KOME

KSK Series

Radial Aluminium Electrolytic Capacitors



Features

- Miniature series, 7 mm height
- 2,000 hours at 105°C
- Wide temperature range of –40 ~ +105°C
- RoHS compliant

TEMPERATURE RANGE	RATED VOLTAGE	CAPACITANCE	ENDURANCE
–40°C … +105°C	6.3 – 63 V	1 – 220 μF	105°C 2000 h

Specifications

Operating temperature range	–40 ~ +105°C
Rated voltage range	6.3 ~ 63 V
Capacitance range	1 ~ 220 μF The characteristics list also includes ratings below 1 μF at 50 V and 63 V — subject to manufacturer confirmation.
Capacitance tolerance	±20% (at 20°C, 120 Hz)
Leakage current	I ≤ 0.01CRUR or 3 μA whichever is greater. (After 2 minutes at 20°C application of rated voltage)
Load life	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for 2000 hours at 105°C. Capacitance change: ≤ ±25% of the initial value D.F. (tan δ): ≤ 200% of the initial specified value Leakage current: ≤ the initial specified value
Shelf life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C The original sheet gives no standard number after 'JIS C' — subject to manufacturer confirmation. Capacitance change: ≤ ±20% of the initial value D.F. (tan δ): ≤ 200% of the initial specified value Leakage current: ≤ 200% the initial specified value

Low-temperature characteristics

Rated voltage (V)	6.3	10	16	25	35	50	63
Z(–25°C)/Z(+20°C)	4	3	2	2	2	2	2
Z(–40°C)/Z(+20°C)	8	6	4	3	3	3	3

Impedance ratio at 120 Hz.

Ripple current frequency correction factor

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz~
Coefficient	0.70	1.00	1.17	1.36	1.50

Dissipation factor (tan δ) at 20°C, 120 Hz

Rated voltage (V)	6.3	10	16	25	35	50	63
tan δ (max.)	0.24	0.21	0.18	0.15	0.13	0.12	0.10

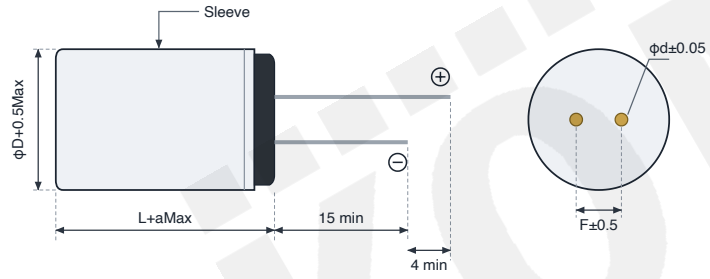
Values as printed in the original specification table; the characteristics list gives 0.22 / 0.19 / 0.16 / 0.14 / 0.12 / 0.10 / 0.09 — subject to manufacturer confirmation.

Standard ratings

μF \ V	6.3	10	16	25	35	50	63
0.1						4×7	4×7
0.22						4×7	4×7
0.33						4×7	4×7
0.47						4×7	4×7
0.68						4×7	
1						4×7	4×7
2.2						4×7	4×7
3.3						4×7	5×7
4.7				4×7	4×7	4×7 5×7	6.3×7
6.8				4×7	4×7 5×7		
10			4×7	4×7 5×7	5×7	6.3×7	6.3×7
22	4×7	4×7	4×7 5×7	5×7 6.3×7	6.3×7	8×7	8×7
33	4×7 5×7	5×7	5×7	6.3×7	6.3×7 8×7	8×7	
47	5×7	5×7	6.3×7	8×7	8×7		
68	5×7	6.3×7	6.3×7 8×7	8×7	8×7		
100	6.3×7	6.3×7 8×7	8×7	8×7			
220	8×7	8×7					

Case size ΦD × L (mm). Full ratings in the characteristics list.

