

# AC & Pulse Metallized Polypropylene Film Capacitors

Series Code  
18, 30

## MPP/MPP

### Main Application

SMPS, motor control circuits, deflection circuit in TV sets (fly back) and monitors electronic ballast, snubber and SCR commutating circuits and applications with high voltage and high current.

### Construction

Series constructed, low inductive wound cell of metallized polypropylene film as electrodes coated with flame retardant epoxy resin or encased in a flame retardant box.

### Climatic Category

40/100/56

### Rated and Maximum Operating Temperature

85°C and 100°C

### Applicable Specification

IEC 384-16

### Capacitance Value

0.001µF-0.15 µF

### Capacitance Tolerance

± 5%, ± 10%, ± 20%

### Insulation Resistance

Minimum Insulation Resistance  $R_{IS}$   
(or) time constant  $T = C_R \times R_{IS}$   
500VDC for  $V_R > 500V$   
at 25° C, relative humidity ≤70%

### Rated Voltage

1000VDC-2000VDC

### Voltage Proof

Between terminals: 1.6 times of rated voltage for 2 sec.

### Tan δ

Frequency (kHz)	$C_R < 0.1\mu F$	$0.1\mu F < C_R \leq 1\mu F$
At 1	0.05%	0.05%
At 10	0.08%	0.08%
At 100	0.25%	-

### Life Test Conditions

(Loading at elevated temperature)

Loaded at 1.25 times of rated DC voltage at 85° C for 1000 hours.

### After the Test

$\Delta C/C \leq 5\%$  of initial value.

Increase of Tan δ:  $\leq 0.003$

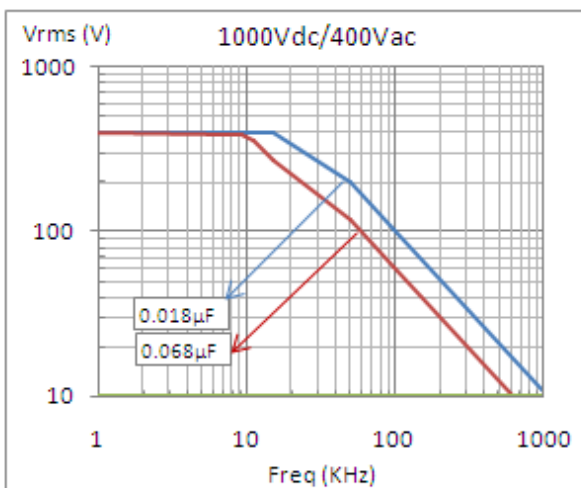
Insulation resistance:  $\geq 50\%$  of the initial value mentioned in IR chart.

$C_R \leq 0.33\mu F$   
100 GΩ

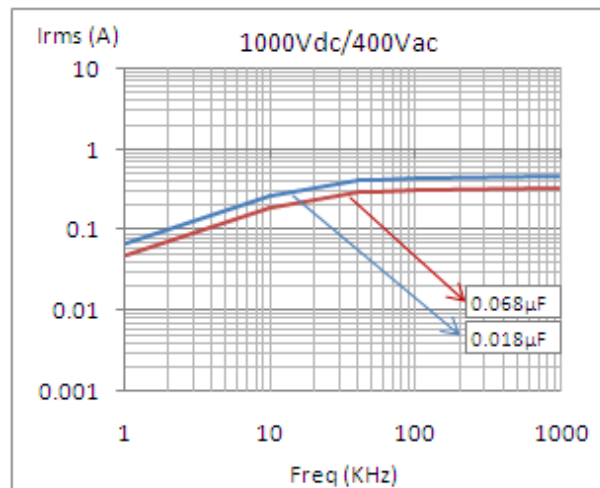
$C_R > 0.33\mu F$   
30000s

## Derating graph for AC & Pulse Metallized Polypropylene Film Capacitors (MPP/MPP)

Max. Voltage (Vrms) vs. Frequency  
(Sinusoidal Waveform at  $T \leq 55^\circ C$ )



Max. Current (Irms) vs. Frequency  
(Sinusoidal Waveform at  $T \leq 55^\circ C$ )

