

K76 TYPE -40°C +85°C 5000H

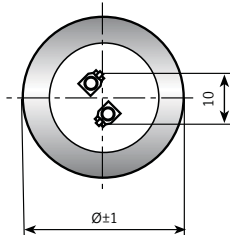
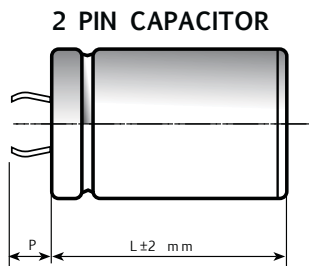
RoHS Compliant

- Design optimized for extremely high miniaturization.
- Surge-proof capacitor in aluminium can with insulation sleeve.
- Snap in terminals for PCB mounting.

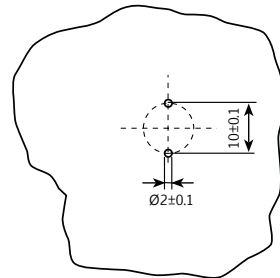
APPLICATIONS

Designed for professional application.
Ultra compact UPS, Solar inverters, High ripple current converters, Motor drives.

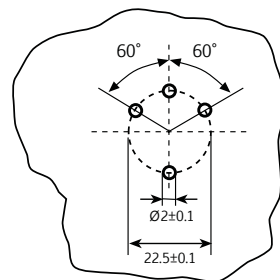
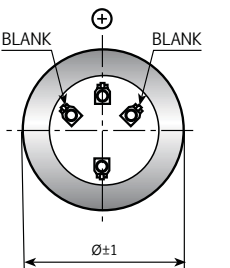
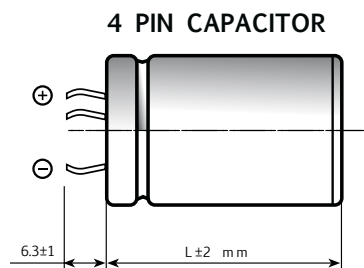
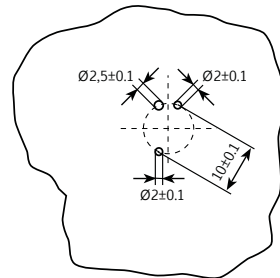
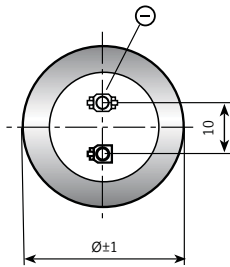
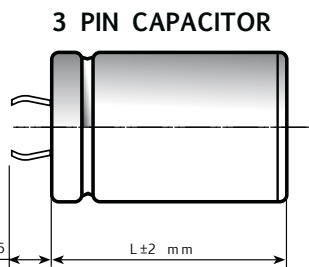
Dimensions in mm.



Circuit board
hole dimensions



PIN LENGTH
P 4.5 short pin
P 6.3 long pin (standard)



Ø	22	25	30	35	40	45	50
2 PINS	●	●	●	●	●		
3 PINS		●	●	●			
4 PINS				●	●	●	●

On demand, only for capacitors with diam ≥ 35mm: octagonal can shape for long stress vibration applications.

SPECIFICATIONS

Temperature Range	Operating : -40°C +85°C [Environmental classification 40/85/56 IEC-68] Storage : Preferably below +25°C, not exceeding +40°C							
Rated Voltage Range (V_r)	from 200V to 450V DC							
Surge Voltage (V_p)	V _p = 1.10 V _r							
Rated Capacitance Range	from 220 µF to 5600 µF							
Capacitance Tolerance	±20% at 100 Hz, 20°C [M class IEC-62] on request : -10% +30% at 100 Hz, 20°C [Q class IEC-62]							
Leakage Current (I_L) (mA, 5 min, 20°C)	max I _L = 0.006 C _r V _r + 4 µA							
Ripple current (I_r)	Refer to table at 85°C and 100Hz :							
	FREQUENCY	50Hz	100Hz	500Hz	1000Hz	>10kHz		
	MULTIPLIER	0.8	1.0	1.2	1.3	1.5		
	AMBIENT TEMP	35°C	45°C	55°C	65°C	75°C	85°C	95°C
	MULTIPLIER	2.2	2.1	1.8	1.6	1.4	1.0	0.5
Insulation Resistance	At 100V DC for 1 min is >100 MΩ across insulating sleeve and terminals.							
Vibration Resistance	Frequency range : 10 Hz to 55 Hz, amplitude 0.75 mm max acceleration 10g for 3x2 h							
Life test (85°C, V_n, I_r applied)	After 2,000 hours application of rated voltage at 85°C capacitors meet characteristics aside		Cap change	≤ 10%				
			tan δ	≤ 130%				
			Leakage current (I _L)	< initial limit				
			Impedance (Z)	≤ 130%				
Shelf life	After leaving capacitors under no load for 500 hours at 85°C, when restored at 20°C meet specifications aside		Cap change	≤ ±15%				
			tan δ	≤ 150%				
			Leakage current (I _L)	< initial limit				
Useful life (85°C, V_n, I_r applied)	≥ 5,000 h at 85°C	D≤35mm	Cap change	≤ 20%				
	≥ 12,000 h at 85°C	D>40mm	tan δ	≤ 200%				
			Leakage current (I _L)	< initial limit				
			Impedance (Z)	≤ 200%				
Failure percentage Failure rate	≤ 1% (during working life) ≤ 33 fit (33 10 ⁻⁹ /h)							
Self inductance	Approx. 15 nH							
Reference standards	CECC 30.300 IEC 60384-4 LONG LIFE GRADE							

