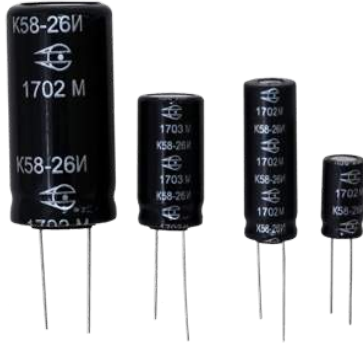


SUPERCAPACITOR
K58-26
GENERAL PURPOSES

elecond.supercapacitor@elcudm.ru
+7 (34147) 4-25-01



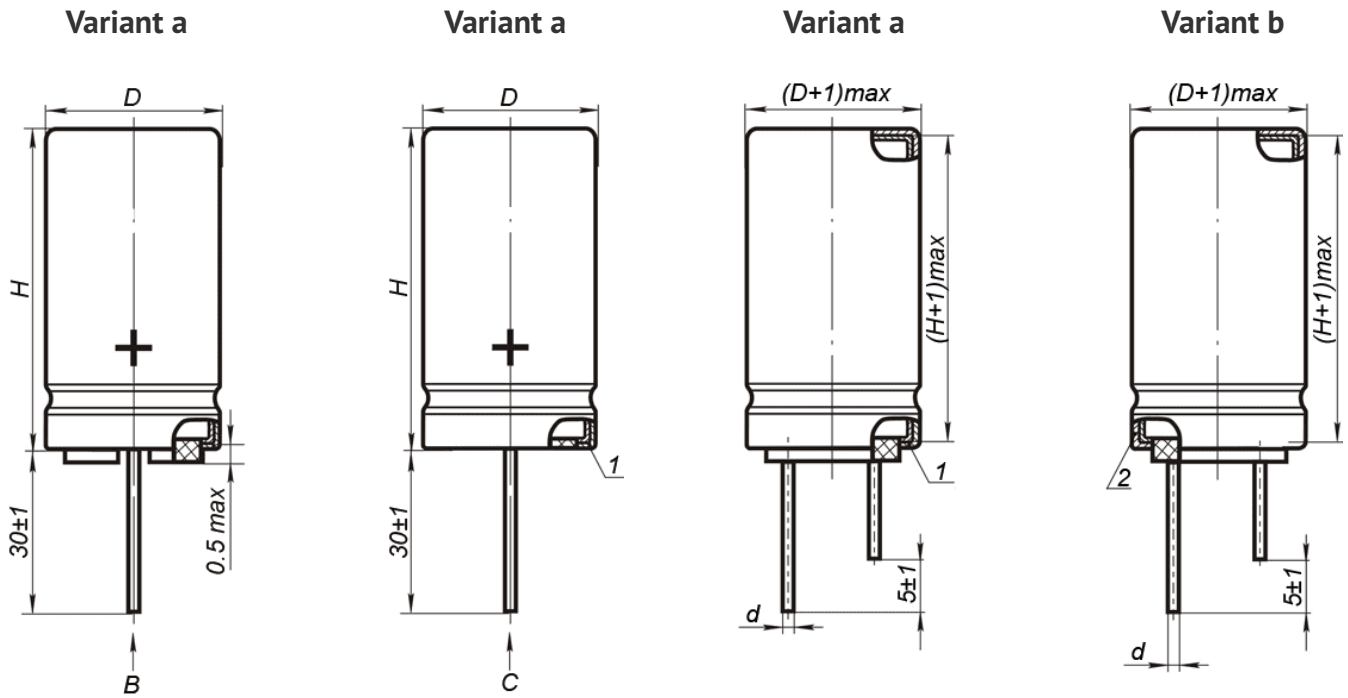
EVAYA.673811.006 TU

Polar fixed sealed capacitors are produced in climatic version with resistance requirements to high humidity of 98% at the temperatures 25°C and 35°C. Capacitors are available in insulated and non-insulated case.

MAIN PARAMETERS:

Name	Value
Rated voltage, V	2.7
Rated capacitance, F	1; 3; 5; 10; 15; 25; 50; 100
Capacitance tolerance, %	+50...-20; ±20
Maximum operating temperature Tenv, °C	65
Minimal operating temperature Tenv, °C	-50
Maximum-permissible overvoltage, V	2.85

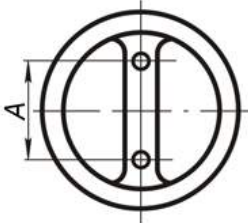
GENERAL VIEW DRAWING



Lid

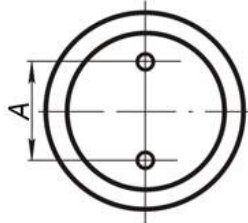
View B.

