

K50-85

ALUMINUM ELECTROLYTIC CAPACITOR

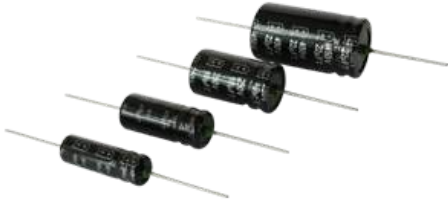
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AZHYAR.673541.014 TV

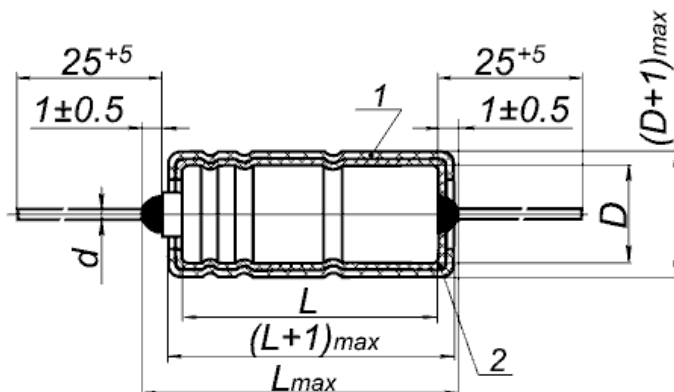
Capacitor is used for operation in direct current and ripple current circuits, secondary power sources and converter equipment. Capacitor is available in all-climate version. Sealed, polar, constant capacity, with axial wire leads. Isolated.

It is recommended to use this capacitor type as substitution for capacitors K50-24, K50-29, K50-20 types.



MAIN PARAMETERS

Name	Value
Rated voltage, V	6.3...450
Rated capacitance, μF	1...4 700
Temporary overvoltage within 10 sec., V	1.15 U_R ($U_R=6.3...300$) 1.1 U_R ($U_R=350, 450$)
Capacitance tolerance (25 °C, 50 Hz), %	+30...-10; +50...-10; ± 20
Maximum operating temperature T_{env} , °C	+100
Minimal operating temperature T_{env} , °C	-60



- 1 – Isolation sleeve
- 2 – Lacquer coating

$d = 0.8 \pm 0.1$ mm
for $D = 9\text{mm}, 12\text{mm}, 14\text{mm}, 16\text{mm}$

$d = 1 \pm 0.1$ mm
for $D = 18\text{mm}, 21\text{mm}$

$L_{max} = L + 2.5\text{mm}$

CAPACITORS RELIABILITY

Reliability Operation modes	Minimal nonfailure operating time, t_{λ} , hours	Capacitor failure rate, λ , 1/hour, max
Maximum-permissible mode (U_R , $T_{env}=70\text{ }^{\circ}\text{C}$)	7 500	5×10^{-6}
Maximum-permissible mode ($0.67U_R$, $T_{env}=100\text{ }^{\circ}\text{C}$)	4 000	10^{-5}
Light mode ($0.5U_R$, $T_{env}=50\text{ }^{\circ}\text{C}$)	150 000	3×10^{-7}
Storageability Gamma-rated time of capacitor storageability T_{cy} at $\gamma=95\%$, years, min	25	

