

AC & Pulse Metallized Polypropylene Film Capacitors

Series Code
05, 29

PP/MMPP Series

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, polypropylene film, aluminum foil and metallized polypropylene film as internal 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

IEC384-16, IEC384-17

Capacitance Value

0.0001μF-0.068 μF

Capacitance Tolerance

±2%, ±5%, ±10%

Rated Voltage

1000VDC-2000VDC

Insulation Resistance

Minimum Insulation Resistance R_{IS}
(or) time constant $T = C_R \times R_{IS}$
500VDC for $V_R > 500V$
temp 20°C, relative humidity ≤ 70%)

$C_R \leq 0.33\mu F$
100 GΩ

$C_R > 0.33\mu F$
30000 s

Voltage Proof

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

Tan δ

Frequency (kHz)	$C_R < 0.1\mu F$	$0.1\mu F \leq C_R \leq 1\mu F$	$C_R > 1\mu F$
At 1	0.05%	0.08%	0.10%
At 10	0.10%	0.15%	-
At 100	0.30%	0.50%	-

Life Test Conditions

(Loading at elevated temperature)

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

After the test

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

Increase of Tan δ: ≤ 0.003

Insulation resistance: ≥ 50% of the initial value mentioned in IR chart.

Life Test Conditions (AC)

(Loading at elevated temperature)

Loaded at 1.1 times of rated AC voltage at 70° C for 1000 hours.

After the test:

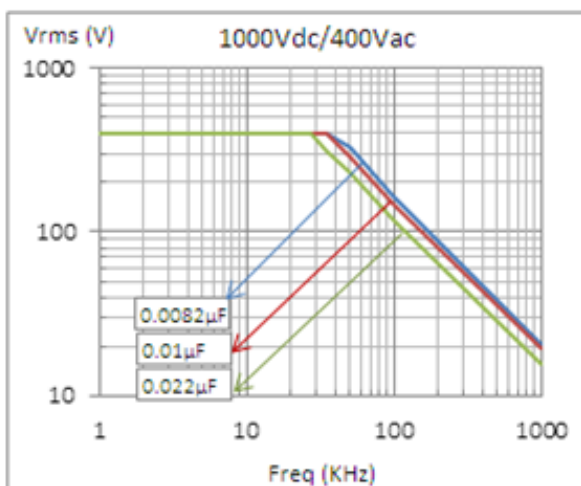
$\Delta C/C \leq 10\%$ of initial value.

Increase of Tan δ: ≤ 0.005, ≤ $C_R 1\mu F$

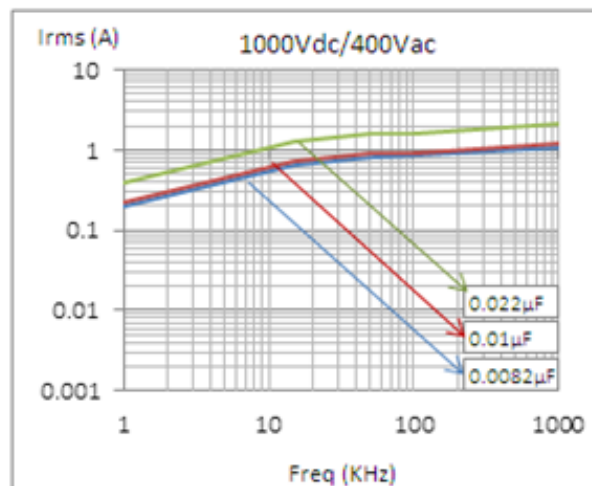
Insulation resistance: ≥ 50% of the initial value mentioned in IR chart.

Derating graph for AC & Pulse Metallized Polypropylene Film Capacitors (PP/MMPP Series)

Max. Voltage (Vrms) vs. Frequency
(Sinusoidal Waveform at $T \leq 85^\circ C$)



Max. Current (Irms) vs. Frequency
(Sinusoidal Waveform at $T \leq 85^\circ C$)

