KRISHNONICS CAPACITORS

PLAIN POLYESTER FILM CAPACITORS

(Inductive)

MAIN APPLICATION

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

CONSTRUCTION

Film / foil inductive type construction with aluminum foil as electrode and polyester (PET) film as dielectric coated with flame

CLIMATIC CATEGORY

400/100/56

APPLICABLE SPECIFICATION

IEC 384/11, IEC 68

CAPICITANCE VALUE

±5% +± 10%

VOLTAGE PROOF

Between terminals: 2 times of rated voltage for 2 seconds

INSULATION RESISTANCE

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

V_R	$C_R \leq 0.33\ \mu F$	$C_R \leq 0.33\ \mu F$
≤ 100 V DC	30,000 MΩ	10,000 s
≤ 250 V DC	30,000 MΩ	10,000 s

TAN δ

1.0% (maximum) at 1 kHz.

LIFETEST CONDITIONS

(Loading at elevated temperature)
Loaded at 1.5 times of rated voltage 85° C or 1.5 times of category voltage at 100°C for 1000 hours

After the test:
c/c ≤ 5% of initial value.
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.

APPROVALS

Capacitors are tested as per IEC 384-11

Rated Voltage	Rated Cap (μfd)	Maximum Dimensions (mm)					
		W	H	T	S ± 0.5	F ± 0.8/-0.2	D ± 0.05
63V DC	0.1	9.0	14.0	4.5	7.0	5.0	0.5
100 V DC	0.001	6.0	11.5	3.5	4.0	5.0	0.5
	0.0015	6.0	11.5	3.5	4.0	5.0	0.5
	0.0022	6.0	11.5	3.5	4.0	5.0	0.5
	0.0027	6.5	11.5	3.5	4.0	5.0	0.5
	0.0033	6.0	11.5	3.5	4.0	5.0	0.5
	0.0039	6.0	11.5	3.5	4.0	5.0	0.5
	0.0047	6.0	11.5	3.5	4.0	5.0	0.5
	0.0056	6.0	11.5	3.5	4.0	5.0	0.5
	0.0068	6.0	11.5	3.5	4.0	5.0	0.5
	0.0091	6.5	11.5	3.5	4.0	5.0	0.5
	0.01	6.5	11.5	3.5	4.0	5.0	0.5
	0.015	6.5	11.5	3.5	4.0	5.0	0.5
	0.022	6.5	13.0	3.5	4.5	5.0	0.5
	0.027	6.5	13.0	4.5	5.0	5.0	0.5
	0.033	6.5	13.0	4.5	5.0	5.0	0.5
	0.039	8.5	13.0	4.5	5.5	5.0	0.5
	0.047	8.5	13.0	4.5	5.5	5.0	0.5
	0.056	9	13.0	4.5	6.0	5.0	0.5
	0.068	9	14.0	5.0	7.0	5.0	0.5
	0.082	10	14.0	5.5	7.0	5.0	0.5
	0.1	10	14.0	5.5	7.0	5.0	0.5
	0.15	11	15.0	6.0	7.5	5.0	0.5
	0.22	11	17.0	6.0	8.5	-	0.5
	0.47	15	21.0	8.0	11.5	-	0.5
250 V DC	0.001	6.0	11.5	3.5	4.0	5.0	0.5
	0.0015	6.0	11.5	3.5	4.0	5.0	0.5
	0.0022	6.0	11.5	3.5	4.0	5.0	0.5
	0.0027	6.5	11.5	3.5	4.0	5.0	0.5
	0.0033	6.0	11.5	3.5	4.0	5.0	0.5
	0.0047	6.0	11.5	3.5	4.0	5.0	0.5
	0.01	7.5	13.0	4.0	5.0	5.0	0.5
	0.015	8.0	13.0	4.5	5.5	5.0	0.5
	0.022	9.0	13.0	4.5	6.0	5.0	0.5
	0.033	9.5	13.0	5.0	7.0	5.0	0.5
	0.047	11.0	14.0	6.0	7.0	7.5	0.5
	0.1	13.0	18.0	6.5	9.0	-	0.5
400 V DC	0.001	6.0	11.5	3.5	4.0	5.0	0.5
	0.0015	6.0	11.5	3.5	4.0	5.0	0.5
	0.0022	6.0	11.5	3.5	4.0	5.0	0.5
	0.0033	6.5	11.5	4.0	4.0	5.0	0.5
	0.0047	7.0	11.5	4.0	5.0	5.0	0.5
	0.0056	8.0	11.5	4.0	5.5	5.0	0.5
	0.01	8.5	12.0	4.5	6.5	5.0	0.5
	0.015	9.5	13.0	5.0	7.0	5.0	0.5
	0.022	10.0	14.0	5.5	7.0	5.0	0.5
	0.033	11.0	15.0	5.5	7.0	7.5	0.5
	0.047	12.0	15.0	7.0	7.0	-	0.5
	0.056	13.0	15.0	8.0	7.5	-	0.5
	0.1	15.0	18.0	8.0	11.0	-	0.5
630 V DC	0.001	6.0	11.5	3.5	4.0	5.0	0.5
	0.0015	6.0	11.5	3.5	4.0	5.0	0.5
	0.0022	6.0	11.5	3.5	4.0	5.0	0.5
	0.0033	8.5	15.0	4.0	5.0	5.0	0.5
	0.0047	8.5	15.0	4.5	5.0	5.0	0.5
	0.0068	9.0	15.0	4.5	5.5	5.0	0.5
	0.01	10.0	15.0	5.0	7.5	7.5	0.5
	0.015	11.0	15.0	7.0	7.5	-	0.5
	0.022	13.0	15.0	7.0	8.5	-	0.5
	0.033	13.0	15.0	8.0	7.5	-	0.5
1000 V DC	0.001	6.5	12.0	4.0	4.0	5.0	0.5
	0.0022	7.5	12.0	4.0	5.0	5.0	0.5
	0.0033	9.0	14.0	5.0	6.0	5.0	0.5
	0.0047	10.0	14.0	5.5	6.0	5.0	0.5
	0.0068	11.0	14.0	6.0	5.5	5.0	0.5

Note: These are most popular values. Other values in the range are available on request. For dimension please refer to the closest highest value

AQL AND INSPECTION LEVEL

1. Inspection level and AQLs are selected from ISO-2859 / IS 2500 or IEC – 410. Sampling plan is single sampling for normal inspection.

2. Symbols used: IL = Inspection level (ISO-2859/IS-2500/IEC – 410)
AQL = acceptable quality level

NO	ITEM		PERFORMANCE REQUIREMENTS	TEST METHOD	I.L.	A.Q.C
1	VISUAL INSPECTION Marking	Rated capacitance Rated voltage Tolerance Trade mark	Marking should be legible There shall be no	Visual inspection -do-	General inspection level II	1.0%
	Mechanical Failure	Lead wire broken Insufficient coating	mechanical failure			
2	DIMENSION	Should confirm to the specification chart	As specified in the data sheet	Gauging	Special inspection level S-1	2.5%
3	ELECTRICAL PROPETIES					
	Voltage Proof	Between termination As per relevant specification	No break down or flash over of applicant	Test voltage and duration of level 1	General Inspection	0.1%
	Capacitance	Within specified tolerance	Measuring frequency 1 kHz			
	Tangent of loss angle	As per relevant specification	Measuring frequency 1 kHz			
	Insulation Resistance	As per relevant specification	As per method in the specification			