Lid version 1



View C.

Lid version 2



1 – Insulating sleeve or lacquer coating

2 – Insulating sleeve and lacquer coating

CAPACITORS OVERALL DIMENSIONS AND MASS

U _R , V	C _R , F	Size DxH, mm	d, mm	A, mm	Mass, g	Lid version
2.7	1	8x13	0.6	4	1.6	2
2.7	3	8x20	0.6	4	2.5	2
2.7	5	10x20	0.6	5.5	3.5	1
2.7	10	10x30	0.6	5.5	4.5	1
2.7	15	12.5x25	0.6	5.5	4.9	1
2.7	25	16x25	0.8	7.5	9.6	2
2.7	50	18x40	0.8	7.5	19	2
2.7	100	20x40	0.8	10	24	1

CASE PROTECTION

Climatic version	Lacquer coating	Jacketing with insulating tube	Design variant
Capacitors are intended for internal wiring with resistance to high humidity of 98% at the temperature 25°C	-	-	-
Capacitors are intended for internal wiring with resistance to high humidity of 98% at the temperature 25°C	-	+	a
Capacitors are intended for internal wiring with resistance to high humidity of 98% at the temperature 35°C	+	-	a
Capacitors are intended for internal wiring with resistance to high humidity of 98% at the temperature 35°C	+	+	b

CAPACITOR ELECTRIC PARAMETERS VALUE

U _R , V	C _R , μF	I _{LEAK} , μA T=25°C, 72h	ESR _{DC} , MOhm T=25°C	Maximum charging and discharging current, A*	Stored energy, Wh	Specific stored energy, Wh/kg	Wh/kg Specific output, W/kg
2.7	1	10	200	1	0.001	0.63	2733.75
2.7	3	10	55	3	0.003	1.22	6362.18
2.7	5	15	45	4.5	0.005	1.45	5554.29
2.7	10	25	35	10	0.010	2.25	5554.29
2.7	15	40	41	12.5	0.015	3.10	4354.41
2.7	25	65	27	20	0.025	2.64	3375.00
2.7	50	160	16	36.5	0.051	2.66	2877.63
2.7	100	200	15	51	0.101	4.22	2430.00

* discharging within 1 second from U_R to ½ U_R

CAPACITORS RELIABILITY

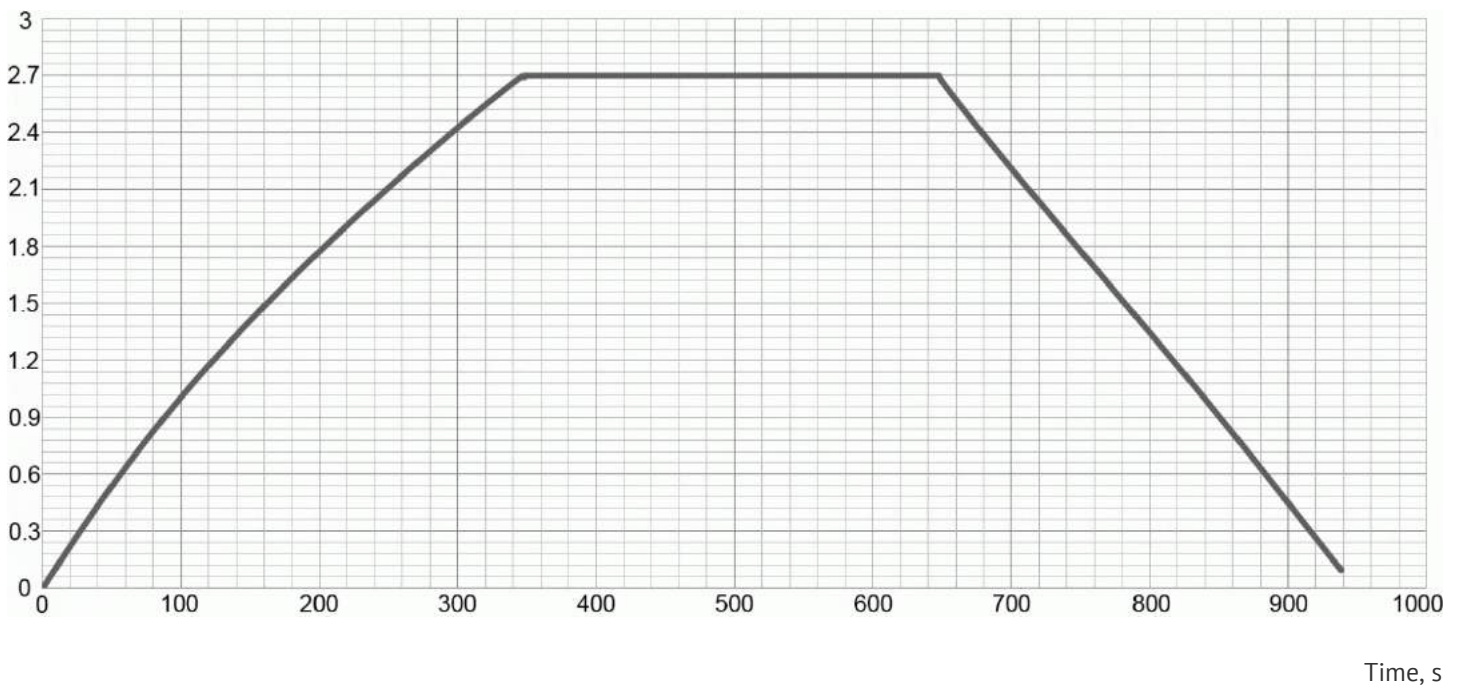
Reliability Operation modes	t_{λ} , hours	t_{λ} , cycles	λ , 1/hour, max
Maximum-permissible mode (U_R , $T_{env}=65^{\circ}C$)	1 500		5×10^{-4}
Maximum-permissible mode (charge to U_R , discharge to $\frac{1}{2}U_R$, $T_{env}=65^{\circ}C$)		30 000	3×10^{-5}
Typical operating mode (U_R , $T_{env}=25^{\circ}C$)	30 000		3×10^{-5}
Typical operating mode (charge to U_R , discharge to $\frac{1}{2}U_R$, $T_{env}=25^{\circ}C$)		500 000	3×10^{-6}