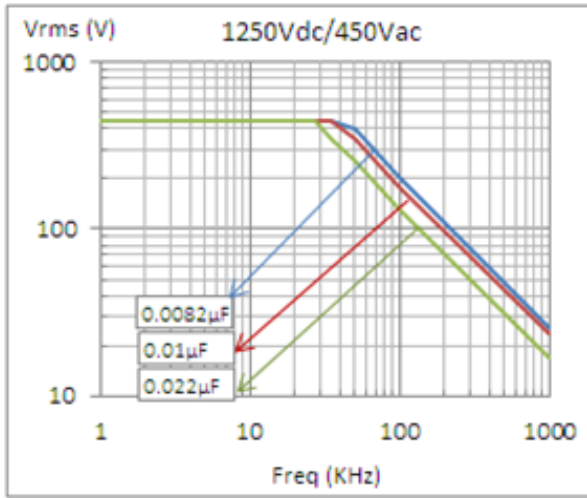


AC & Pulse Metallized Polypropylene Film Capacitors

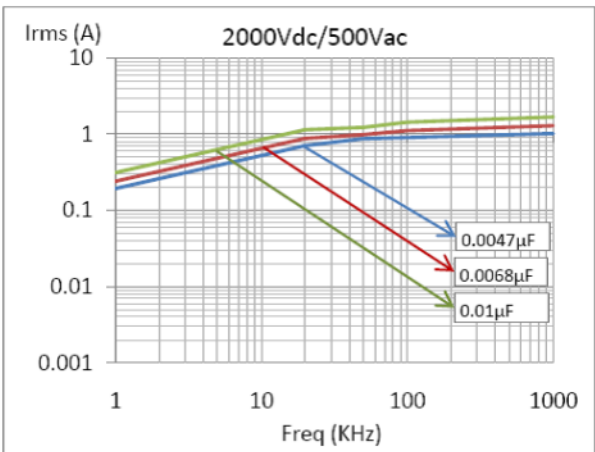
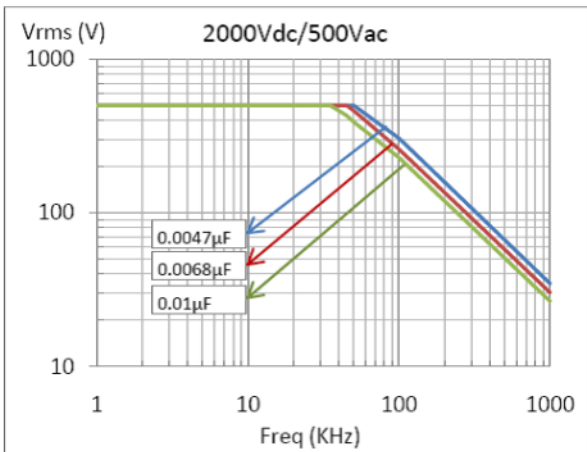
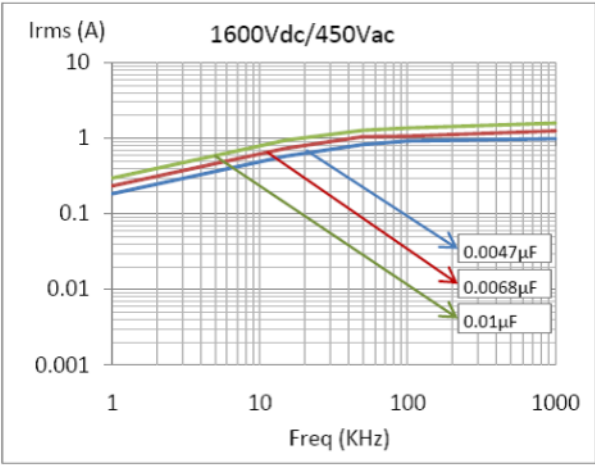
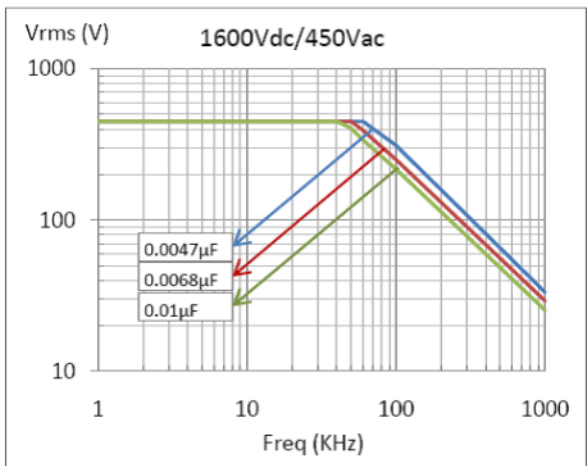
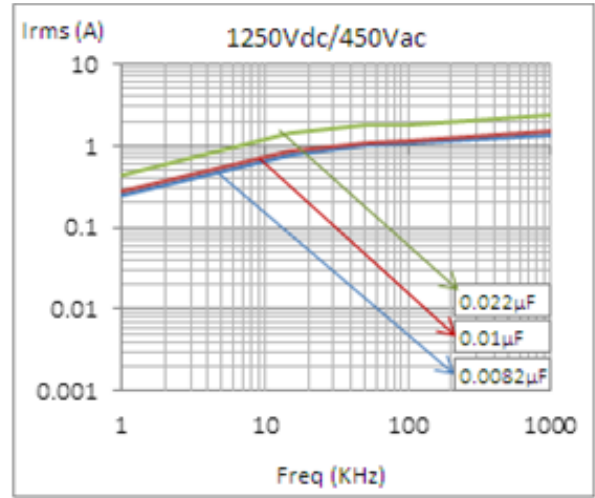
PP/MMPP Series • Series Code 05, 29



