KRISHNONICS CAPACITORS

METALIZED POLYESTER FILM CAPACITORS
7.5 mm Pitch

MAIN APPLICATION
Blocking, bypassing, filtering, timing, coupling and decoupling, interference suppression in low voltage applications, low pulse operations

CONSTRUCTION
Low inductive cell for metalized polyester film coated with flame retardant epoxy resin with tinned steel wire as leads

CLIMATIC CATEGORY
55/100/56

CAPITANCE VALUE, RATED VOLTAGE (DC)
Refer Dimension Chart

CAPITANCE TOLERANCE
±5%, ± 10%, ± 20%

VOLTAGE PROOF
Between terminals: 1.6 times of rated voltage.

TANδ (DISSIPATION FACTOR) AT 20^{O} C

Frequency KHz	C_R < 0.1 mfd	0.1 mfd <C_R≤1 mfd	C_R >1 mfd
At 1	≤ 0.8%	≤ 0.8%	1.0%
At 10	≤ 1.5%	≤ 1.5%	
At 100	≤ 3.0%	≤ 3.0%	

LIFE TEST CONDITIONS
(Loading at elevated temperature)
Loaded at 1.25 times rated voltage at 85^{O}C or 1.25 Times of category voltage at 100^{O}C for 1000 hours
After the test
Δc/c: ≤ 5% of initial value.
Tan δ ≤ 0.003 C_R ≤1 μF; ≤ 0.002, C_R > 1 μF

INSULATION RESISTANCE AT 20^{O}C

V_R	V_{TEST}	C≤0.33 mfd	0.33mfd<C≤1.0mfd
50V DC	10 V DC	≥15,000 MΩ	≥ 5000 secs (MΩ X mfd)
63V DC	10 V DC	≥15,000 MΩ	≥ 5000 secs (MΩ X mfd)
100V DC	100 V DC	≥15,000 MΩ	≥ 5000 secs (MΩ X mfd)
250V DC	100 V DC	≥30,000MΩ	≥ 10000 secs (MΩ X mfd)
400 V DC	100 V DC	≥30,000MΩ	≥ 10000 secs (MΩ X mfd)
>500 V DC	500 V DC	≥30,000MΩ	≥ 10000 secs (MΩ X mfd)

Rated Voltage	Rated Cap (μfd)	Maximum Dimensions in mm W	H	S ± 0.5	F ± 0.8/-0.2	D ± 0.05
63V	0.1	3.5	6.5	10.5	7.5	0.6
	0.15	3.5	6.5	10.5	7.5	0.6
	0.22	3.5	6.5	10.5	7.5	0.6
	0.33	4.0	9.0	10.5	7.5	0.6
	0.47	5.0	11.0	10.5	7.5	0.6
	0.68	5.0	11.0	10.5	7.5	0.6
	1.0	6.0	12.0	10.5	7.5	0.6
100 V	0.033	3.5	6.5	10.5	7.5	0.6
	0.047	3.5	6.5	10.5	7.5	0.6
	0.068	3.5	6.5	10.5	7.5	0.6
	0.1	4.0	9.0	10.5	7.5	0.6
	0.15	4.0	9.0	10.5	7.5	0.6
	0.22	4.0	9.0	10.5	7.5	0.6
	0.33	5.0	11.0	10.5	7.5	0.6
	0.47	6.0	12.0	10.5	7.5	0.6
250 V	0.01	3.5	6.5	10.5	7.5	0.6
	0.015	3.5	6.5	10.5	7.5	0.6
	0.022	3.5	6.5	10.5	7.5	0.6
	0.033	4.0	9.0	10.5	7.5	0.6
	0.047	4.0	9.0	10.5	7.5	0.6
	0.068	5.0	11.0	10.5	7.5	0.6
	0.1	5.0	11.0	10.5	7.5	0.6
	0.15	6.0	12.0	10.5	7.5	0.6
	0.22	6.0	12.0	10.5	7.5	0.6
400 V	0.0047	3.5	6.5	10.5	7.5	0.6
	0.0068	3.5	6.5	10.5	7.5	0.6
	0.01	4.0	9.0	10.5	7.5	0.6
	0.015	4.0	9.0	10.5	7.5	0.6
	0.022	5.0	11.0	10.5	7.5	0.6
	0.033	5.0	11.0	10.5	7.5	0.6
	0.047	4.0	9.0	10.5	7.5	0.6
630 V	0.001	3.5	6.5	10.5	7.5	0.6
	0.0015	3.5	6.5	10.5	7.5	0.6
	0.0022	3.5	6.5	10.5	7.5	0.5
	0.0033	3.5	6.5	10.5	7.5	0.6
	0.0047	4.0	9.0	10.5	7.5	0.6
	0.0068	4.0	9.0	10.5	7.5	0.6
	0.01	5.0	11.0	10.5	7.5	0.6
	0.015	6.0	12.0	10.5	7.5	0.6
	0.022	6.0	12.0	10.5	7.5	0.6

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

KRISHNONICS LTD.