K76 TYPE STANDARD RATINGS

Cap µF	Ø x L mm	Tan δ MAX 100 Hz 20°C	ESR TYP mΩ 100 Hz 20°C	Z TYP mΩ 10 kHz 20°C	Ir a.c. A max 100 Hz 85°C	PART NUMBER termination digit excluded
560	25x30	0.09	106	39	3.05	K76200561_PM0C030
680	25x35	0.09	85	32	3.63	K76200681_PM0C035
820	25x40	0.09	67	25	4.04	K76200821_PM0C040
820	30x30	0.09	84	34	3.87	K76200821_PM0D030
1000	25x45	0.10	61	23	4.72	K76200102_PM0C045
1000	30x35	0.10	68	30	4.56	K76200102_PM0D035
1000	35x30	0.10	75	37	4.43	K76200102_PM0E030
1200	25x50	0.10	53	22	5.23	K76200122_PM0C050
1200	30x40	0.10	58	25	5.15	K76200122_PM0D040
1200	35x30	0.10	69	33	4.45	K76200122_PM0E030
1500	30x45	0.10	50	22	5.86	K76200152_PM0D045
1500	35x35	0.10	58	26	5.22	K76200152_PM0E035
1800	35x40	0.10	53	27	5.97	K76200182_PM0E040
2200	35x45	0.10	46	24	6.72	K76200222_PM0E045
2200	35x50	0.10	46	24	7.43	K76200222_PM0E050
2700	35x60	0.10	33	17	8.89	K76200272_PM0E060
3300	40x60	0.10	32	18	9.64	K76200332_PM0F060

**RATED
VOLTAGE
VDC**

200V

Cap µF	Ø x L mm	Tan δ MAX 100 Hz 20°C	ESR TYP mΩ 100 Hz 20°C	Z TYP mΩ 10 kHz 20°C	Ir a.c. A max 100 Hz 85°C	PART NUMBER termination digit excluded
390	25x30	0.09	141	52	2.68	K76250391_PM0C030
470	25x35	0.09	111	42	3.17	K76250471_PM0C035
560	30x30	0.09	106	44	3.45	K76250561_PM0D030
680	25x45	0.09	80	33	4.09	K76250681_PM0C045
760	30x35	0.09	82	35	4.05	K76250761_PM0D035
820	30x40	0.09	75	30	4.50	K76250821_PM0D040
820	35x30	0.09	84	36	4.07	K76250821_PM0E030
1000	30x45	0.10	60	26	5.25	K76250102_PM0D045
1000	35x35	0.10	66	32	4.80	K76250102_PM0E035
1200	30x50	0.10	55	22	5.75	K76250122_PM0D050
1200	35x40	0.10	55	22	5.44	K76250122_PM0E040
1500	35x50	0.10	48	22	6.80	K76250152_PM0E050
2200	35x60	0.10	39	18	8.12	K76250222_PM0E060
2500	40x60	0.10	31	18	9.50	K76250252_PM0F060

**RATED
VOLTAGE
VDC**

250V

K76 TYPE STANDARD RATINGS

**RATED
VOLTAGE
VDC**

350V

Cap µF	Ø x L mm	Tan δ MAX 100 Hz 20°C	ESR TYP mΩ 100 Hz 20°C	Z TYP mΩ 10 kHz 20°C	Ir a.c. A max 100 Hz 85°C	PART NUMBER termination digit excluded
330	25x30	0.09	238	117	1.91	K76350331_PM0C030
390	25x35	0.09	225	114	2.25	K76350391_PM0C035
470	30x30	0.09	208	107	2.53	K76350471_PM0D030
520	30x30	0.09	195	105	2.55	K76350521_PM0D030
560	30x35	0.09	169	87	2.93	K76350561_PM0D035
560	30x40	0.09	169	87	3.14	K76350561_PM0D040
620	30x35	0.09	149	76	3.00	K76350621_PM0D050
680	30x40	0.09	127	66	3.34	K76350681_PM0D040
680	35x40	0.09	142	79	3.11	K76350681_PM0E040
820	30x45	0.09	111	57	3.77	K76350821_PM0D045
820	35x35	0.09	134	77	3.59	K76350821_PM0E035
880	30x45	0.09	110	57	3.78	K76350881_PM0D045
920	30x50	0.09	104	56	4.19	K76350921_PM0D050
1000	35x40	0.10	102	56	4.12	K76350102_PM0E040
1200	35x45	0.10	88	49	4.63	K76350122_PM0E045
1400	35x50	0.10	83	46	5.18	K76350142_PM0E050
1700	35x60	0.10	68	40	6.17	K76350172_PM0E060
2200	40x60	0.10	60	38	7.10	K76350222_PM0F060
2400	45x60	0.10	45	26	7.60	K76350242_PM0N060
2900	45x77	0.10	42	25	9.50	K76350292_PM0N077
2900	50x60	0.10	41	26	8.85	K76350292_PM0V060
3100	40x97	0.10	40	24	9.00	K76350312_PM0F097
3700	50x77	0.10	34	22	9.80	K76350372_PM0V077
4400	45x105	0.10	26	15	12.50	K76350442_PM0N105
4700	50x105	0.10	25	15	13.60	K76350472_PM0V105
5600	50x105	0.10	23	15	14.00	K76350562_PM0V105

