

Plain Polyester Film Capacitors

Non-Inductive

Main Application

Blocking, bypassing, filtering, coupling and decoupling, interference suppression in low voltage application, low pulse application.

Construction

Film/foil inductive type construction with aluminium foil as electrode and polyester (PET) film as dielectric coated with flame retardant epoxy resin or encased in flame retardant box.

Climatic Category

40/125/56

Maximum Operating Temperature

125° C

Applicable Specification

IEC 384-11

Capacitance Value

0.001µF-0.47µF

Capacitance Tolerance

±5%, ±10%

Insulation Resistance

Minimum Insulation Resistance R_{IS}

(or) time constant $T = C_R \times R_{IS}$

(at 25° C, relative humidity ≤70%)

V_R

≤100 V DC

≥250 V DC

Rated Voltage

100VDC-1000VDC

Voltage Proof

Between terminal 2 times of rated voltage for 2 sec.

Tan δ

0.8% (maximum) at 1 kHz.

Life Test Conditions

(Loading at elevated temperature)

Loaded at 1.5 times of rated voltage at 85° C for 1000 hours.

After the test

$\Delta c/c$: ≤ 5% of initial value.

Change in Tan δ: ≤ 0.01 or 1.2 times the value measured before the test, whichever is higher.

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

$C_R \leq 0.1 \mu F$

30 GΩ

100 GΩ

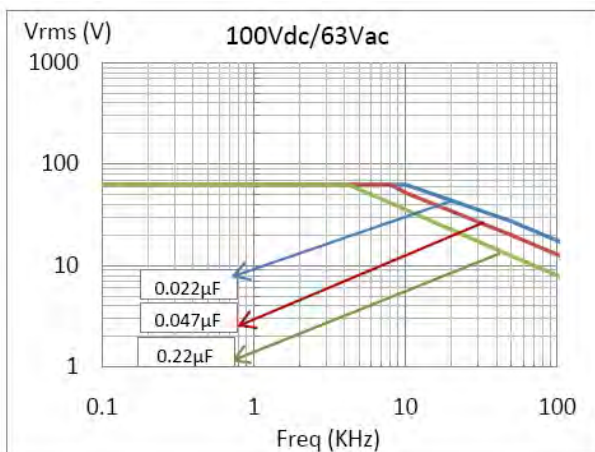
$C_R > 0.1 \mu F$

10000 s

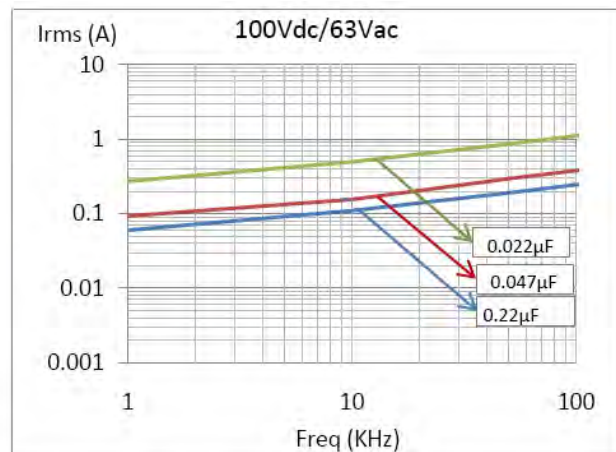
10000 s

Derating Graph for Plain Polyester Film Capacitors (Non-Inductive)

Max. Voltage (Vrms) vs. Frequency
(Sinusoidal Waveform at T ≤ 85° C)



Max. Current (Irms) vs. Frequency
(Sinusoidal Waveform at T ≤ 85° C)