Gamma-rated time of capacitor storageability T_{cy} at $y=95\%$, 25 years

TECHNICAL SPECIFICATIONS:

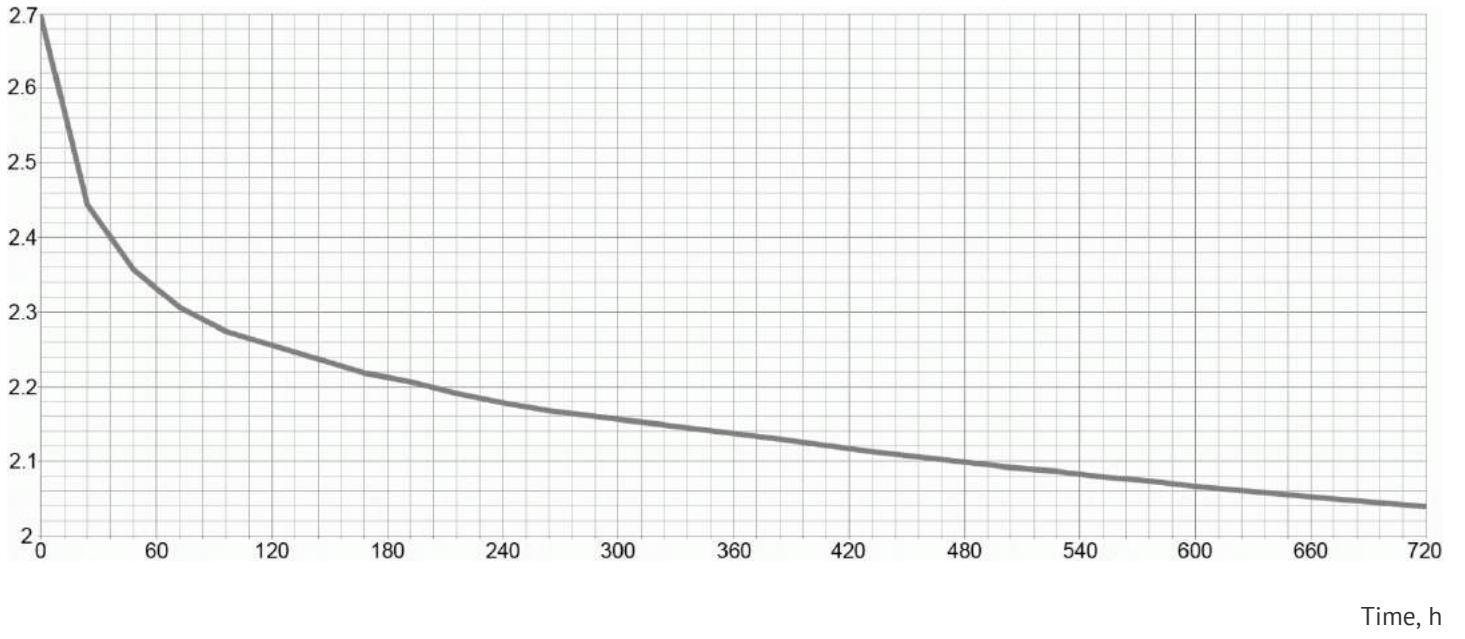
CHARGE-DISCHARGE PERFORMANCE OF CAPACITOR 2.7VX15F (CHARGING CURRENT 150MA, DISCHARGING CURRENT 150 MA)