Max. Voltage (Vrms) vs. Frequency
(Sinusoidal Waveform at $T \leq 85^\circ\text{C}$)



Max. Current (Irms) vs. Frequency
(Sinusoidal Waveform at $T \leq 85^\circ\text{C}$)



AC & Pulse Metallized Polypropylene Film Capacitors

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Ordering code and packaging unit: AC & Pulse Metallized Polypropylene Film Capacitors (PP/MMPP Series) Dip Type • Series Code 05

Rated Voltage	Rated Cap. (µF)	Dimensions (mm)						DV/DT V/µs	Wt. g	Ordering code	Packing units	
		W max.	H max.	L max.	d ±0.05	S ±0.75	F ±0.75				Ammo	Bulk
1000VDC	0.0033	5	10	19	0.8	15.0	15.0	28000	1.1	05 332 +3A [^]	1100	1000
400VAC	0.01	6	11	19	0.8	15.0	15.0	28000	1.5	05 103 +3A [^]	1100	1000
	0.027	8	15	19	0.8	15.0	15.0	28000	3.5	05 273 +3A [^]	700	1000
	0.015	5	12	27	0.8	22.5	22.5	11000	2.4	05 153 +3A [^]	650	400
	0.047	8	15	27	0.8	22.5	22.5	11000	4.2	05 473 +3A [^]	500	400
	0.068	10	16	27	0.8	22.5	22.5	11000	5.3	05 683 +3A [^]	-	200
1250VDC	0.0022	5	10	19	0.8	15.0	15.0	30000	1.1	05 222 +3B [^]	1100	1000
450VAC	0.0047	5	10	19	0.8	15.0	15.0	30000	1.1	05 472 +3B [^]	1100	1000
	0.0082	6	12	19	0.8	15.0	15.0	30000	1.5	05 822 +3B [^]	1100	1000
	0.0082	5	12	27	0.8	22.5	22.5	11000	2.2	05 822 +3B [^]	650	400
	0.01	5	12	27	0.8	22.5	22.5	11000	2.3	05 103 +3B [^]	650	400
	0.033	8	15	27	0.8	22.5	22.5	11000	4.1	05 333 +3B [^]	500	400
1600VDC	0.001	5	10	19	0.8	15.0	15.0	34000	1.1	05 102 +3C [^]	1100	1000
450VAC	0.0033	6	13	19	0.8	15.0	15.0	34000	1.5	05 332 +3C [^]	1100	1000
	0.0068	8	15	19	0.8	15.0	15.0	34000	3.0	05 682 +3C [^]	700	1000
	0.0056	6	12	27	0.8	22.5	22.5	11000	2.4	05 562 +3C [^]	650	400
	0.01	7	13	27	0.8	22.5	22.5	11000	2.9	05 103 +3C [^]	650	400
	0.022	10	16	27	0.8	22.5	22.5	11000	4.7	05 223 +3C [^]	-	200
2000VDC	0.0001	4	9	19	0.8	15.0	15.0	54000	1.1	05 101 +3D [^]	1100	1000
500VAC	0.001	6	12	19	0.8	15.0	15.0	54000	1.5	05 102 +3D [^]	1100	1000
	0.0027	7	13	19	0.8	15.0	15.0	54000	2.4	05 272 +3D [^]	900	1000
	0.0027	5	12	27	0.8	22.5	22.5	11000	2.2	05 272 +3D [^]	650	400
	0.0068	7	14	27	0.8	22.5	22.5	11000	3.1	05 682 +3D [^]	650	400
	0.012	10	20	27	0.8	22.5	22.5	11000	4.0	05 123 +3D [^]	500	400