Dimensions



ΦD	4	5	6.3	8.0
F	1.5	2.0	2.5	3.5
Φd	0.45	0.45	0.45	0.5
a	1.0	1.0	1.0	1.0

Unit: mm

How to order

KSK	3	101	M	100	B	8X7
Series code	Number of characters for capacitance 47μF = 2, 470μF = 3, 4700μF = 4	Capacitance 47μF = 470, 3300μF = 332, 33000μF = 333	Capacitance tolerance M = ±20%, K = ±10%	Voltage code 6.3V = 060, 10V = 100, 63V = 630, 100V = 101	Package B: bulk pack, A: ammo pack	Size code

Example: KSK3101M100B8X7

Characteristics list

UR (V)	Rated Capacitance (μF)	D.F. (tan δ) 20°C 120Hz	Rated Ripple Current 105°C 120Hz (mA rms)	Size ΦD×L (mm)	Surge Voltage (V)
6.3	22	0.22	28	4×7	8
6.3	33	0.22	32	4×7	8
6.3	33	0.22	35	5×7	8
6.3	47	0.22	47	5×7	8
6.3	68	0.22	50	5×7	8
6.3	100	0.22	75	6.3×7	8
6.3	220	0.22	92	8×7	8
10	22	0.19	32	4×7	13
10	33	0.19	48	5×7	13
10	47	0.19	51	5×7	13
10	68	0.19	68	6.3×7	13
10	100	0.19	80	6.3×7	13
10	100	0.19	95	8×7	13
10	220	0.19	130	8×7	13

UR (V)	Rated Capacitance (μF)	D.F. (tan δ) 20°C 120Hz	Rated Ripple Current 105°C 120Hz (mA rms)	Size ΦD×L (mm)	Surge Voltage (V)
16	10	0.16	28	4×7	20
16	22	0.16	35	4×7	20
16	22	0.16	42	5×7	20
16	33	0.16	50	5×7	20
16	47	0.16	67	6.3×7	20
16	68	0.16	70	6.3×7	20
16	68	0.16	78	8×7	20
16	100	0.16	110	8×7	20
25	4.7	0.14	17	4×7	32
25	6.8	0.14	19	4×7	32
25	10	0.14	28	4×7	32
25	10	0.14	33	5×7	32
25	22	0.14	43	5×7	32
25	22	0.14	45	6.3×7	32
25	33	0.14	62	6.3×7	32
25	47	0.14	75	8×7	32
25	68	0.14	80	8×7	32
25	100	0.14	115	8×7	32
35	4.7	0.12	22	4×7	44
35	6.8	0.12	24	4×7	44
35	6.8	0.12	28	5×7	44
35	10	0.12	35	5×7	44
35	22	0.12	60	6.3×7	44
35	33	0.12	50	6.3×7	44
35	33	0.12	68	8×7	44
35	47	0.12	80	8×7	44
35	68	0.12	85	8×7	44
50	0.1	0.10	1.5	4×7	63
50	0.22	0.10	2.5	4×7	63
50	0.33	0.10	3.5	4×7	63
50	0.47	0.10	5	4×7	63
50	0.68	0.10	7	4×7	63
50	1	0.10	10	4×7	63
50	2.2	0.10	20	4×7	63
50	3.3	0.10	26	4×7	63
50	4.7	0.10	27	4×7	63
50	4.7	0.10	29	5×7	63
50	10	0.10	38	6.3×7	63
50	22	0.10	63	8×7	63
50	33	0.10	78	8×7	63
63	0.1	0.09	1.5	4×7	79
63	0.22	0.09	2.5	4×7	79
63	0.33	0.09	3.5	4×7	79
63	0.47	0.09	6	4×7	79
63	1	0.09	12	4×7	79
63	2.2	0.09	20	4×7	79
63	3.3	0.09	28	5×7	79
63	4.7	0.09	33	6.3×7	79
63	10	0.09	40	6.3×7	79
63	22	0.09	65	8×7	79

Capacitance range: the original specification table gives 1 ~ 220 μF, while the original characteristics list also includes 0.1, 0.22, 0.33, 0.47 and 0.68 μF at 50 V and 0.1, 0.22, 0.33 and 0.47 μF at 63 V — subject to manufacturer confirmation.
Dissipation factor: the original specification table gives tan δ 0.24 / 0.21 / 0.18 / 0.15 / 0.13 / 0.12 / 0.10 for 6.3 / 10 / 16 / 25 / 35 / 50 / 63 V, while the original characteristics list gives 0.22 / 0.19 / 0.16 / 0.14 / 0.12 / 0.10 / 0.09 — subject to manufacturer confirmation.
Shelf life: the original sheet ends the preconditioning reference at 'Item 4.1 of JIS C' without a standard number — subject to manufacturer confirmation.
Custom products are available on request.
Voltage code for 6.3 V is 060 as specified by the manufacturer (2026-11-03).