

# PLASTIC FILM CAPACITORS

## MDDSA Series (Small Type Metallized Polyester Capacitors)

MDDSA series is the reduced size of conventional MDD type, light weight and high reliability metallized polyester film capacitors.

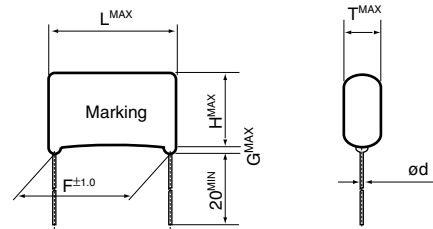
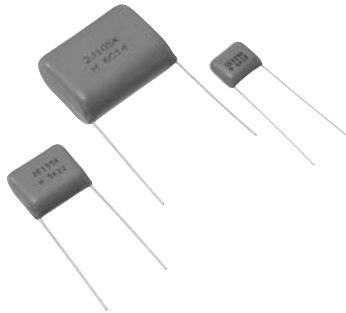
- The size is reduced by 40 to 50% of conventional MDD type.
- The capacitance range is extended from 0.01 $\mu$ F to 10 $\mu$ F.
- Humidity resistance is greatly improved through special production technique.
- Excellent in flame retardant property with outside coating of flame resistance epoxy resin.
- Tracking resistance is improved.
- For lead forming and taping, see page 106 and 107.

### Product Specifications

Items	Specifications	
Temperature range	-40°C ~ +85°C (+105°C, with derating over 85°C)	
Rated voltage	100 ~ 630 V.DC	
Capacitance tolerance	±5% (J), ±10% (K), ±20% (M)	
Dielectric dissipation factor	0.8% or less (20°C, 1KHz)	
Withstanding voltage	Between terminals	Rated voltage (V.DC) × 1.4 for one min
	Between terminal and outside coating	Rated voltage (V.DC) × 2.0 for 1 to 5 seconds
Insulation resistance	$C_r \leq 0.33\mu\text{F}$	7,500M $\Omega$ or more
	$C_r > 0.33\mu\text{F}$	2,500 / $C_r$ M $\Omega$ or more
Related standard	Subject to JIS C 5101-1 and JIS C 5101-2.	

$C_r$  : Capacitance (  $\mu$ F )

### Outline of drawings and dimensions



G : 1.0 mm when F Dimension is less than 7.5 mm.  
1.5 mm when F Dimension is more than 10 mm.

### Standard value and case size

(Unit : mm)