METALIZED POLYESTER FILM CAPACITORS
10 – 27.5 mm Pitch

MAIN APPLICATION

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

CONSTRUCTION (POWDER COATED TYPE)

Low inductive cell for metallised polyester film coated with flame retardant epoxy resin with tinned steel wire as leads

CLIMATIC CATEGORY

40/85/21

APPLICABLE SPECIFICATION

IEC 384-2, IEC 68

CAPITANCE VALUE, RATED VOLTAGE (DC)

Refer Dimension Chart

CAPITANCE TOLERANCE

±5%, ± 10%

VOLTAGE PROOF

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

TANδ (DISSIPATION FACTOR) AT 20^{O} C

Frequency KHz	C_R < 0.1 mfd	0.1 mfd <C_R≤1 mfd	C_R >1 mfd
At 1	0.8%	1.0%	1.0%
At 10	1.5%	1.5%	

LIFE TEST CONDITIONS

(Loading at elevated temperature)
Loaded at 1.25 times rated voltage at 85^{O}C or 1.25 Times of category voltage at 100^{O}C for 1000 hours
After the test
Δc/c: ≤ 5% of initial value.
Tan δ ≤ 0.003 C_R ≤1 μF; ≤ 0.002, C_R > 1 μF

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

INSULATION RESISTANCE

Minimum Insulation Resistance R	V_R	C_r ≤ 0.33 μ F	C > 0.33 μ F
Minimum Insulation Resistance R_{IS} (or) time constant T = C_R X R_{IS} at 25^{O} C relative humidity ≤ 70%	≤ 100 V DC	15,000 MΩ	5,000s
	> 100 V DC	30,000 MΩ	10,000s

Dimensions:

Rated Voltage	Rated Cap (μfd)	Max. W mm	H mm	L mm	D mm
10 mm Pitch (±1.0)					
100 V	0.01	7.0	12.0	13.0	0.6
	0.022	6.0	11.0	13.0	0.6
	0.033	6.0	11.0	13.0	0.6
	0.047	6.0	11.0	13.0	0.6
	0.068	7.0	12.0	13.0	0.6
	0.082	6.0	11.0	13.0	0.6
	0.1	6.0	11.0	13.0	0.6
	0.15	6.0	11.0	13.0	0.6
	0.22	7.0	12.0	13.0	0.6
	0.33	7.0	12.0	13.0	0.6
250V	0.01	7.0	12.0	13.0	0.6
	0.022	6.0	11.0	13.0	0.6
	0.033	6.0	11.0	13.0	0.6
	0.047	6.0	11.0	13.0	0.6
	0.068	7.0	12.0	13.0	0.6
	0.082	6.0	11.0	13.0	0.6
	0.1	6.0	11.0	13.0	0.6
	0.15	6.0	11.0	13.0	0.6
400V	0.01	7.0	12.0	13.0	0.6
	0.022	6.0	11.0	13.0	0.6
	0.033	6.0	11.0	13.0	0.6
	0.047	6.0	11.0	13.0	0.6
	0.068	7.0	12.0	13.0	0.6
	0.082	7.0	12.0	13.0	0.6
630V	0.01	7.0	12.0	13.0	0.6
	0.022	6.0	11.0	13.0	0.6
15 mm Pitch (±1.0)					
100 V	0.47	6.0	12.0	18.0	0.8
	1.0	8.0	15.0	18.0	0.8
250 V	0.22	6.0	11.0	18.0	0.8
	0.33	6.0	12.0	18.0	0.8
	0.47	7.0	13.0	18.0	0.8
	0.68	9.0	14.0	18.0	0.8
400 V	0.1	6.0	11.0	18.0	0.8
	0.15	7.0	12.0	18.0	0.8
	0.22	8.0	13.0	18.0	0.8
630 V	0.033	6.0	11.0	18.0	0.8
	0.047	7.0	13.0	18.0	0.8
	0.068	7.0	13.0	18.0	0.8
	0.082	8.0	13.0	18.0	0.8
	0.1	9.0	14.0	18.0	0.8
22.5 mm Pitch (±1.0)					
100 V	1.5	8.0	16.0	26.0	0.8
	2.2	9.5	17.0	26.0	0.8
	3.3	12.0	18.0	26.0	0.8
250 V	1.0	6.5	14.6	26.0	0.8
	1.5	8.0	17.0	26.0	0.8
	2.2	10.0	18.0	26.0	0.8
400 V	0.33	8.0	13.0	26.0	0.8
	0.47	9.0	16.0	26.0	0.8
	0.68	10.0	17.0	26.0	0.8
630 V	0.15	7.0	14.0	26.0	0.8
	0.22	8.0	15.0	26.0	0.8
22.5 mm Pitch (±1.0)					
100 V	4.7	10.0	18.0	32.0	0.8
	6.8	14.0	22.0	32.0	0.8
250 V	3.3	14.0	24.0	32.0	0.8
400 V	1.0	8.0	16.0	31.0	0.8
	1.5	9.0	17.0	31.0	0.8
	2.2	12.5	21.0	31.0	0.8
	3.3	13.0	24.0	31.0	0.8
630 V	0.33	11.0	17.0	31.0	0.8
	0.47	11.0	20.0	31.0	0.8

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	Marking should be legible	Visual inspection	General inspection level II	1.0%
		Trade mark	There shall be no	-do-		
	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			