Voltage, V



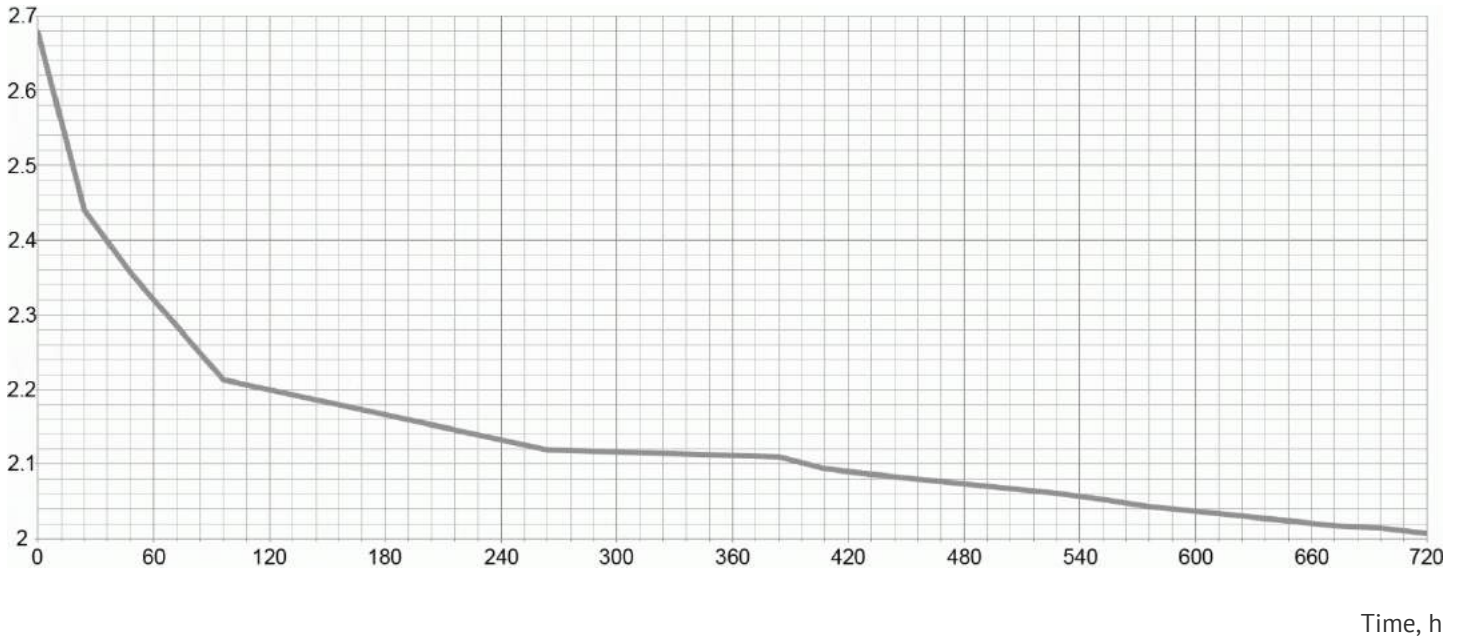
SELF-DISCHARGE CURVE OF CAPACITOR 2.7VX100F

Voltage, V



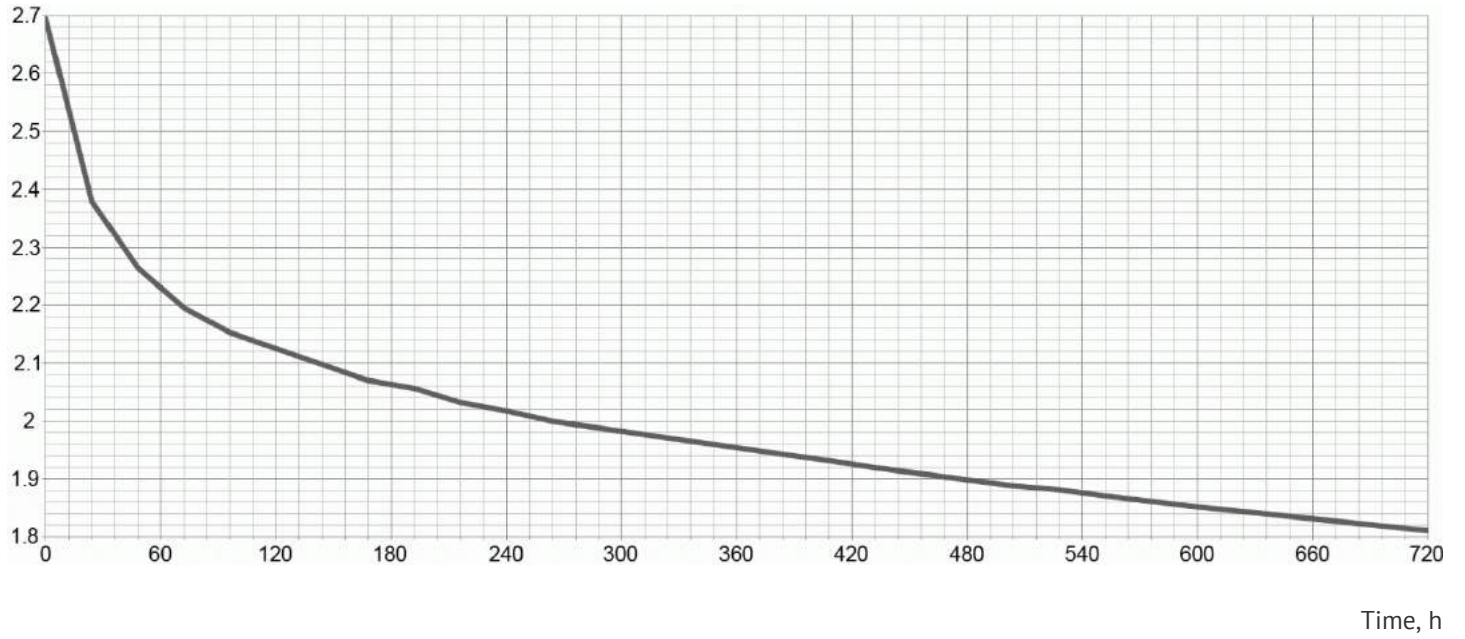
SELF-DISCHARGE CURVE OF CAPACITOR 2.7VX15F

Voltage, V



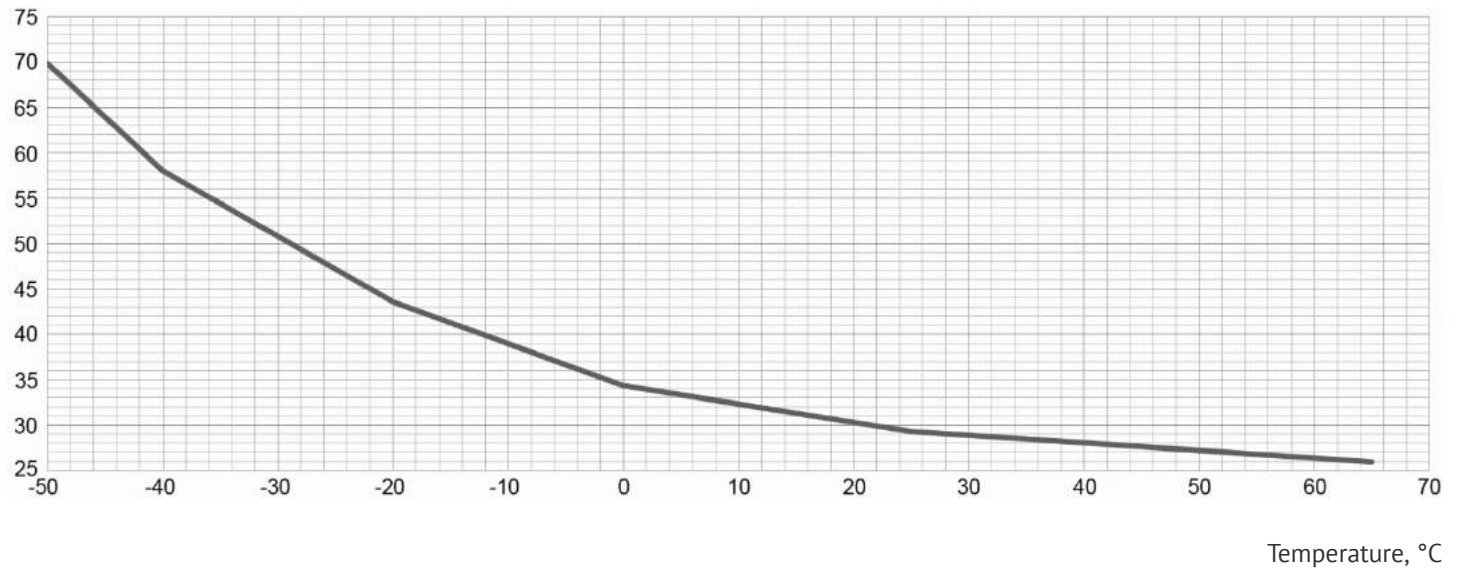