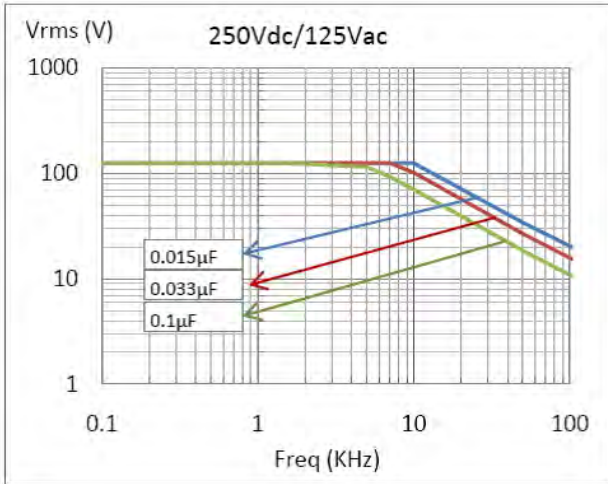


Plain Polyester Film Capacitors

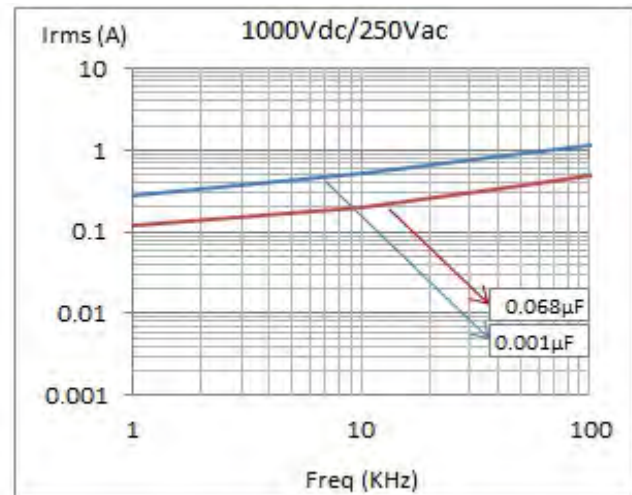
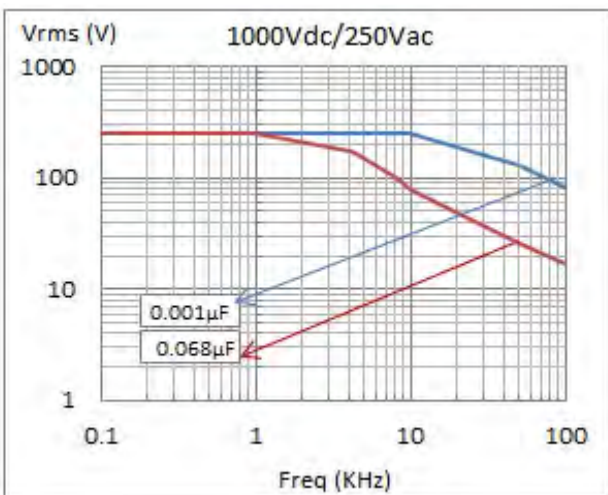
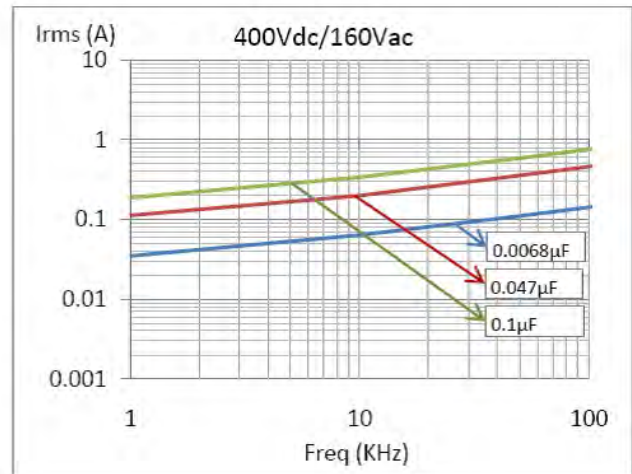
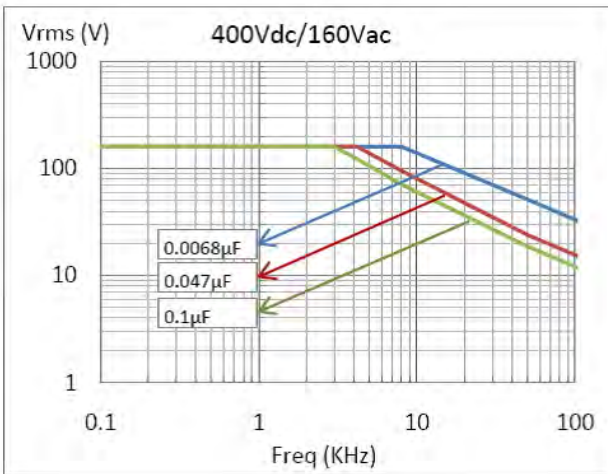
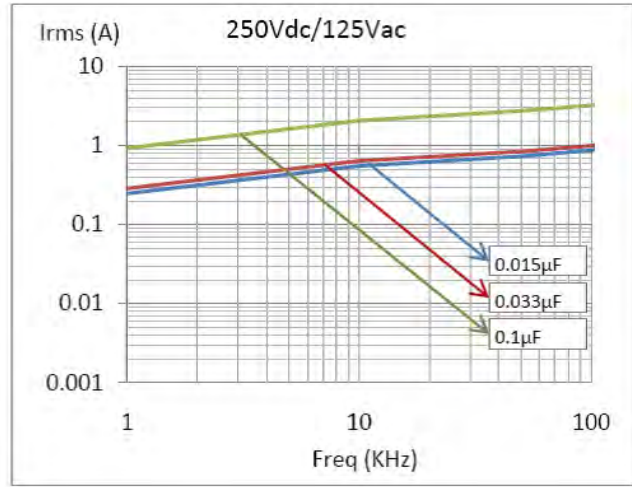
Non-Inductive • Series Code 25, 31