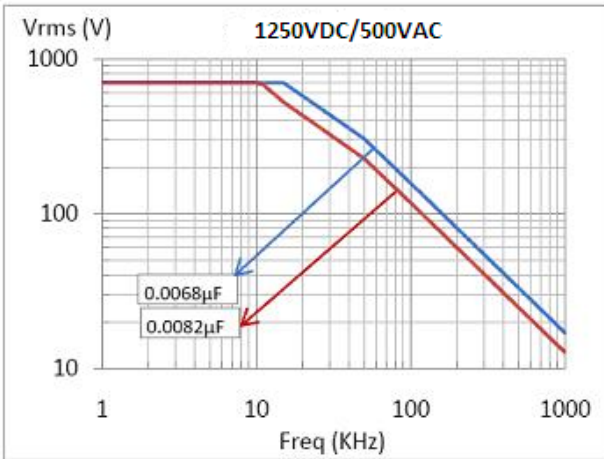


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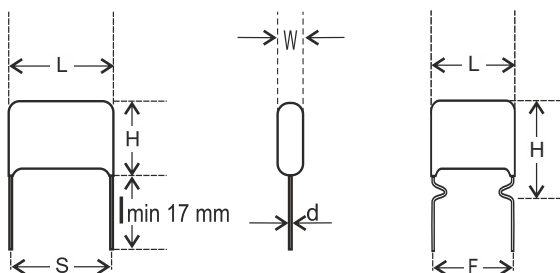
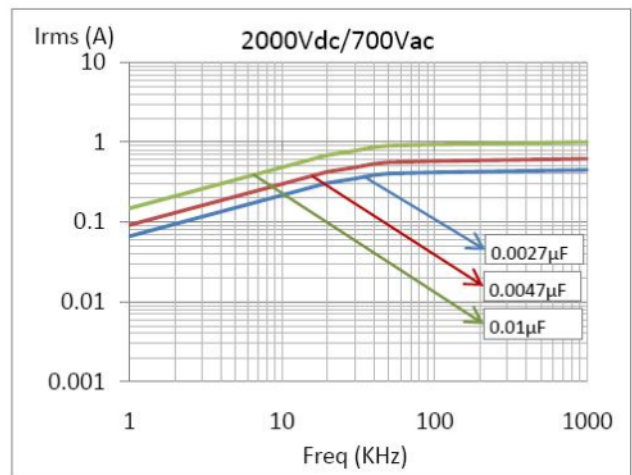
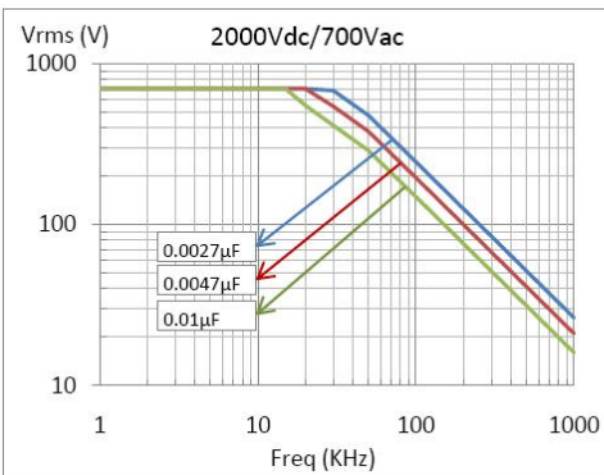
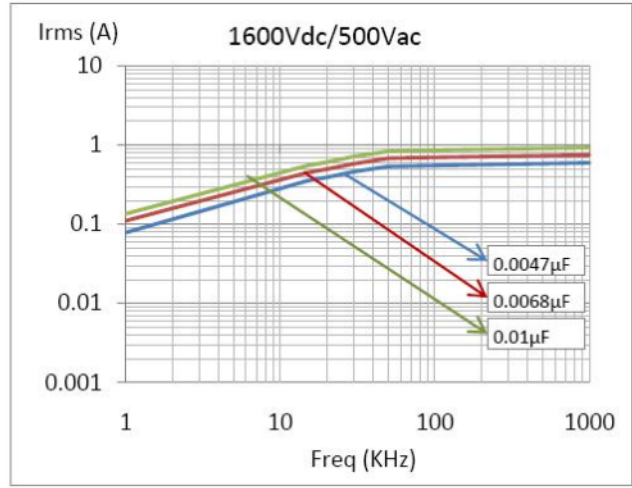
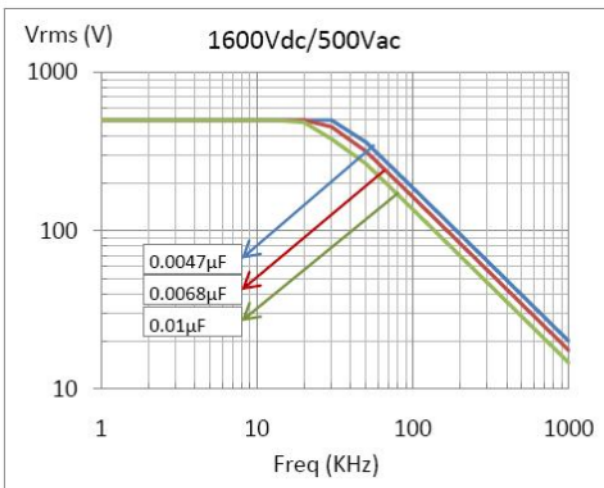
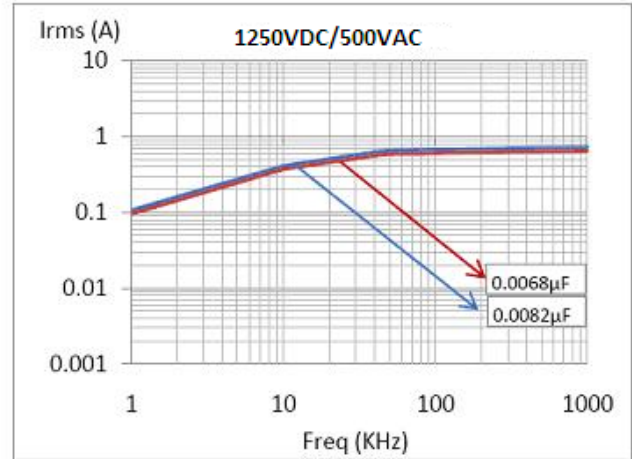


