KOME

KPH Series

High Voltage / High Reliability



Features

- High voltage and high reliability
- Large permissible ripple current
- Low ESR at high frequency range

TEMPERATURE RANGE	RATED VOLTAGE	CAPACITANCE	ENDURANCE
–55°C … +105°C	**35 – 100 V**	**10 – 330 μF**	**105°C 2000 h**

Specifications

Operating temperature range	–55 ~ +105°C
Rated voltage range	35 ~ 100 V DC
Capacitance range	8.2 ~ 330 μF
Capacitance tolerance	±20% (120 Hz, +20°C)
Leakage current	Not to exceed the values shown in the characteristics list (Rated voltage applied, after 2 minutes at 20°C)
Dissipation factor (tan δ, at 20°C, 120 Hz)	Not to exceed the values shown in the characteristics list
ESR (at 100 kHz, 20°C)	Not to exceed the values shown in the characteristics list
Endurance	105°C, 2000h, at rated voltage Capacitance change: Within ±20% of the value before test Leakage current: Not to exceed the value specified ESR: Not to exceed 150% of the value specified Dissipation factor: Not to exceed 150% of the value specified
Moisture resistance	Stored at 60°C, RH90~95%, 1000h Capacitance change: Within ±20% of the value before test Leakage current: Not to exceed the value specified ESR: Not to exceed 150% of the value specified Dissipation factor: Not to exceed 150% of the value specified

Frequency coefficient for ripple current

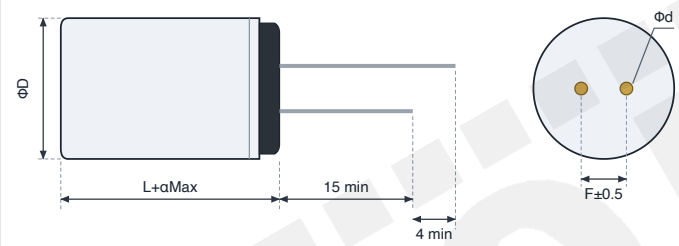
Frequency	120 Hz ≤ freq. < 1 kHz	1 kHz ≤ freq. < 10 kHz	10 kHz ≤ freq. < 100 kHz	100 kHz ≤ freq. < 300 kHz
Coefficient	0.05	0.3	0.7	1

Standard ratings

μF \ V	35	50	63	100
10			6.3×8 8×11.5	8×9
22		6.3×8	8×8	8×11.5
33	6.3×8	8×8 8×11.5	8×11.5	8×11.5
47	8×8	8×11.5	8×11.5	
56	8×8	8×11.5 10×10 10×12.5	10×12.5	
68	8×8 8×11.5	8×8 8×11.5 10×12.5	10×12.5	
82	8×11.5	10×12.5	10×12.5	
100	8×8 8×11.5	10×12.5		
120		10×12.5		
150	8×11.5		10×12.5	
220	10×12.5			
270	10×12.5			
330	10×12.5			

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

Dimensions



ΦD×L	ΦD+0.5	α	F±0.5	Φd±0.05
6.3×8	6.3	1.0	2.5	0.6
8×8	8.0	1.0	3.5	0.6
8×9/8×11.5	8.0	1.5	3.5	0.6
10×10	10.0	1.5	5.0	0.6
10×12.5	10.0	1.5	5.0	0.6

(+): longer lead.

19 min: from the seal end to the end of the longer (+) lead.

Unit: mm

How to order

KPH	3	331	M	350	B	1012
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, 35V = 350, 50V = 500, 63V = 630, 100V = 101	Package B: bulk pack, A: ammo pack	Size code 10×12.5 = 1012, 8×11.5 = 0811, 6.3×8 = 0608

Example: KPH3331M350B1012

Characteristics list

W.V. (V)	Cap (μF)	Size ΦD×L (mm)	L.C. (μA, 2 min)	tan δ (120 Hz, 20°C)	ESR (mΩ, 100 kHz)	Max. Permissible Ripple Current (mA rms)
35	33	6.3×8	231	0.12	30	2500
35	47	8×8	329	0.12	30	2700
35	56	8×8	392	0.12	30	2700
35	68	8×8	476	0.12	30	2700
35	68	8×11.5	476	0.12	20	3600
35	82	8×11.5	574	0.12	20	3600
35	100	8×8	700	0.12	25	2800
35	100	8×11.5	700	0.12	20	3600
35	150	8×11.5	1050	0.12	15	4400
35	220	10×12.5	1540	0.12	20	4000
35	270	10×12.5	1890	0.12	20	4000
35	330	10×12.5	2310	0.12	18	4400
50	22	6.3×8	220	0.12	45	2300
50	33	8×8	330	0.12	45	2300
50	33	8×11.5	330	0.12	32	2700
50	47	8×11.5	470	0.12	30	2800

W.V. (V)	Cap (μF)	Size ΦD×L (mm)	L.C. (μA, 2 min)	tan δ (120 Hz, 20°C)	ESR (mΩ, 100 kHz)	Max. Permissible Ripple Current (mA rms)
50	56	8×11.5	560	0.12	30	2800
50	56	10×10	560	0.12	30	2800
50	56	10×12.5	560	0.12	25	3400
50	68	8×8	680	0.12	40	2400
50	68	8×11.5	680	0.12	30	2800
50	68	10×12.5	680	0.12	25	3400
50	82	10×12.5	820	0.12	25	3400
50	100	10×12.5	1000	0.12	25	3400
50	120	10×12.5	1200	0.12	25	3400
63	10	6.3×8	126	0.12	45	1900
63	10	8×11.5	126	0.12	45	2100
63	22	8×8	277.2	0.12	45	2100
63	33	8×11.5	415.8	0.12	35	2500
63	47	8×11.5	592.2	0.12	35	2500
63	56	10×12.5	705.6	0.12	30	3000
63	68	10×12.5	856.8	0.12	30	3000
63	82	10×12.5	1033.2	0.12	30	3000
63	150	10×12.5	1890	0.12	30	3000
100	10	8×9	200	0.12	42	2100
100	22	8×11.5	440	0.12	35	2800
100	33	8×11.5	660	0.12	35	2800

Ripple current (mA rms) at 105°C, 100 kHz.
Capacitance range is printed as 8.2 ~ 330 μF; the lowest capacitance in the characteristics list is 10 μF — subject to manufacturer confirmation.
How to order: size codes for 8×8, 8×9 and 10×10 are not shown — subject to manufacturer confirmation.
Voltage code for 6.3 V is 060 as specified by the manufacturer (2026-11-03).