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



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



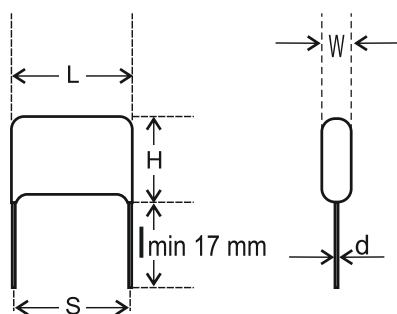
Plain Polyester Film Capacitors

Non-Inductive • Series Code 25, 31



Ordering code and packing units: Plain Polyester Film Capacitors
(Non-inductive) • Dip Type • Series Code 25

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 ±1.0	F ±0.5				Ammo	Bulk
100 VDC	0.015	4.5	9.5	14	0.6	10.0	10	10000	0.4	25 153 +2A [^]	2000	500
	0.022	5.5	10.0	14	0.6	10.0	10	10000	0.6	25 223 +2A [^]	2000	500
	0.033	6.0	10.5	14	0.6	10.0	10	10000	0.7	25 333 +2A [^]	2000	500
	0.047	7.0	11.5	14	0.6	10.0	10	10000	0.9	25 473 +2A [^]	2000	500
	0.1	7.5	13.0	19	0.8	15.0	15	10000	1.7	25 104 +2A [^]	2000	500
	0.22	7.5	15.5	27	0.8	22.5	-	10000	3.2	25 224 +2A [^]	1000	250
	0.33	9.0	17.0	27	0.8	22.5	-	10000	4.4	25 334 +2A [^]	500	250
	0.47	11.0	19.0	27	0.8	22.5	-	10000	6.0	25 474 +2A [^]	500	250
250 VDC	0.01	5.0	9.5	14	0.6	10.0	10	10000	0.5	25 103 +2E [^]	2000	500
	0.015	5.5	10.0	14	0.6	10.0	10	10000	0.6	25 153 +2E [^]	2000	500
	0.022	6.5	11.0	14	0.6	10.0	10	10000	0.8	25 223 +2E [^]	2000	500
	0.033	5.5	11.0	19	0.8	15.0	15	10000	1.1	25 333 +2E [^]	2000	250
	0.047	7.0	12.5	19	0.8	15.0	15	10000	1.4	25 473 +2E [^]	2000	250
	0.1	7.5	15.0	27	0.8	22.5	-	10000	2.7	25 104 +2E [^]	1000	250
	0.22	10	18.0	27	0.8	22.5	-	10000	4.5	25 224 +2E [^]	500	250
	0.33	10.5	19.5	32	0.8	27.5	-	10000	6.3	25 334 +2E [^]	500	250
400 VDC	0.0068	6.5	12.0	14	0.6	10.0	10	10000	0.5	25 682 +2G [^]	2000	500
	0.01	6.0	10.5	14	0.6	10.0	10	10000	0.7	25 103 +2G [^]	2000	500
	0.015	6.5	12.5	19	0.6	15.0	15	10000	0.9	25 153 +2G [^]	2000	250
	0.022	7.5	13.5	19	0.8	15.0	15	10000	1.2	25 223 +2G [^]	2000	250
	0.033	7.5	16.0	19	0.8	15.0	15	10000	1.6	25 333 +2G [^]	2000	250
	0.039	8.5	14.0	19	0.8	15.0	15	10000	1.8	25 393 +2G [^]	2000	250
	0.047	9.0	16.0	19	0.8	15.0	15	10000	2.1	25 473 +2G [^]	1000	250
	0.1	11.0	19.0	19	0.8	15.0	15	10000	3.8	25 104 +2G [^]	500	250
630 VDC	0.0047	6.0	10.5	14	0.6	10.0	10	10000	0.7	25 472 +2J [^]	2000	500
	0.0068	7.0	11.5	14	0.6	10.0	10	10000	0.9	25 682 +2J [^]	2000	500
	0.01	6.5	13.0	19	0.8	15.0	10	10000	1.2	25 103 +2J [^]	2000	500
	0.015	7.5	13.0	19	0.8	15.0	15	10000	1.5	25 153 +2J [^]	2000	250
	0.022	7.5	14.5	19	0.8	15.0	15	10000	2.0	25 223 +2J [^]	1000	250
	0.033	7.5	15.5	27	0.8	22.5	-	10000	2.8	25 333 +2J [^]	1000	250
	0.047	9.0	17.0	27	0.8	22.5	-	10000	3.5	25 473 +2J [^]	500	250
	0.1	11.5	20.5	32	0.8	27.5	-	10000	6.2	25 104 +2J [^]	500	250



