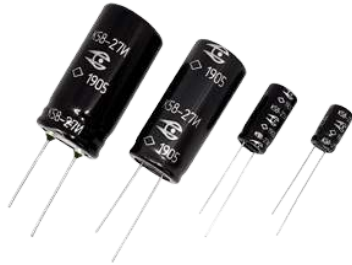


**AZHYAR.673623.005 TU**

Commercially produced capacitors. Available to order.



## APPLICATION

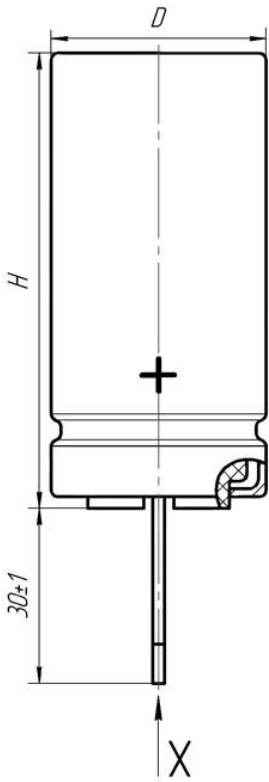
- ✓ Maintaining of the equipment operation when voltage depression occurs;
- ✓ Safely shutdown of machineries;
- ✓ Maintaining "a bridge" when switching between the power supplies;
- ✓ Providing high discharging current in the equipment;
- ✓ Rapid electrical energy accumulation and further providing to the grid;
- ✓ Providing temporary electricity power for equipment while operating in autonomous mode;
- ✓ As an energy storage device in difficult remote equipment;
- ✓ As an power supply in single-use system;
- ✓ To improve the operational reliability of the equipment;
- ✓ Are used together with chemical and other current sources to extend the service life;

## MAIN PARAMETERS

Name	Value
Rated voltage, V	2.5
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

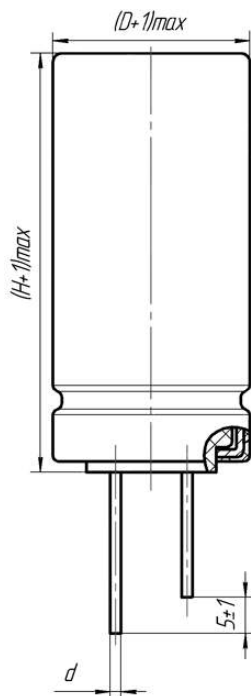
# DIMENSIONAL DRAWING OF CAPACITOR

**Figure 1**



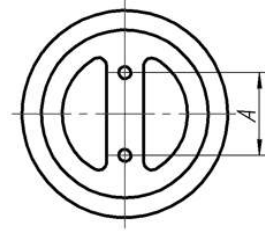
**Figure 2**

(also see fig. 1)



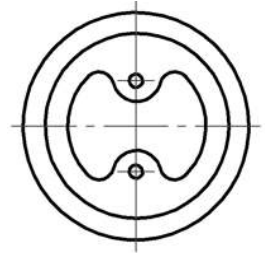
**View X**

(lid version 1)

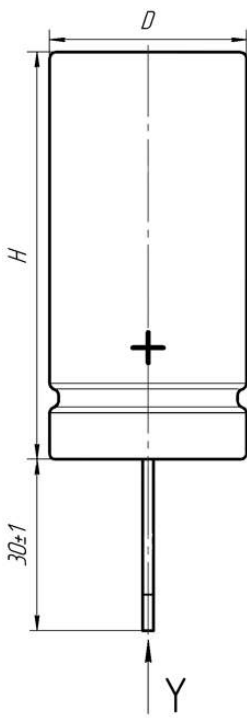


**View X**

(lid version 2)

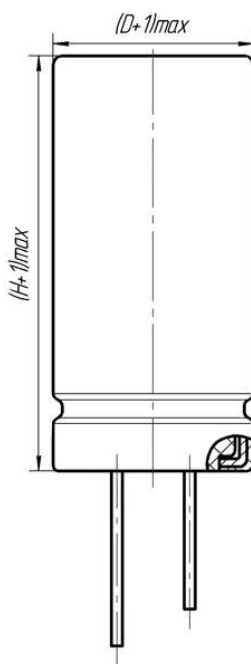


**Figure 3**



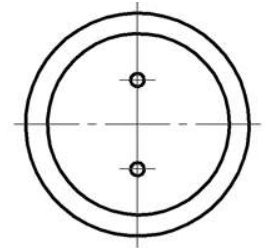
**Figure 4**

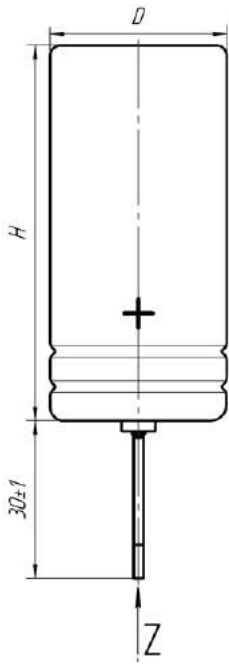
(also see fig. 2)



