KOME

KTH Series

Screw Terminal Aluminium Electrolytic Capacitors



Features

- 2000 hours at 105°C
- Standard 105°C series
- For professional power supplies and inverters

TEMPERATURE RANGE	RATED VOLTAGE	CAPACITANCE	ENDURANCE
–40 / –25°C … +105°C	**25 – 450 V**	**220 – 330000 μF**	**105°C 2000 h**

Specifications

Operating temperature range	25 ~ 100 V: –40 ~ +105°C 160 ~ 450 V: –25 ~ +105°C
Rated voltage range	25 ~ 100 V 160 ~ 450 V
Capacitance range	220 ~ 330000 μF
Capacitance tolerance	±20% (at 20°C, 120 Hz)
Leakage current	After 5 minutes at 20°C application of rated voltage, leakage current is not more than 0.01CV or 5 mA, whichever is greater. C: nominal capacitance (μF), V: rated voltage (V)
Dissipation factor (tan δ)	Less than the values shown in the standard ratings (at 20°C, 120 Hz)
Stability at low temperature	25 ~ 100 V: capacitance at –40°C shall not be less than 60% of the 20°C value 160 ~ 450 V: capacitance at –25°C shall not be less than 70% of the 20°C value
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: within ±20% of the initial value
	D.F. (tan δ): not more than 200% of the specified value
	Leakage current: not more than the specified value
Shelf life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 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 5101-4.
	Capacitance change: within ±20% of the initial value
	D.F. (tan δ): not more than 200% of the specified value
	Leakage current: not more than 200% of the specified value

Ripple current frequency correction factor

Frequency	50 / 60 Hz	120 Hz	300 Hz	1 kHz	≥ 10 kHz
Coefficient	0.80	1.00	1.10	1.30	1.40

Ripple current temperature coefficient

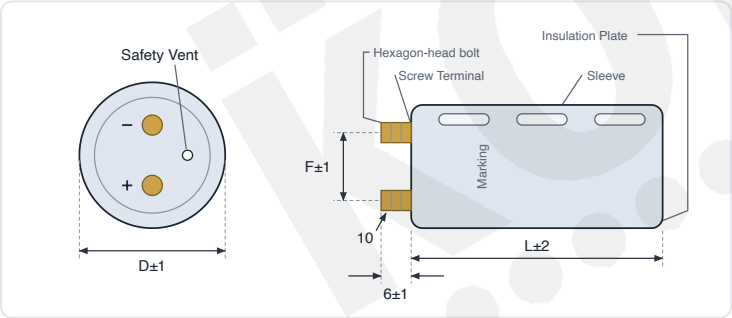
Ambient temperature (°C)	+40	+55	+70	+85	+105
All voltages	2.70	2.00	1.70	1.00	1.00

Standard ratings

μF \ V	25	35	50	63	80	100	160	200	250	400	450
220											35×53
330								35×53	35×53		35×100
470							35×53	35×53	35×53		50.8×83
680							35×53	35×83	35×83		50.8×96
1000						35×53	35×83	35×100	35×100	50.8×75	50.8×100
1200										50.8×96	
1500						35×53	35×83	50.8×75	50.8×75	50.8×115	50.8×130
1800										50.8×130	
2200				35×53	35×53	35×83	35×100	50.8×96	50.8×96	63.5×96	63.5×115
2700										63.5×115	
3300			35×53	35×53	35×83	35×83	50.8×83	50.8×96	63.5×96	63.5×130	76×130
3900										63.5×155 76×115	
4700			35×53	35×83	35×83	35×100	50.8×96	63.5×115	63.5×115	63.5×195 76×130	76×155
5600										63.5×195 76×155	89×157
6800		35×53	35×83	35×83	35×100	50.8×75	63.5×96	63.5×115	76×115	89×157	
8200										89×157	
10000	35×53	35×83	35×83	35×100	50.8×75	50.8×96	76×96	76×155	76×155	89×196	
15000	35×83	35×83	35×100	50.8×75	50.8×96	63.5×96	76×130	89×157	89×157		
22000	35×83	35×100	50.8×75	50.8×96	63.5×96	76×96	89×131				
33000	35×100	50.8×75	50.8×115	63.5×96	76×96	76×130					
47000	50.8×75	50.8×96	63.5×96	63.5×115	76×115	89×131					
68000	50.8×115	50.8×155	63.5×115	76×115	89×131						
100000	63.5×96	63.5×115	76×115	89×131							
150000	63.5×115	76×115	89×131								
220000	76×115	89×131									
330000	89×131										