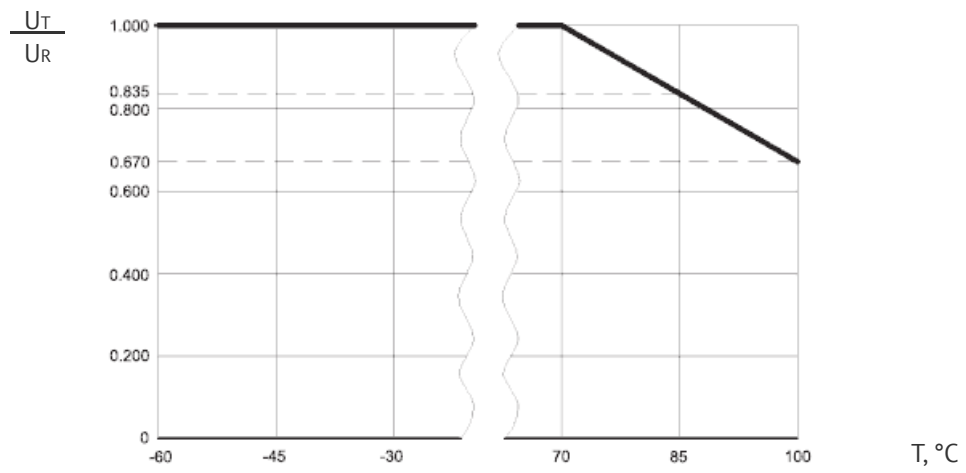
CAPACITOR ELECTRIC PARAMETERS VALUE WHEN DELIVERED

U_R , V	C_R , μF	$\text{tg } \delta$, %, $25\text{ }^{\circ}\text{C}$, 50 Hz, max	I_{LEAK} , μA , $25\text{ }^{\circ}\text{C}$, after 5 min., max	Z^+ , Ohm, $25\text{ }^{\circ}\text{C}$, max	I_R , A, $70\text{ }^{\circ}\text{C}$, 50 Hz, max
6.3	47	25	15	2.40	0.027
6.3	100	25	22	1.80	0.064
6.3	220	25	23	1.30	0.116
6.3	470	25	39	0.60	0.210
6.3	1 000	25	73	0.32	0.405
6.3	2 200	25	235	0.24	0.709
6.3	4 700	25	344	0.18	0.890
16	22	20	17	3.6	0.038
16	47	20	25	2.1	0.046
16	100	20	25	1.12	0.100
16	220	20	45	0.7	0.200
16	470	20	85	0.45	0.300
16	1 000	20	252	0.21	0.500
16	2 200	20	375	0.17	0.900
25	10	20	15	3.90	0.024
25	22	20	20	2.40	0.040
25	47	20	21	1.60	0.070
25	100	20	35	0.80	0.136
25	220	20	65	0.60	0.223
25	470	20	210	0.47	0.360
25	1 000	20	310	0.30	0.600
25	2 200	20	469	0.11	1.170
63	4.7	20	15	3.80	0.023
63	10	20	22	3.00	0.032
63	22	20	23	2.00	0.060

U_R, V	$C_R, \mu F$	$\text{tg } \delta, \%, 25^\circ C, 50 \text{ Hz, max}$	$I_{LEAK}, \mu A, 25^\circ C, \text{ after 5 min., max}$	$Z^*, \text{ Ohm, } 25^\circ C, \text{ max}$	$I_R, A, 70^\circ C, 50 \text{ Hz, max}$
63	47	20	39	1.20	0.100
63	100	20	73	0.60	0.187
63	220	20	235	0.45	0.320
63	470	20	344	0.23	0.550
63	1 000	20	500	0.16	1.000
100	2.2	10	14	8.20	0.015
100	4.7	10	19	4.90	0.028
100	10	10	30	4.40	0.045
100	22	10	32	2.10	0.077
100	47	10	55	1.80	0.140
100	100	10	110	1.60	0.300
160	1.0	10	24	18.0	0.008
160	2.2	10	30	12.0	0.018
160	4.7	10	40	6.8	0.030
160	10	10	45	3.5	0.059
160	22	10	100	2.3	0.120
160	47	10	220	1.3	0.200
250	4.7	10	35	4.8	0.05
250	10	10	75	3.0	0.10
250	22	10	165	2.4	0.19
250	47	10	350	1.7	0.32
300	4.7	10	40	5.1	0.050
300	10	10	90	3.2	0.110
300	22	10	198	1.7	0.225
300	47	10	420	1.2	0.400
350	2.2	10	43	19.0	0.030
350	4.7	10	49	7.6	0.060
350	10	10	105	3.9	0.125
350	22	10	230	1.8	0.250
450	2.2	10	49	21.0	0.040
450	4.7	10	63	15.0	0.073
450	10	10	135	4.0	0.141
450	22	10	297	3.0	0.280

* Capacitor impedance Z is measured at frequency 100 kHz for capacitors $C_R \leq 1\ 000 \mu F$, and at frequency 10 kHz for capacitors $C_R > 1\ 000 \mu F$

VOLTAGE VERSUS TEMPERATURE



EXAMPLE OF REFERENCE DESIGNATION FOR ORDERING

CAPACITOR K50-85 – 6.3V – 47 μF $\pm 20\%$ I B AZHYAR.673541.014 TU

CAPACITOR K50-85 – 16V – 22 μF (+30 -10)% I B AZHYAR.673541.014 TU