Plain Polyester Film Capacitors

Non-Inductive • Series Code 25, 31



Ordering code and packing units: Plain Polyester Film Capacitors
(Non-inductive) • Box Type • Series Code 31

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 ±0.5	S ±0.5	F ±0.5				Ammo	Bulk
100VDC	0.001	5.0	11.0	13.0	0.6	10.0	10.0	10000	1.50	31 102 + 2A *^	-	500
	0.0022	5.0	11.0	13.0	0.6	10.0	10.0	10000	1.50	31 222 + 2A *^	-	500
	0.0047	5.0	11.0	13.0	0.6	10.0	10.0	10000	1.50	31 472 + 2A *^	-	500
	0.01	6.0	12.0	13.0	0.6	10.0	10.0	10000	1.80	31 103 + 2A *^	-	500
	0.047	6.0	12.0	13.0	0.6	10.0	10.0	10000	2.00	31 473 + 2A *^	-	500
	0.068	6.0	12.0	18.0	0.8	15.0	15.0	10000	2.70	31 683 + 2A *^	-	250
	0.22	7.0	16.0	26.5	0.8	22.5	22.5	10000	5.89	31 224 + 2A *^	-	250
	0.47	9.0	18.0	32.0	0.8	27.5	27.5	10000	10.5	31 474 + 2A *^	-	250
250VDC	0.001	5.0	11.0	13.0	0.6	10.0	10.0	10000	1.50	31 102 + 2E *^	-	500
	0.0022	5.0	11.0	13.0	0.6	10.0	10.0	10000	1.50	31 222 + 2E *^	-	500
	0.0047	5.0	11.0	13.0	0.6	10.0	10.0	10000	1.50	31 472 + 2E *^	-	500
	0.01	6.0	12.0	13.0	0.6	10.0	10.0	10000	1.80	31 103 + 2E *^	-	500
	0.047	6.0	12.0	13.0	0.6	10.0	10.0	10000	2.00	31 473 + 2E *^	-	500
	0.068	6.0	12.0	18.0	0.8	15.0	15.0	10000	2.70	31 683 + 2E *^	-	250
	0.22	7.0	16.0	26.5	0.8	22.5	22.5	10000	5.89	31 224 + 2E *^	-	250
	0.47	9.0	18.0	32.0	0.8	27.5	27.5	10000	10.5	31 474 + 2E *^	-	250
400VDC	0.001	5.0	11.0	13.0	0.6	10.0	10.0	10000	1.50	31 102 + 2G *^	-	500
	0.0022	5.0	11.0	13.0	0.6	10.0	10.0	10000	1.50	31 222 + 2G *^	-	500
	0.0047	5.0	11.0	13.0	0.6	10.0	10.0	10000	1.50	31 472 + 2G *^	-	500
	0.068	6.0	12.0	18.0	0.8	15.0	15.0	10000	2.70	31 683 + 2G *^	-	250
	0.1	8.5	14.5	18.0	0.8	15.0	15.0	10000	6.14	31 104 + 2G *^	-	250
	0.22	8.5	17.0	26.5	0.8	22.5	22.5	10000	7.95	31 224 + 2G *^	-	250
	0.47	11	20.0	32.0	0.8	27.5	27.5	10000	14.84	31 474 + 2G *^	-	250
	630VDC	0.001	5.0	11.0	13.0	0.6	10.0	10.0	10000	1.50	31 102 + 2J *^	-
0.0022		5.0	11.0	13.0	0.6	10.0	10.0	10000	1.50	31 222 + 2J *^	-	500
0.0047		5.0	11.0	13.0	0.6	10.0	10.0	10000	1.50	31 472 + 2J *^	-	500
0.01		6.0	12.0	13.0	0.6	10.0	10.0	10000	1.90	31 103 + 2J *^	-	500
0.047		8.5	14.5	18.0	0.8	15.0	15.0	10000	4.48	31 473 + 2J *^	-	250
0.1		8.5	17.0	26.5	0.8	22.5	22.5	10000	7.60	31 104 + 2J *^	-	250
0.22		11	20.0	32.0	0.8	27.5	27.5	10000	14.10	31 224 + 2J *^	-	250
1000VDC	0.001	6.0	12.0	13.0	0.6	10.0	10.0	10000	1.50	31 102 + 3A *^	-	500
	0.068	12.0	22.0	26.0	0.8	22.5	22.5	10000	7.67	31 683 + 3A *^	-	250