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

Dimensions



D	35	50.8	63.5	76	89	100
F	13	22	28	32	32	42

Unit: mm

How to order

KTH	5	103	M	630	B	35X100
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, 25V = 250, 35V = 350, 50V = 500, 63V = 630, 80V = 800, 100V = 101, 160V = 161, 200V = 201, 250V = 251, 400V = 401, 450V = 451	Package B: bulk pack, A: ammo pack	Size code

Example: KTH5103M630B35X100

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)
25	10000	0.35	2900	35×53	32
25	15000	0.35	4200	35×83	32
25	22000	0.35	5100	35×83	32
25	33000	0.40	6300	35×100	32
25	47000	0.40	8000	50.8×75	32
25	68000	0.50	10000	50.8×115	32

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)
25	100000	0.60	11300	63.5×96	32
25	150000	0.80	12900	63.5×115	32
25	220000	1.00	14800	76×115	32
25	330000	1.00	19900	89×131	32
35	6800	0.30	2600	35×53	44
35	10000	0.30	3700	35×83	44
35	15000	0.30	4500	35×83	44
35	22000	0.35	5500	35×100	44
35	33000	0.40	6700	50.8×75	44
35	47000	0.45	8100	50.8×96	44
35	68000	0.50	10000	50.8×155	44
35	100000	0.60	12100	63.5×115	44
35	150000	0.70	13800	76×115	44
35	220000	0.70	17600	89×131	44
50	3300	0.20	2200	35×53	63
50	4700	0.25	3300	35×53	63
50	6800	0.25	3400	35×83	63
50	10000	0.25	4100	35×83	63
50	15000	0.30	4900	35×100	63
50	22000	0.35	5900	50.8×75	63
50	33000	0.40	7800	50.8×115	63
50	47000	0.40	9500	63.5×96	63
50	68000	0.45	11600	63.5×115	63
50	100000	0.50	14100	76×115	63
50	150000	0.50	18900	89×131	63
63	2200	0.15	2100	35×53	79
63	3300	0.20	2200	35×53	79
63	4700	0.20	3100	35×83	79
63	6800	0.20	3700	35×83	79
63	10000	0.25	4400	35×100	79
63	15000	0.25	5700	50.8×75	79
63	22000	0.30	6800	50.8×96	79
63	33000	0.30	9200	63.5×96	79
63	47000	0.35	10900	63.5×115	79
63	68000	0.40	13000	76×115	79
63	100000	0.40	17200	89×131	79
80	2200	0.15	2100	35×53	100
80	3300	0.15	3000	35×83	100
80	4700	0.15	3600	35×83	100
80	6800	0.20	4000	35×100	100
80	10000	0.20	5200	50.8×75	100
80	15000	0.25	6200	50.8×96	100
80	22000	0.25	8200	63.5×96	100
80	33000	0.30	9700	76×96	100
80	47000	0.30	12500	76×115	100
80	68000	0.30	16400	89×131	100
100	1000	0.15	1400	35×53	125
100	1500	0.15	1700	35×53	125
100	2200	0.15	2500	35×83	125
100	3300	0.15	3000	35×83	125
100	4700	0.15	3900	35×100	125
100	6800	0.15	5000	50.8×75	125
100	10000	0.15	6500	50.8×96	125
100	15000	0.20	7600	63.5×96	125
100	22000	0.20	9700	76×96	125
100	33000	0.25	11800	76×130	125
100	47000	0.25	15000	89×131	125
160	470	0.15	1000	35×53	200
160	680	0.15	1100	35×53	200
160	1000	0.15	1700	35×83	200
160	1500	0.15	2000	35×83	200
160	2200	0.15	2700	35×100	200
160	3300	0.15	3500	50.8×83	200
160	4700	0.15	4400	50.8×96	200
160	6800	0.15	5900	63.5×96	200
160	10000	0.15	7600	76×96	200
160	15000	0.15	10300	76×130	200
160	22000	0.15	13200	89×131	200
200	330	0.15	800	35×53	250