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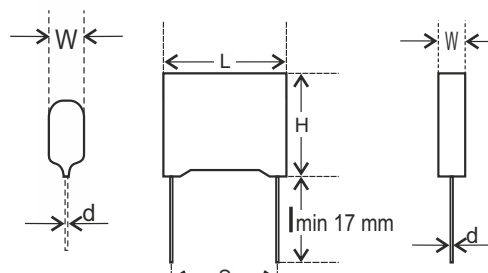
Max. Voltage (Vrms) vs. Frequency  
(Sinusoidal Waveform at  $T \leq 55^\circ\text{C}$ )



Max. Current (Irms) vs. Frequency  
(Sinusoidal Waveform at  $T \leq 55^\circ\text{C}$ )



Dip Type



Box Type

Ordering code and packing units overleaf.

# AC & Pulse Metallized Polypropylene Film Capacitors



MPP/MPP • Series Code 18, 30

## Ordering code and packing units: AC & Pulse Metallized Polypropylene Film Capacitor (MPP/MPP) Dip Type • Series Code 18

Rated Voltage	Rated Cap. (µF)	Dimensions (mm)						DV/DT V/µs	Wt. g	Ordering code	Packing units Bulk
		W (max)	H (max)	L (max)	d ±0.05	S ±0.5	F ±0.5				
1000VDC	0.018	6.5	11.5	19	0.8	15.0	15.0	3000		18 183 +3A* <sup>^</sup>	250
400VAC	0.068	11.5	19.0	19	0.8	15.0	15.0	3000		18 683 +3A* <sup>^</sup>	250
	0.1	13.0	21.0	19	0.8	15.0	15.0	3000		18 104 +3A* <sup>^</sup>	250
1250VDC	0.0082	5.5	11.5	19	0.8	15.0	15.0	3300	1.4	18 822 +3B* <sup>^</sup>	1000
500VAC	0.033	10.5	16.5	19	0.8	15.0	15.0	3300	2.6	18 333 +3B* <sup>^</sup>	1000
	0.047	10.5	17.0	19	0.8	15.0	15.0	3300	2.6	18 473 +3B* <sup>^</sup>	1000
	0.033	6.5	15.5	27	0.8	22.5	22.5	2100	2.5	18 333 +3B* <sup>^</sup>	400
	0.082	10.5	19.0	27	0.8	22.5	22.5	2100	5.0	18 823 +3B* <sup>^</sup>	400
	0.15	13.0	21.0	27	0.8	22.5	22.5	2100	5.2	18 154 +3B* <sup>^</sup>	200
1600VDC	0.0022	5.5	11.5	19	0.8	15.0	15.0	4500	1.1	18 222 +3C* <sup>^</sup>	1000
500VAC	0.01	8.0	14.0	19	0.8	15.0	15.0	4500	2.0	18 103 +3C* <sup>^</sup>	1000
	0.022	10.5	16.5	19	0.8	15.0	15.0	4500	2.8	18 223 +3C* <sup>^</sup>	1000
	0.056	10.5	19.0	27	0.8	22.5	22.5	3000	5.0	18 563 +3C* <sup>^</sup>	400
	0.12	13.0	22.0	27	0.8	22.5	22.5	3000	5.2	18 124 +3C* <sup>^</sup>	200
2000VDC	0.001	5.5	11.5	19	0.8	15.0	15.0	9500	1.1	18 102 +3D* <sup>^</sup>	1000
700VAC	0.01	8.0	14.0	19	0.8	15.0	15.0	9500	2.0	18 103 +3D* <sup>^</sup>	1000
	0.027	11.0	20.0	19	0.8	15.0	15.0	9500	2.6	18 273 +3D* <sup>^</sup>	1000
	0.0047	6.5	15.5	27	0.8	22.5	22.5	3500	2.6	18 472 +3D* <sup>^</sup>	400
	0.01	6.5	15.5	27	0.8	22.5	22.5	3500	2.6	18 103 +3D* <sup>^</sup>	400
	0.047	10.5	19.0	27	0.8	22.5	22.5	3500	5.0	18 473 +3D* <sup>^</sup>	200

