

K50-88

ALUMINUM ELECTROLYTIC CAPACITOR

elecond-market@elcudm.ru

+7 (34147) 2-99-89

AZHYAR.673541.016 TU



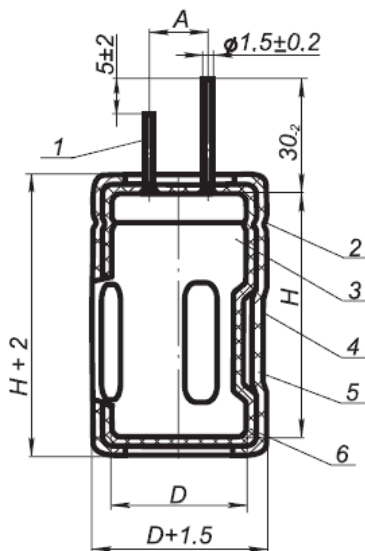
Are radial lead capacitors with lengthwise case swage, increased service life.

Capacitors are suitable for application in direct current and ripple current circuits, secondary power supplies and other electronics. Capacitor is available in all-climate version. Isolated. Sealed.

It is recommended to use this capacitor type as substitution for capacitors K50-32 types.

MAIN PARAMETERS

Name	Value
Rated voltage, V	63...450
Rated capacitance, μF	100...2 200
Temporary overvoltage within 10 sec., V	1.15 U_R ($U_R \leq 315$) 1.1 U_R ($U_R > 315$)
Capacitance tolerance (25 °C, 50 Hz), %	+50...-20; ± 20
Maximum operating temperature T_{env} , °C	+125
Minimal operating temperature T_{env} , °C	-60



$$A = 16.5 \pm 0.15 \text{ mm}$$

- 1 – Positive terminal
- 2 – Bead
- 3 – Case
- 4 – Lengthwise swage
- 5 – Isolation sleeve
- 6 – Lacquer coating

CAPACITOR ELECTRIC PARAMETERS VALUE WHEN DELIVERED

U _R , V	C _R , μF	tg δ, %, 25°C, 50 Hz, max	I _{LEAK} , μA, 25°C, after 5 min., max	Z*, Ohm, 25°C, max	I _R , A, 85°C, 50 Hz, max
63	2 200	25	4 178	0.8	1.24
100	1 000		3 020	0.35	0.89
160			4 820	0.5	1.46
250	330	20	2 495	1.2	0.86
	470		3 545	0.9	1.2
315	220		2 099	1.2	0.69
	330		3 138	0.9	0.96
	470		4 461	0.8	1.27
350	220		2 330	1.0	0.72
	330		3 485	0.8	0.99
	470		4 955	0.7	1.32
400	100		1 220	1.3	0.43
	220		2 660	0.9	0.82
	330		3 980	0.7	0.14
	470		5 660	0.6	1.54
450	100	1 370	1.4	0.42	
	220	2 990	0.9	0.76	
	330	4 475	0.7	1.05	

* Capacitor impedance Z is measured at frequency 100 kHz for capacitors C_R ≤ 1 000 μF, and at frequency 10 kHz for capacitors C_R > 1 000 μF

CAPACITORS OVERALL DIMENSIONS AND MASS

U _R , V	63	100	160	250	315	350	400	450
C _R , μF	DxH, mm mass, g							
100							<u>40x45</u> 90	<u>40x45</u> 90
220					<u>40x45</u> 90	<u>40x55</u> 110	<u>40x65</u> 130	<u>45x50</u> 125
330				<u>40x55</u> 110	<u>40x60</u> 120	<u>40x60</u> 120	<u>45x65</u> 160	<u>45x65</u> 160
470				<u>40x60</u> 120	<u>40x80</u> 160	<u>45x65</u> 160	<u>45x75</u> 190	
1 000		<u>40x60</u> 120	<u>40x80</u> 160					
2 200	<u>40x60</u> 120							

Ripple current effective value

versus temperature and frequency can be found from the formula $I_{R0} = I_R \times K_T \times K_F$, where

I_R – allowable ripple current at 85 °C, 50 Hz (See Table “Capacitor electric parameters”)

K_T - I_R CORRECTION FACTOR VERSUS TEMPERATURE

Tenv, °C	25	40	50	60	70	85	125
K_T	1.43	1.37	1.31	1.25	1.17	1.0	0.25

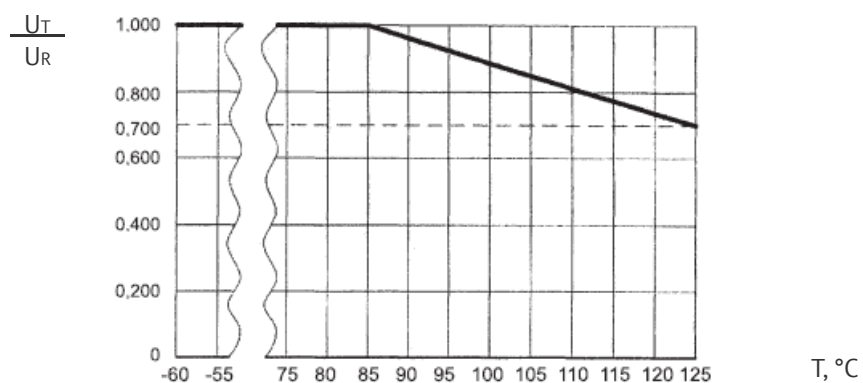
K_F - I_R CORRECTION FACTOR VERSUS FREQUENCY

F, Hz	50	100	300	600	1 000	10 000	≥50 000
K_F	1	1.25	1.5	1.63	1.69	1.88	2.0

CAPACITORS RELIABILITY

Reliability Operation modes	Minimal nonfailure operating time, t_λ , hours	Capacitor failure rate, λ , 1/hour, max
Maximum-permissible mode ($0.7U_R$, Tenv=125 °C)	6 000	2×10^{-6}
Maximum-permissible mode (U_R , Tenv=85 °C)	40 000	5×10^{-7}
Light mode ($0.6U_R$, Tenv=60 °C)	300 000	3×10^{-8}
Light mode ($0.6U_R$, Tenv=85 °C)	110 000	10^{-7}
Storageability Gamma-rated time of capacitor storageability T_{cy} at $y=99.5\%$, years, min	25	

VOLTAGE VERSUS TEMPERATURE



EXAMPLE OF REFERENCE DESIGNATION FOR ORDERING

CAPACITOR K50-88 – 450V – 100 μ F (+50 -20)% I B AZHYAR.673541.016 TU

CAPACITOR K50-88 – 450V – 100 μ F \pm 20% I B AZHYAR.673541.016 TU