SELF-DISCHARGE CURVE OF CAPACITOR 2.7VX1F

Voltage, V



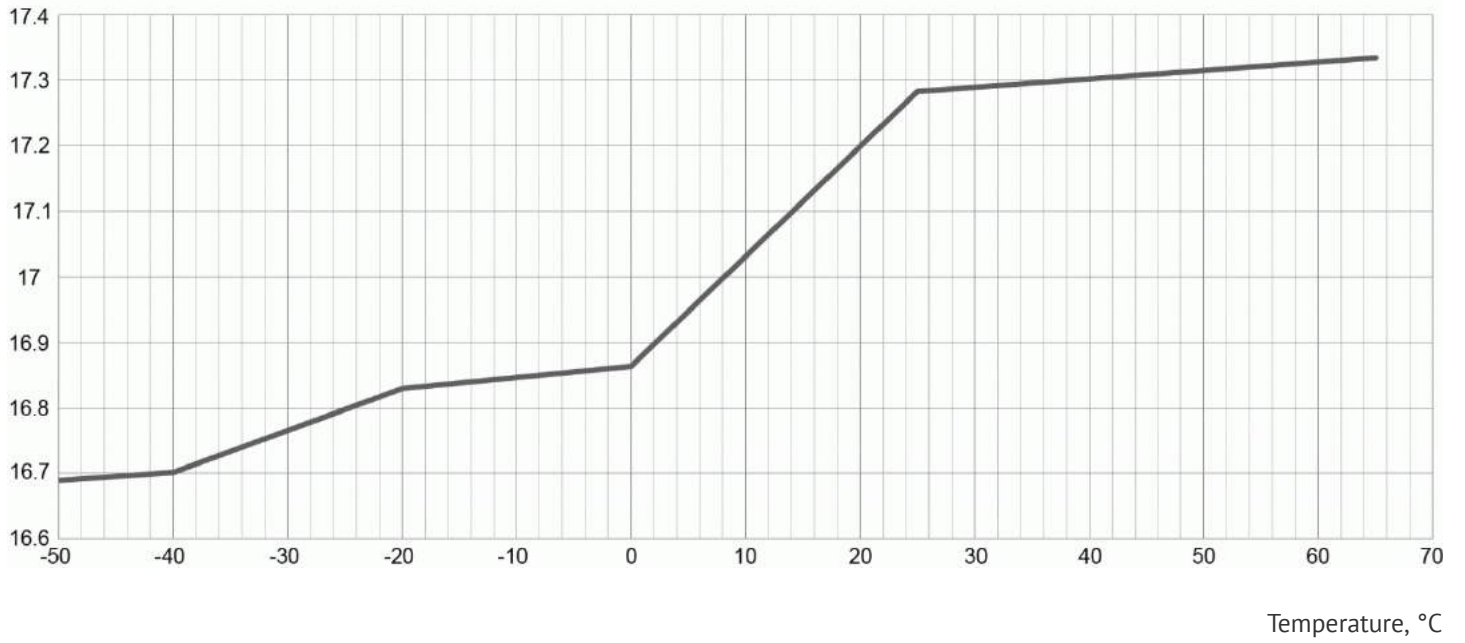
ESR CURVE AT DC OF CAPACITOR 2.7VX15F DUE TO TEMPERATURE CHANGES -50...65°C

Resistance, mOhm



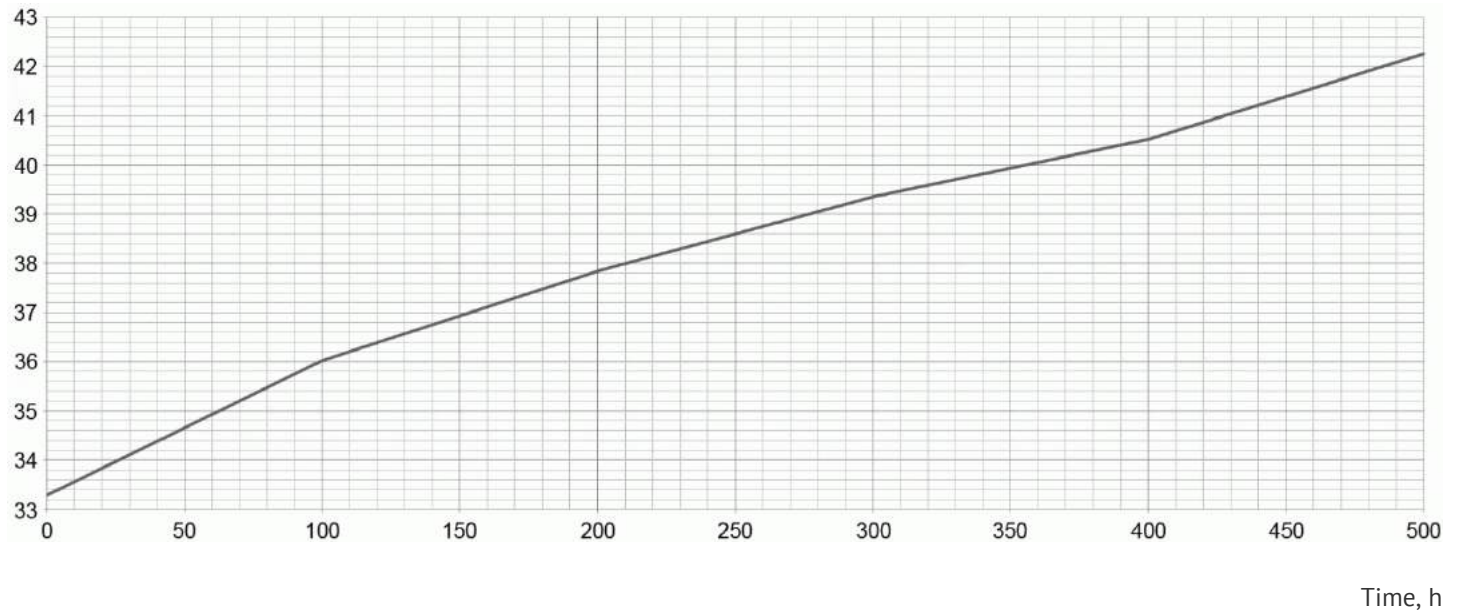
