

AZHYAR.673541.017 TU



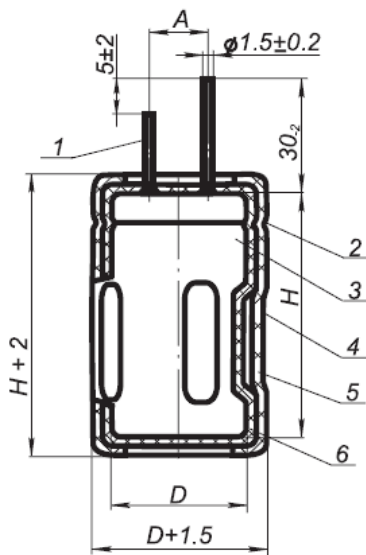
Capacitors with radial wire leads and longitudinal crimping of the body. Differ in the increased operating time.

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 B
Rated capacitance, μF	470...4 700
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 Tenv, °C	+125
Minimal operating temperature Tenv, °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

CAPACITORS OVERALL DIMENSIONS AND MASS

U _R , V	63	100	160	250	315	350	400	450
C _R , μF	DxH, mm mass, g							
470								45x50 125
1 000				45x75 190	45x85 210	45x85 210	45x85 210	
2 200		45x75 190	45x85 210					
4 700	45x75 190							

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	4 700	25	8 903	0.5	2.23
100	2 200		6 620	0.15	1.77
160			10 580	0.35	2.84
250	1 000	20	7 520	0.46	2.27
315			9 470	0.5	2.37
350			10 520	0.48	2.42
400			12 020	0.42	2.85
450	470		6 365	0.6	1.38

* 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

Ripple current effective value
versus temperature and frequency can be found from the formula I_{RO} = I_R x K_T x 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

T _{env} , °C	25	40	50	60	70	85	125
K _T	1.43	1.37	1.31	1.25	1.17	1.0	0.25

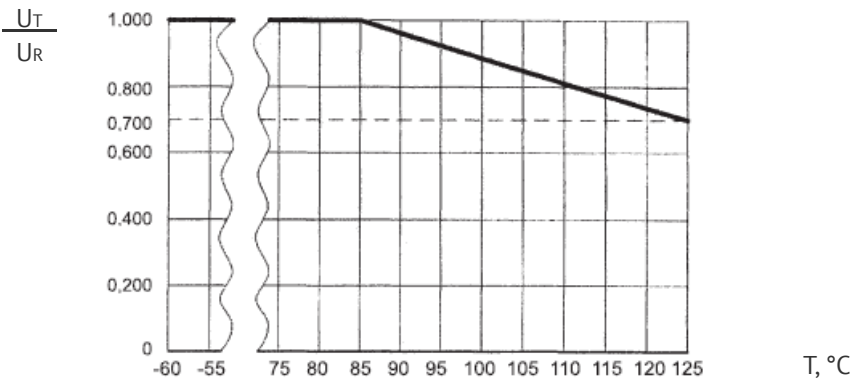
K_F - I_R CORRECTION FACTOR VERSUS FREQUENCY

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	2x10 ⁻⁶
Maximum-permissible mode (U _R , Tenv=85 °C)	30 000	5x10 ⁻⁷
Light mode (0.6U _R , Tenv=60 °C)	300 000	3x10 ⁻⁸
Light mode (0.6U _R , Tenv=85 °C)	110 000	10 ⁻⁷
Storageability Gamma-rated time of capacitor storageability Tcy at γ=99.5%, years, min	25	

VOLTAGE VERSUS TEMPERATURE



EXAMPLE OF REFERENCE DESIGNATION FOR ORDERING

CAPACITOR K50-89 – 450V – 470μF (+50 -20)% I B AZHYAR.673541.017 TU
CAPACITOR K50-89 – 450V – 470μF ±20% I B AZHYAR.673541.017 TU