## Ordering code and packing units: AC & Pulse Metallized Polypropylene Film Capacitor (MPP/MPP) Box Type • Series Code 30

Rated Voltage	Rated Cap. (µF)	Dimensions (mm)						DV/DT V/µs	Wt. g	Ordering code	Packing units Bulk
		W ±0.5	H ±0.5	L ±0.5	d ±0.05	S ±0.5	F ±0.5				
1000VDC	0.018	5.0	11.0	18.0	0.8	15.0	15.0	3000		30 183 +3A* <sup>^</sup>	500
400VAC	0.068	8.5	16.0	18.0	0.8	15.0	15.0	3000		30 683 +3A* <sup>^</sup>	500
	0.1	10.0	16.0	18.0	0.8	15.0	15.0	3000		30 104 +3A* <sup>^</sup>	500
1250VDC	0.0082	5.0	10.8	18.0	0.8	15.0	15.0	3300	1.1	30 822 +3B* <sup>^</sup>	1000
500VAC	0.022	7.5	13.5	18.0	0.8	15.0	15.0	3300	2.0	30 223 +3B* <sup>^</sup>	1000
	0.039	10.0	16.0	18.0	0.8	15.0	15.0	3300	2.8	30 393 +3B* <sup>^</sup>	1000
	0.068	8.5	17.0	26.5	0.8	22.5	22.5	2100	4.5	30 683 +3B* <sup>^</sup>	400
	0.1	10.0	18.5	26.5	0.8	22.5	22.5	2100	5.4	30 104 +3B* <sup>^</sup>	200
1600VDC	0.0022	5.0	10.8	18.0	0.8	15.0	15.0	4500	1.1	30 222 +3C* <sup>^</sup>	1000
500VAC	0.01	7.5	13.5	18.0	0.8	15.0	15.0	4500	2.0	30 103 +3C* <sup>^</sup>	1000
	0.022	10.0	16.0	18.0	0.8	15.0	15.0	4500	2.8	30 223 +3C* <sup>^</sup>	1000
	0.047	8.5	17.0	26.5	0.8	22.5	22.5	3000	4.5	30 473 +3C* <sup>^</sup>	400
	0.068	10.0	18.5	26.5	0.8	22.5	22.5	3000	5.4	30 683 +3C* <sup>^</sup>	200
2000VDC	0.001	5.0	10.8	18.0	0.8	15.0	15.0	9500	1.1	30 102 +3D* <sup>^</sup>	1000
700VAC	0.0082	7.5	13.5	18.0	0.8	15.0	15.0	9500	2.0	30 822 +3D* <sup>^</sup>	1000
	0.018	10.0	16.0	18.0	0.8	15.0	15.0	9500	2.8	30 183 +3D* <sup>^</sup>	1000
	0.047	10.0	18.5	26.5	0.8	22.5	22.5	3500	5.4	30 473 +3D* <sup>^</sup>	200

Note: For more details please contact [info@dekielectronics.com](mailto:info@dekielectronics.com)