PACKAGED IONISTOR MODULE

MIK

SPECIAL PURPOSE

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EVAYA.673623.025 TU

Commercially produced modules. Available to order.

MAIN PARAMETERS

Name	Value
Rated voltage, V	5...30
Rated capacitance, F	4.16...25
Capacitance tolerance (25°C, 50 Hz), %	+50...-20; ±20
Maximum operating temperature Tenv, °C	+65
Minimal operating temperature Tenv, °C	Type 1: -50 Type 2: -60

GENERAL VIEW DRAWING

Figure 1

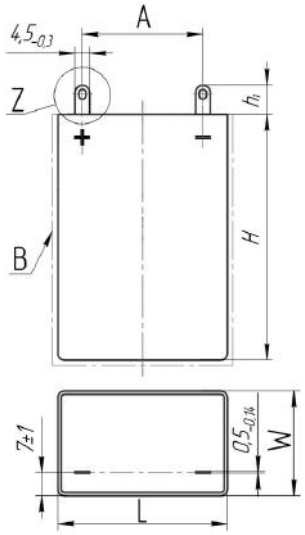


Figure 2
(also see fig. 1)

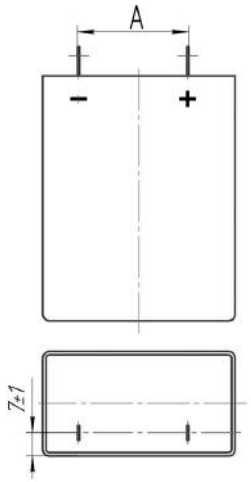
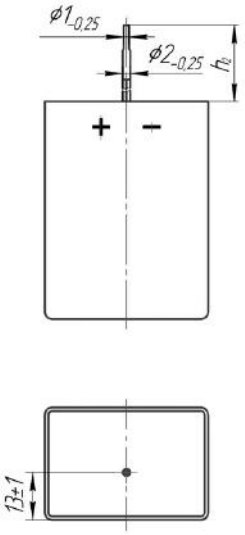
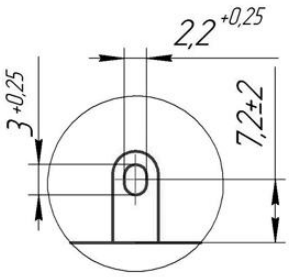


Figure 3
(also see fig. 1)



View Z (2:1)



OVERALL DIMENSIONS AND MASS OF SUPERCAPACITOR MODULES MIK

Name	Type [1]	Version [2]	Dimensions, mm						Mass, g	Figure
			L±2	W±2	H±2	h_1 ±2	h_2 ±3	A±3		
Module 5V x 7.5F	1	1	45	31	60	-	100	-	75	3
Module 5V x 25F	1	2	52	32	75.5	9	-	37	160	1
Module 7.5V x 5F	1	1	45	31	85	-	100	-	85	3
Module 7.5V x 16.66F	1	2	52	32	101.5	9	-	37	235	1
Module 10V x 12.5F	1	2	52	32	128	9	-	37	290	1
Module 12.5V x 10F	1	2	52	32	145	9	-	37	350	1
Module 15V x 8.33F	1	2	52	32	181	9	-	37	500	1
Module 20V x 6.25F	1	2	59	52	128	9	-	38	580	2
Module 25V x 5F	1	2	59	52	154	9	-	38	700	2
Module 30V x 4.16F	1	2	59	52	181	9	-	38	880	2
Module 5V x 7.5F	2	1	45	31	60	-	100	-	75	3
Module 5V x 25F	2	2	52	32	75.5	9	-	37	160	1
Module 7.5V x 5F	2	1	45	31	85	-	100	-	85	3
Module 7.5V x 16.66F	2	2	52	32	101.5	9	-	37	235	1
Модуль 10V x 12.5F	2	2	52	32	128	9	-	37	290	1
Module 12.5V x 10F	2	2	52	32	145	9	-	37	350	1
Module 15V x 8.33F	2	2	52	32	181	9	-	37	500	1
Module 20V x 6.25F	2	2	59	52	128	9	-	38	580	2
Module 25V x 5F	2	2	59	52	154	9	-	38	700	2
Module 30V x 4.16F	2	2	59	52	181	9	-	38	880	2

Note 1

- **Type-1** with lower ESR and leakage current, operating temperature range from –50°C to +65°C (MIK-1-1, MIK-1-2);
- **Type-2** with extended operating temperature range from -60°C to +65°C (MIK-2-1, MIK-2-2).

Note 2

- **Version 1** are sealed modules in non-insulated metal square case with unidirectional polar wire leads. Modules are designed for internal wiring with higher humidity resistance of 98% at temperature 25°C and 35°C.
- **Version 2** are sealed modules in non-insulated metal square case with unidirectional polar wire leads (leaves acc. To GOST 22376). Modules are designed for internal wiring with higher humidity resistance of 98% at temperature 25°C and 35°C.

ELECTRICAL PARAMETERS FOR IONISTOR MODULES MIK TYPE-1

Rated voltage, V	Rated capacitance, F	Leakage current, μA, (72 hours) T=(25±1)°C	ESR_{DC}, MOhm T=(25±1)°C
5	7.5	40	82
5	25	160	32
7.5	5	40	123
7.5	16.66	160	48
10	12.5	160	64
12.5	10	160	80
15	8.33	160	96
20	6.25	160	128
25	5	160	160
30	4.16	160	192

ELECTRICAL PARAMETERS FOR IONISTOR MODULES MIK TYPE-2

Rated voltage, V	Rated capacitance, F	Leakage current, μA, (72 hours) T=(25±1)°C	ESR_{DC}, MOhm T=(25±1)°C
5	7.5	60	170
5	25	240	64
7.5	5	60	255
7.5	16.66	240	96
10	12.5	240	128
12.5	10	240	160
15	8.33	240	192
20	6.25	240	256
25	5	240	320
30	4.16	240	384

CAPACITORS RELIABILITY

Reliability Operation modes	t_λ, hours	t_λ, cycles	λ, 1/hour, max
Maximum-permissible mode (U_R, Tenv=65 °C)	1 500		$5x10^{-4}$
Maximum-permissible mode (charge to U_R, discharge to ½U_R, Tenv=65°C)		30 000	$5x10^{-5}$
Typical operating mode (U_R, Tenv=25°C)	90 000		$2x10^{-5}$
Typical operating mode (charge to U_R, discharge to ½U_R, Tenv=25°C)		500 000	$2x10^{-7}$

Gamma-rated time of capacitor storageability Tcy at y=95%, 25 years

EXAMPLE OF REFERENCE DESIGNATION

Module MIK-1-2 – 20V – 6.5F – M EVAYA.673623.025 ТУ

Module MIK-2-1 – 5V – 7.5F – S – B EVAYA.673623.025 ТУ

“M” – capacitance tolerance code (±20%);
“S” – capacitance tolerance code (+50...-20)%;
“B” – module for internal wiring with higher humidity resistance of 98% at temperature 35°C , without “B”– module for internal wiring with higher humidity resistance of 98% at temperature 25°C;