.295	0.886	1.220	0.669	0.374	1.063
2.2	1.024	0.630	0.354	0.886	1.220	0.748	0.453	1.063
3.3	1.024	0.748	0.433	0.886	1.220	0.906	0.551	1.063
4.7	1.220	0.906	0.472	1.063	1.220	1.063	0.650	1.063
6.8	1.220	0.984	0.551	1.063				

Capacitance in μF	VOLTAGE DC/AC							
	400 V DC / 200 V AC				630 V DC / 220 V AC			
	Dimensions in Millimeters				Dimensions in Millimeters			
	L	H	T	S	L	H	T	S
0.01	12.5	9.0	4.5	10.0	12.5	9.0	4.5	10.0
0.015	12.5	9.5	4.5	10.0	12.5	9.5	5.0	10.0
0.022	12.5	9.5	5.0	10.0	12.5	10.5	6.0	10.0
0.033	12.5	10.5	5.5	10.0	18.0	11.0	6.0	15.0
0.047	12.5	10.5	6.0	10.0	18.0	11.5	6.5	15.0
0.068	18.0	10.5	6.0	15.0	18.0	12.5	7.0	15.0
0.1	18.0	11.5	6.5	15.0	26.0	13.0	7.0	22.5
0.15	26.0	12.5	6.0	22.5	26.0	14.0	8.5	22.5
0.22	26.0	13.5	7.0	22.5	26.0	16.5	10.0	22.5
0.33	26.0	15.5	8.5	22.5	31.0	17.5	10.5	27.0
0.47	26.0	18.0	9.5	22.5	31.0	19.5	12.0	27.0
0.68	31.0	17.5	10.0	27.0	31.0	22.5	15.0	27.0
1.0	31.0	20.0	12.0	27.0	31.0	27.5	19.0	27.0
1.5	31.0	23.5	13.5	27.0				
2.2	31.0	26.0	16.5	27.0				

Capacitance in μF	VOLTAGE DC/AC							
	400 V DC / 200 V AC				630 V DC / 220 V AC			
	Dimensions in Inches				Dimensions in Inches			
	L	H	T	S	L	H	T	S
0.01	0.492	0.354	0.177	0.394	0.492	0.354	0.177	0.394
0.015	0.492	0.374	0.177	0.394	0.492	0.374	0.197	0.394
0.022	0.492	0.374	0.197	0.394	0.492	0.413	0.236	0.394
0.033	0.492	0.413	0.217	0.394	0.709	0.433	0.236	0.591
0.047	0.492	0.413	0.236	0.394	0.709	0.453	0.256	0.591
0.068	0.709	0.413	0.236	0.591	0.709	0.492	0.276	0.591
0.1	0.709	0.453	0.256	0.591	1.024	0.512	0.276	0.886
0.15	1.024	0.492	0.236	0.886	1.024	0.551	0.335	0.886
0.22	1.024	0.531	0.276	0.886	1.024	0.650	0.394	0.886
0.33	1.024	0.610	0.335	0.886	1.220	0.689	0.413	1.063
0.47	1.024	0.709	0.374	0.886	1.220	0.768	0.472	1.063
0.68	1.220	0.689	0.394	1.063	1.220	0.886	0.591	1.063
1.0	1.220	0.787	0.472	1.063	1.220	1.083	0.748	1.063
1.5	1.220	0.925	0.531	1.063				
2.2	1.220	1.024	0.650	1.063				