CAPACITANCE CURVE OF CAPACITOR 2.7VX15F DUE TO TEMPERATURE CHANGES -50...65°C

Capacitance, F



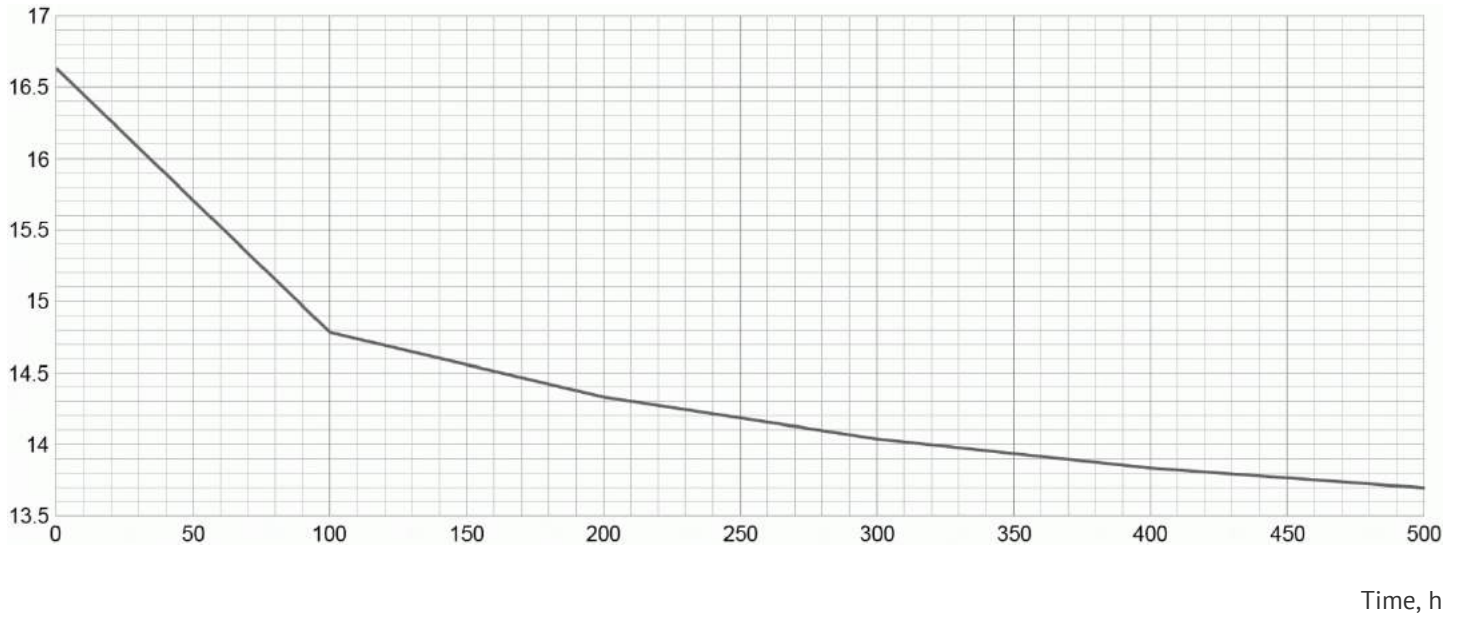
ESR CURVE AT DC OF CAPACITOR 2.7VX15F WITH OPERATING TIME 500 HOURS

Resistance, mOhm



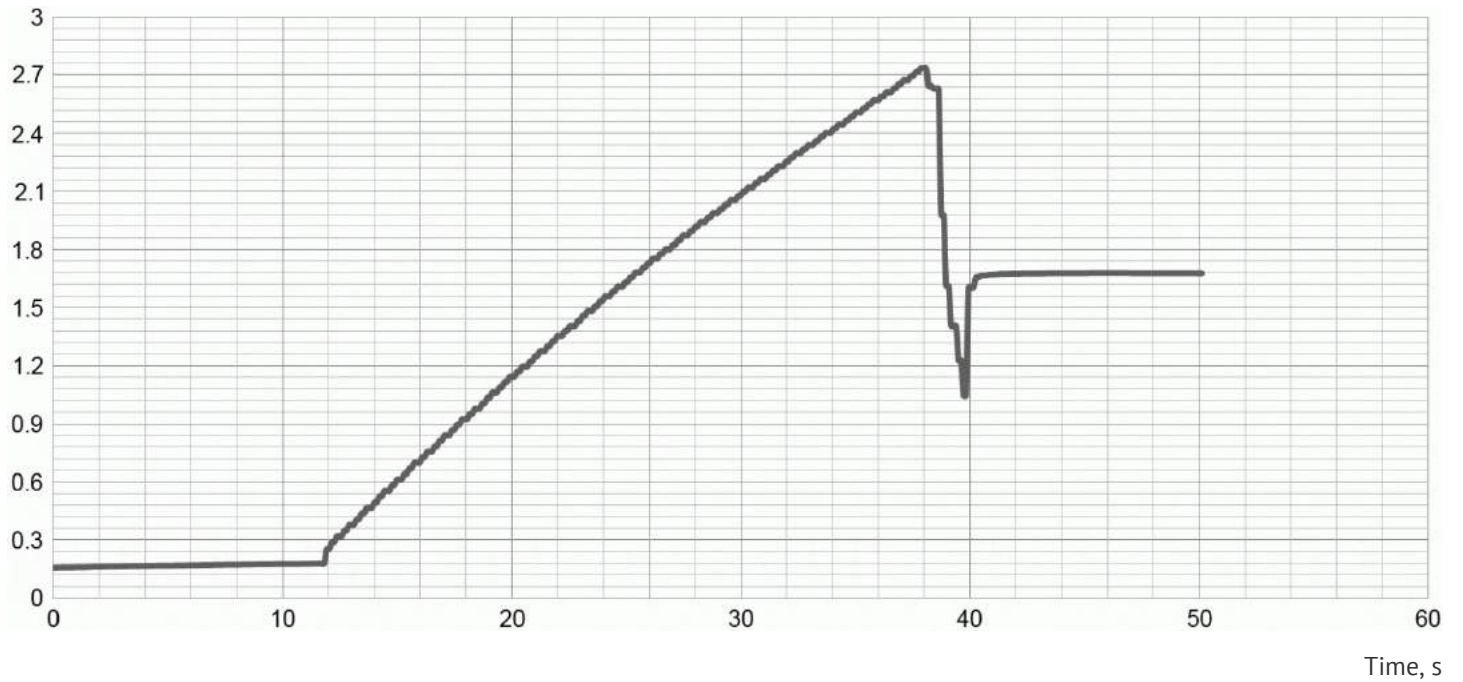
CAPACITANCE CURVE OF CAPACITOR 2.7VX15F WITH OPERATING TIME 500 HOURS

Capacitance, F



CHARGE-DISCHARGE PERFORMANCE OF CAPACITOR 2.7VX15F (CHARGING CURRENT 1.35A, DISCHARGING CURRENT 12.5A)

Voltage, V



EXAMPLE OF REFERENCE DESIGNATION FOR ORDERING

CAPACITOR K58-26 – 2.7V – 1F ±20% EVAYA.673811.006 TU

CAPACITOR K58-26 – 2.7V – 3F ±20% – I – EVAYA.673811.006 TU

CAPACITOR K58-26 – 2.7V – 1F (+50-20)% – B – EVAYA.673811.006 TU

CAPACITOR K58-26 – 2.7V – 10F (+50-20)% I – B – EVAYA.673811.006 TU