Capacitance		Rated voltage (Code)																			
		100V.DC (2A)					250V.DC (2E)					400V.DC (2G)					630V.DC (2J)				
$\mu$ F	Code	T	H	L	F	d	T	H	L	F	d	T	H	L	F	d	T	H	L	F	d
0.010	103	4.5	7.5	8.5	5.0	0.5	4.5	8.0	10.0	7.5	0.6	4.5	8.0	10.0	7.5	0.6	4.5	8.0	12.5	10.0	0.6
0.012	123	4.5	7.5	8.5	5.0	0.5	4.5	8.5	10.0	7.5	0.6	4.5	8.5	10.0	7.5	0.6	4.5	8.5	12.5	10.0	0.6
0.015	153	4.5	7.5	8.5	5.0	0.5	4.5	8.0	10.0	7.5	0.6	4.5	8.0	10.0	7.5	0.6	5.0	9.0	12.5	10.0	0.6
0.018	183	4.5	7.5	8.5	5.0	0.5	4.5	8.0	10.0	7.5	0.6	4.5	8.0	10.0	7.5	0.6	5.0	9.5	12.5	10.0	0.6
0.022	223	4.5	7.5	8.5	5.0	0.5	4.5	8.0	10.0	7.5	0.6	4.5	8.0	10.0	7.5	0.6	5.5	10.0	12.5	10.0	0.6
0.027	273	4.5	7.5	8.5	5.0	0.5	4.5	8.0	10.0	7.5	0.6	5.0	8.5	10.0	7.5	0.6	5.5	11.0	12.5	10.0	0.6
0.033	333	4.5	7.5	8.5	5.0	0.5	4.5	8.0	10.0	7.5	0.6	5.0	9.0	10.0	7.5	0.6	6.0	11.5	12.5	10.0	0.6
0.039	393	4.5	7.5	8.5	5.0	0.5	4.5	8.0	10.0	7.5	0.6	4.5	8.0	12.5	10.0	0.6	6.5	12.0	12.5	10.0	0.6
0.047	473	4.5	8.0	8.5	5.0	0.5	4.5	8.0	10.0	7.5	0.6	4.5	9.0	12.5	10.0	0.6	7.5	12.5	12.5	10.0	0.6
0.056	563	4.5	8.0	8.5	5.0	0.5	4.5	8.0	10.0	7.5	0.6	5.0	9.0	12.5	10.0	0.6	5.5	11.0	18.0	15.0	0.6
0.068	683	4.5	8.0	8.5	5.0	0.5	4.5	8.5	10.0	7.5	0.6	5.5	9.5	12.5	10.0	0.6	6.0	11.5	18.0	15.0	0.6
0.082	823	4.5	8.0	8.5	5.0	0.5	4.5	9.0	10.0	7.5	0.6	5.5	10.5	12.5	10.0	0.6	6.0	13.0	18.0	15.0	0.6
0.10	104	4.5	8.0	8.5	5.0	0.5	5.0	9.0	10.0	7.5	0.6	6.0	11.0	12.5	10.0	0.6	6.5	13.5	18.0	15.0	0.6
0.12	124	4.5	8.0	10.0	7.5	0.6	5.5	9.5	10.0	7.5	0.6	5.0	10.0	18.0	15.0	0.6	7.5	14.0	18.0	15.0	0.8
0.15	154	4.5	8.5	10.0	7.5	0.6	6.0	10.0	10.0	7.5	0.6	5.0	10.5	18.0	15.0	0.6	8.0	15.0	18.0	15.0	0.8
0.18	184	4.5	8.5	10.0	7.5	0.6	5.0	10.0	12.5	10.0	0.6	5.5	11.0	18.0	15.0	0.6	9.0	15.5	18.0	15.0	0.8
0.22	224	5.0	8.5	10.0	7.5	0.6	5.5	10.5	12.5	10.0	0.6	6.0	12.0	18.0	15.0	0.6	9.5	16.5	18.0	15.0	0.8
0.27	274	5.0	9.0	10.0	7.5	0.6	6.0	11.0	12.5	10.0	0.6	6.5	12.5	18.0	15.0	0.8	7.5	17.5	25.5	22.5	0.8
0.33	334	5.5	9.5	10.0	7.5	0.6	6.5	11.5	12.5	10.0	0.6	7.0	12.5	18.0	15.0	0.8	8.0	18.5	25.5	22.5	0.8
0.39	394	6.0	9.5	10.0	7.5	0.6	5.0	12.0	18.0	15.0	0.6	7.0	14.0	18.0	15.0	0.8	9.0	19.0	25.5	22.5	0.8
0.47	474	6.5	10.0	10.0	7.5	0.6	5.5	12.0	18.0	15.0	0.6	8.0	14.5	18.0	15.0	0.8	10.0	20.0	25.5	22.5	0.8
0.56	564	5.5	10.5	12.5	10.0	0.6	6.0	12.5	18.0	15.0	0.6	7.0	14.0	25.5	22.5	0.8	11.0	21.0	25.5	22.5	0.8
0.68	684	5.5	11.0	12.5	10.0	0.6	6.5	13.0	18.0	15.0	0.8	7.5	14.5	25.5	22.5	0.8	12.0	22.5	25.5	22.5	0.8
0.82	824	6.0	11.5	12.5	10.0	0.6	7.0	14.0	18.0	15.0	0.8	7.5	16.0	25.5	22.5	0.8	12.0	22.5	30.5	27.5	0.8
1.0	105	6.5	12.0	12.5	10.0	0.6	7.5	14.5	18.0	15.0	0.8	8.5	17.0	25.5	22.5	0.8	13.5	24.0	30.5	27.5	0.8
1.2	125	5.5	12.0	18.0	15.0	0.8	8.5	15.0	18.0	15.0	0.8	9.5	18.0	25.5	22.5	0.8	15.0	25.0	30.5	27.5	0.8
1.5	155	6.0	12.5	18.0	15.0	0.8	9.0	16.0	18.0	15.0	0.8	9.0	18.0	30.5	27.5	0.8	16.5	27.0	30.5	27.5	0.8
1.8	185	6.5	13.0	18.0	15.0	0.8	8.0	15.0	25.5	22.5	0.8	10.0	19.0	30.5	27.5	0.8	18.5	29.0	30.5	27.5	0.8
2.2	225	7.0	14.0	18.0	15.0	0.8	9.0	16.0	25.5	22.5	0.8	11.0	20.0	30.5	27.5	0.8	21.5	31.5	30.5	27.5	0.8
2.7	275	8.0	14.5	18.0	15.0	0.8	10.0	17.0	25.5	22.5	0.8										
3.3	335	8.5	16.0	18.0	15.0	0.8	11.0	18.0	25.5	22.5	0.8										
3.9	395	7.5	14.5	25.5	22.5	0.8	11.5	20.0	25.5	22.5	0.8										
4.7	475	7.5	16.5	25.5	22.5	0.8	12.5	21.0	25.5	22.5	0.8										
5.6	565	8.5	17.0	25.5	22.5	0.8	12.0	21.0	30.5	27.5	0.8										
6.8	685	9.5	18.5	25.5	22.5	0.8	14.0	22.0	30.5	27.5	0.8										
8.2	825	11.0	20.0	25.5	22.5	0.8	15.0	23.0	30.5	27.5	0.8										
10.0	106	11.5	21.0	25.5	22.5	0.8	16.5	25.0	30.5	27.5	0.8										

Product symbol : (Example) MDDSA Series 100V.DC 0.47 $\mu$ F ±10%

**MDDSA-2A-474 K**

— Capacitance tolerance code  
— Capacitance code  
— Rated voltage code  
Type of series

For taping, ask us for further information.