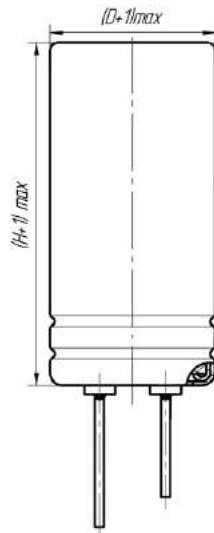
**View Y**

(lid version 3)

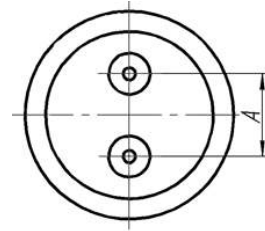


**Figure 5****Figure 6**

(also see fig. 3)

**View Z**

(lid version 4)

**CAPACITORS OVERALL DIMENSIONS AND MASS**

$U_R, V$	$C_R, F$	Size DxH, mm	d, mm	A, mm	Mass, g	Lid version	Figure
2.5	1	8x13	0.6	3.5	2.5	2, 3	1, 2, 3, 4
2.5	3	8x20	0.6	3.5	3.5	2, 3	1, 2, 3, 4
2.5	5	10x20	0.6	5	4.5	1	1, 2, 3, 4
2.5	10	10x30	0.6	5	6.5	1	1, 2, 3, 4
2.5	15	12.5x25	0.6	5	10.5	1	1, 2, 3, 4
2.5	25	16x25	0.8	7.5	15	1, 3	1, 2, 3, 4
2.5	50	18x40	0.8	7.5	25	1, 3	1, 2, 3, 4
2.5	100	18x60	0.8	7.5	45	1, 3	1, 2, 3, 4
2.5	100	20x40	0.8	10	45	4	5, 6

## CASE PROTECTION

Climatic version	Lacquer coating	Jacketing with insulating tube	Figure
Capacitors are intended for internal wiring with resistance to high humidity of 98% at the temperature 25°C	-	-	1, 3, 5
Capacitors are intended for internal wiring with resistance to high humidity of 98% at the temperature 25°C	-	+	2, 4, 6
Capacitors are intended for internal wiring with resistance to high humidity of 98% at the temperature 35°C	+	-	2, 4, 6
Capacitors are intended for internal wiring with resistance to high humidity of 98% at the temperature 35°C	+	+	2, 4, 6

## CAPACITOR ELECTRIC PARAMETERS VALUE

$U_R$ , V	$C_R$ , F	Size DxH, mm	$I_{LEAK}$ , $\mu A$ T=25°C, 72h	ESR <sub>DC</sub> , MOhm T=25°C	Maximum charging and discharging current, A (discharge within 1sec. from $U_R$ to $\frac{1}{2}U_R$ )	Stored energy, Wh	Specific stored energy, Wh/kg	Specific output, W/kg
2.5	1	8x13	10	200	1.1	0.001	0.41	1749.6
2.5	3	8x20	8	55	3.4	0.003	0.87	4544.42
2.5	5	10x20	8	35	5.7	0.005	1.13	5554.29
2.5	10	10x30	23	30	10.3	0.010	1.56	4486.15
2.5	15	12.5x25	53	30	14	0.015	1.45	2777.14
2.5	25	16x25	65	25	20.7	0.025	1.69	2332.8
2.5	50	18x40	73	16	37	0.051	2.03	2187.00
2.5	100	18x60	260	12	61	0.101	2.25	1620.00
2.5	100	20x40	200	10	65	0.101	2.25	1944.00

## CAPACITORS RELIABILITY

Reliability Operation modes	$t_\lambda$ , hours	$t_\lambda$ , cycles	$\lambda$ , 1/hour, max
Maximum-permissible mode ( $U_R$ , Tenv=65°C)	1 500		$5 \times 10^{-4}$
Maximum-permissible mode (charge to $U_R$ , discharge to $\frac{1}{2} U_R$ , Tenv=65°C)		30 000	$3 \times 10^{-5}$
Typical operating mode ( $U_R$ , Tenv=25°C)	90 000		$3 \times 10^{-5}$
Typical operating mode (charge to $U_R$ , discharge to $\frac{1}{2} U_R$ , Tenv=25°C)		500 000	$3 \times 10^{-6}$

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

## **EXAMPLE OF REFERENCE DESIGNATION FOR ORDERING**

CAPACITOR K58-27 – 2.5V – 1F (+50-20)% (8×13) AZHYAR.673623.005 TU

CAPACITOR K58-27 – 2.5V – 5F ±20% – (10×20) – I AZHYAR.673623.005 TU

CAPACITOR K58-27 – 2.5V – 100F (+50-20)% – (18×60) – B AZHYAR.673623.005 TU

CAPACITOR K58-27 – 2.5V – 100F (+50-20)% – (20×40) – IB AZHYAR.673623.005 TU