KOME

KPC Series

Radial Conductive Polymer Solid Capacitors



Features

- Low ESR at high frequency range
- Large permissible ripple current

TEMPERATURE RANGE	RATED VOLTAGE	CAPACITANCE	ENDURANCE
–55°C … +105°C	**2.5 – 25 V**	**47 – 3300 µF**	**105°C 2000 h**

Capacitance: 47 – 3300 µF as covered by the characteristics list (specifications: 39 to 3500 µF) — subject to manufacturer confirmation.

Specifications

Operating temperature range	–55°C ~ +105°C
Rated voltage range	2.5 ~ 25 VDC
Capacitance range	39 to 3500 µF
Capacitance tolerance	±20% (120 Hz, +20°C)
Leakage current (+20°C, max.)	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

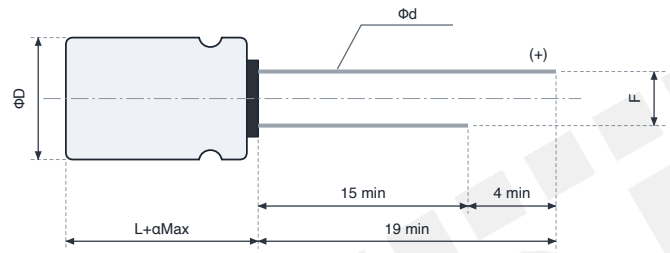
Frequency	120 Hz ≤ freq. < 1 kHz	1 kHz ≤ freq. < 10 kHz	10 kHz ≤ freq. < 100 kHz	100 kHz ≤ freq. < 300 kHz
Coefficient	0.05	0.3	0.7	1

Standard ratings

μF \ V	2.5	6.3	10	16	25
47					6.3×8
100				6.3×8	6.3×8
220		5×8	6.3×8	6.3×8	8×8 8×11.5
270		5×8	6.3×8	6.3×8	8×11.5
330		6.3×8	6.3×8	8×8	8×11.5
470		6.3×8	8×8	8×8 8×11.5	10×12.5
560	6.3×8	6.3×8	8×8	8×8 8×11.5 10×12.5	10×12.5
680	6.3×8	6.3×8	8×8	8×11.5 10×12.5	10×12.5
820	6.3×8	8×8	8×11.5		10×12.5
1000	6.3×8	8×8	8×11.5	10×12.5	
1500			10×12.5		
2200	8×11.5	10×12.5			
3300	10×12.5	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
5×8	6.3	1.0	2.5	0.6
6.3×8	6.3	1.5	2.5	0.6
8×8	8.0	1.0	3.5	0.6
8×11.5	8.0	1.5	3.5	0.6
10×12.5	10.0	1.5	5.0	0.6

Unit: mm

5×8: ΦD+0.5 printed as 6.3 (as for 6.3×8) — subject to manufacturer confirmation.

How to order

KPC	3	821	M	250	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, 25V = 250, 63V = 630, 100V = 101	Package B: bulk pack, A: ammo pack	Size code 10×12.5 = 1012

Example: KPC3821M250B1012

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)	Maximum Permissible Ripple Current (mA, r.m.s)
2.5	560	6.3×8	280	0.08	12	5100
2.5	680	6.3×8	340	0.08	12	5200
2.5	820	6.3×8	410	0.08	12	5200
2.5	1000	6.3×8	500	0.08	12	5500
2.5	2200	8×11.5	1100	0.08	12	5900
2.5	3300	10×12.5	1700	0.08	12	5900
6.3	220	5×8	277.2	0.07	21	5100
6.3	270	5×8	340.2	0.07	21	5100
6.3	330	6.3×8	415.8	0.07	15	5100
6.3	470	6.3×8	592.2	0.08	12	5100
6.3	560	6.3×8	705.6	0.08	12	5100
6.3	680	6.3×8	856.8	0.08	10	5100
6.3	820	8×8	1033.0	0.10	12	5100
6.3	1000	8×8	1260	0.10	12	5100
6.3	2200	10×12.5	1386	0.10	12	5900
6.3	3300	10×12.5	1575	0.10	12	6100
10	220	6.3×8	440	0.08	15	5100
10	270	6.3×8	540	0.08	15	5100

W.V. (V)	Cap (μF)	Size ΦD×L (mm)	L.C. (μA, 2 min)	tan δ (120 Hz, 20°C)	ESR (mΩ, 100 kHz)	Maximum Permissible Ripple Current (mA, r.m.s)
10	330	6.3×8	660	0.08	12	5100
10	470	8×8	940	0.08	12	5500
10	560	8×8	1220	0.08	12	5500
10	680	8×8	1360	0.10	12	5500
10	820	8×11.5	1640	0.10	12	5900
10	1000	8×11.5	1640	0.10	12	5900
10	1500	10×12.5	1640	0.10	12	5900
16	100	6.3×8	320	0.08	12	4800
16	220	6.3×8	700	0.08	15	4500
16	270	6.3×8	860	0.08	12	4500
16	330	8×8	1000	0.08	12	4500
16	470	8×8	1400	0.10	16	4500
16	470	8×11.5	1500	0.10	12	5000
16	560	8×8	1700	0.12	16	4500
16	560	8×11.5	1700	0.10	12	5000
16	560	10×12.5	1700	0.10	12	5500
16	680	8×11.5	1800	0.12	14	5000
16	680	10×12.5	1800	0.10	12	5500
16	1000	10×12.5	1800	0.10	12	5500
25	47	6.3×8	235	0.08	25	3500
25	100	6.3×8	500	0.08	20	3900
25	220	8×8	1100	0.08	20	3900
25	220	8×11.5	1100	0.08	20	4200
25	270	8×11.5	1350	0.08	18	4400
25	330	8×11.5	1650	0.08	18	4400
25	470	10×12.5	2350	0.08	20	4500
25	560	10×12.5	2800	0.10	20	4500
25	680	10×12.5	3400	0.12	20	4500
25	820	10×12.5	2050	0.12	20	4500

Ripple current (mA, rms) at 105°C, 100 kHz.
Capacitance range: the specifications give 39 to 3500 μF; the characteristics list covers 47 to 3300 μF — subject to manufacturer confirmation.
Dimensions: the 5×8 row of the original dimension table gives ΦD+0.5 as 6.3, the same as the 6.3×8 row — subject to manufacturer confirmation.
How to order: voltage codes for 2.5 V and 16 V and size codes for the other case sizes are not shown — subject to manufacturer confirmation.
Voltage code for 6.3 V is 060 as specified by the manufacturer (2026-11-03).