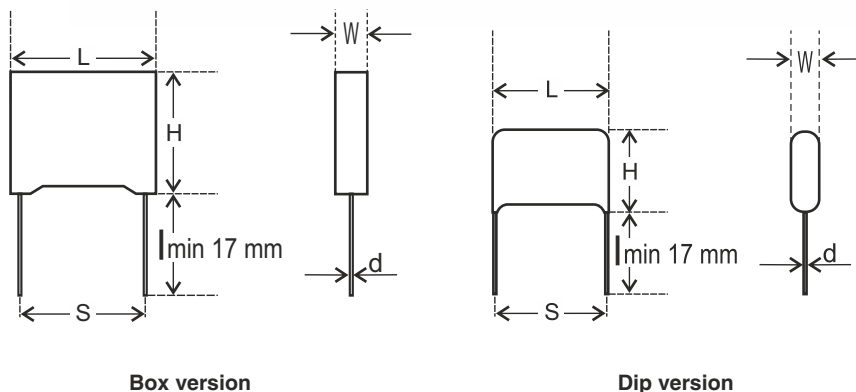
AC & Pulse Metallized Polypropylene Film Capacitors



PP/MMPP Series • Series Code 05, 29

Ordering code and packaging unit: AC & Pulse Metallized Polypropylene Film Capacitors
(PP/MMPP Series) Box Type • Series Code 29

Rated Voltage	Rated Cap. (µF)	Dimensions (mm)						DV/DT V/µs	Wt. g	Ordering code	Packing units	
		W ±0.5	H ±0.5	L ±0.5	d ±0.05	S ±0.75	F ±0.75				Ammo	Bulk
1000VDC	0.0033	5.0	10.8	18.0	0.8	15.0	15.0	28000	1.1	29 332 +3A [^]	1100	1000
400VAC	0.01	6.0	12.0	18.0	0.8	15.0	15.0	28000	1.5	29 103 +3A [^]	1100	1000
	0.027	10.0	16.0	18.0	0.8	15.0	15.0	28000	3.5	29 273 +3A [^]	700	1000
	0.015	6.0	15.0	26.5	0.8	22.5	22.5	11000	2.4	29 153 +3A [^]	650	400
	0.033	7.0	16.0	26.5	0.8	22.5	22.5	11000	3.5	29 333 +3A [^]	650	400
	0.056	10.0	18.5	26.5	0.8	22.5	22.5	11000	4.7	29 563 +3A [^]	500	400
1250VDC	0.0022	5.0	10.8	18.0	0.8	15.0	15.0	30000	1.1	29 222 +3B [^]	1100	1000
450VAC	0.0047	7.5	13.5	18.0	0.8	15.0	15.0	30000	1.9	29 472 +3B [^]	1100	1000
	0.0082	6.0	15.0	26.5	0.8	15.0	15.0	30000	2.2	29 822 +3B [^]	650	400
	0.01	6.0	15.0	26.5	0.8	22.5	22.5	11000	2.3	29 103 +3B [^]	650	400
	0.022	8.5	17.0	26.5	0.8	22.5	22.5	11000	3.3	29 223 +3B [^]	650	400
	0.033	10.0	18.5	26.5	0.8	22.5	22.5	11000	4.1	29 333 +3B [^]	500	400
1600VDC	0.001	5.0	10.8	18.0	0.8	15.0	15.0	34000	1.1	29 102 +3C [^]	1100	1000
450VAC	0.0033	7.5	13.5	18.0	0.8	15.0	15.0	34000	2.1	29 332 +3C [^]	1100	1000
	0.0068	10.0	16.0	18.0	0.8	15.0	15.0	34000	3	29 682 +3C [^]	700	1000
	0.0056	6.0	15.0	26.5	0.8	22.5	22.5	34000	2.4	29 562 +3C [^]	650	400
	0.01	6.0	15.0	26.5	0.8	22.5	22.5	11000	2.9	29 103 +3C [^]	650	400
	0.022	10.0	18.5	26.5	0.8	22.5	22.5	11000	4.7	29 223 +3C [^]	-	200
2000VDC	0.0001	5.0	10.8	18.0	0.8	15.0	15.0	11000	1.1	29 101 +3D [^]	1100	1000
500VAC	0.001	6.0	11.9	19.0	0.8	15.0	15.0	54000	1.5	29 102 +3D [^]	1100	1000
	0.0027	6.0	15.0	26.5	0.8	15.0	15.0	54000	2.2	29 272 +3D [^]	650	400
	0.0033	6.0	15.0	26.5	0.8	22.5	22.5	11000	2.3	29 332 +3D [^]	650	400
	0.0068	8.5	17.0	26.5	0.8	22.5	22.5	11000	3.1	29 682 +3D [^]	650	400
	0.01	10.0	18.5	26.5	0.8	22.5	22.5	11000	3.7	29 103 +3D [^]	500	400



Note: For more details please contact info@dekielectronics.com