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)
200	470	0.15	1000	35×53	250
200	680	0.15	1100	35×83	250
200	1000	0.15	1700	35×100	250
200	1500	0.15	2200	50.8×75	250
200	2200	0.15	2800	50.8×96	250
200	3300	0.15	3700	50.8×96	250
200	4700	0.15	4900	63.5×115	250
200	6800	0.15	6300	63.5×115	250
200	10000	0.15	8100	76×155	250
200	15000	0.15	10900	89×157	250
250	330	0.15	800	35×53	300
250	470	0.15	1000	35×53	300
250	680	0.15	1400	35×83	300
250	1000	0.15	1900	35×100	300
250	1500	0.15	2300	50.8×75	300
250	2200	0.15	3100	50.8×96	300
250	3300	0.15	4200	63.5×96	300
250	4700	0.15	5400	63.5×115	300
250	6800	0.15	6900	76×115	300
250	10000	0.15	9300	76×155	300
250	15000	0.15	12200	89×157	300
400	1000	0.15	2500	50.8×75	450
400	1200	0.15	3000	50.8×96	450
400	1500	0.15	3600	50.8×115	450
400	1800	0.15	4100	50.8×130	450
400	2200	0.15	4500	63.5×96	450
400	2700	0.15	5300	63.5×115	450
400	3300	0.15	6200	63.5×130	450
400	3900	0.15	7200	63.5×155	450
400	3900	0.15	6800	76×115	450
400	4700	0.15	8700	63.5×195	450
400	4700	0.15	7800	76×130	450
400	5600	0.15	9600	63.5×195	450
400	5600	0.15	9200	76×155	450
400	6800	0.15	10700	89×157	450
400	8200	0.15	11800	89×157	450
400	10000	0.15	14100	89×196	450
450	220	0.15	1100	35×53	500
450	330	0.15	1500	35×100	500
450	470	0.15	2100	50.8×83	500
450	680	0.15	2700	50.8×96	500
450	1000	0.15	4200	50.8×100	500
450	1500	0.15	5700	50.8×130	500
450	2200	0.15	7300	63.5×115	500
450	3300	0.15	10100	76×130	500
450	4700	0.15	12600	76×155	500
450	5600	0.15	15800	89×157	500

Rated voltage range: the original prints '25 ~ +100V'; read as 25 ~ 100 V.
Leakage current: 0.01CV or 5 mA, whichever is greater, as confirmed (2026-11-05). The original prints 0.01CV or 5 mA, whichever is smaller.
Stability at low temperature: the original heading reads 'Impedance Radio at 120Hz', but the values describe capacitance change — shown here as capacitance change.
Ripple current temperature coefficient: table as answered by the manufacturer (2026-11-05), including +105°C = 1.00 (2026-11-06). The original prints separate rows for ≤250 V and >250 V.
Sizes as printed: 100 V 33000 μF 76×130; 35 V 68000 μF 50.8×155; 450 V 1000 μF 50.8×100; 400 V 3900, 4700 and 5600 μF are each listed in two sizes — the manufacturer answered that the sizes asked about are in production (2026-11-05).
Voltage codes 250 / 350 / 500 / 800 / 161 and 6.3 V = 060 as given by the manufacturer (2026-11-03); 201 / 251 / 401 / 451 confirmed by the manufacturer (2026-11-04).
Size code examples confirmed (2026-11-04): 50.8×155 → 50X155; 63.5×115 → 63X115.