**RATED
VOLTAGE
VDC**

400V

Cap µF	Ø x L mm	Tan δ MAX 100 Hz 20°C	ESR TYP mΩ 100 Hz 20°C	Z TYP mΩ 10 kHz 20°C	Ir a.c. A max 100 Hz 85°C	PART NUMBER termination digit excluded
220	25x30	0.09	328	148	1.70	K76400221_PM0C030
330	25x35	0.09	240	115	2.10	K76400331_PM0C035
390	30x30	0.09	230	112	2.35	K76400391_PM0D030
470	30x35	0.09	190	91	2.75	K76400471_PM0D035
560	30x40	0.09	160	78	3.11	K76400561_PM0D040
560	35x30	0.09	183	97	2.92	K76400561_PM0E030
680	30x45	0.09	126	60	3.55	K76400681_PM0D045
680	35x35	0.09	140	64	3.44	K76400681_PM0E035
720	30x50	0.09	121	59	3.89	K76400721_PM0D050
780	35x40	0.09	128	67	3.85	K76400781_PM0E040
820	35x45	0.09	114	59	4.32	K76400821_PM0E045
1000	35x50	0.10	97	51	4.85	K76400102_PM0E050
1200	35x60	0.10	79	41	5.77	K76400122_PM0E060
1700	40x60	0.10	67	39	6.70	K76400172_PM0F060
2000	45x60	0.10	49	28	8.36	K76400202_PM0N060
2200	45x77	0.10	46	26	8.8	K76400222_PM0N077
2200	50x60	0.10	45	26	8.1	K76400222_PM0V060
2400	40x97	0.10	43	25	8.8	K76400242_PM0F097
2400	45x77	0.10	42	23	8.8	K76400242_PM0N077
2400	50x60	0.10	45	26	8.8	K76400242_PM0V060
2900	50x77	0.10	38	22	10.0	K76400292_PM0V077
3300	45x105	0.10	30	18	11.8	K76400332_PM0N105
3300	50x105	0.10	28	16	12.80	K76400332_PM0V105
4400	50x105	0.10	26	15	13.40	K76400442_PM0V105

K76 TYPE STANDARD RATINGS

**RATED
VOLTAGE
VDC**

420V

Cap µF	Ø x L mm	Tan δ MAX 100 Hz 20°C	ESR TYP mΩ 100 Hz 20°C	Z TYP mΩ 10 kHz 20°C	I _r a.c. A max 100 Hz 85°C	PART NUMBER termination digit excluded
290	25x35	0.09	273	123	2.02	K76420291_PM0C035
330	30x30	0.09	256	118	2.30	K76420331_PM0D030
470	30x35	0.09	178	81	2.76	K76420471_PM0D035
520	30x40	0.09	170	80	3.02	K76420521_PM0D040
520	35x30	0.09	180	87	2.86	K76420521_PM0E030
560	30x45	0.09	149	69	3.48	K76420561_PM0D045
560	35x35	0.09	165	82	3.33	K76420561_PM0E035
620	30x45	0.09	150	72	3.50	K76420621_PM0D045
620	35x35	0.09	150	72	3.40	K76420621_PM0E035
680	30x50	0.09	127	60	3.80	K76420681_PM0D050
680	35x45	0.09	127	60	3.80	K76420681_PM0E045
820	35x45	0.09	115	55	4.23	K76420821_PM0E045
920	35x50	0.09	100	51	4.73	K76420921_PM0E050
1000	35x60	0.10	84	44	5.51	K76420102_PM0E060
1200	35x60	0.10	80	42	5.65	K76420122_PM0E060
1500	40x60	0.10	69	38	6.58	K76420152_PM0F060
1700	45x60	0.10	53	28	7.5	K76420172_PM0N060
2000	45x77	0.10	44	23	8.2	K76420202_PM0N077
2200	40x97	0.10	45	26	8.3	K76420222_PM0F097
2200	50x60	0.10	47	27	8.0	K76420222_PM0V060
2700	50x77	0.10	40	22	9.5	K76420272_PM0V077
3100	45x105	0.10	31	16	11.41	K76420312_PM0N105
3300	50x105	0.10	28	16	12.80	K76420332_PM0V105
3900	50x105	0.10	27	16	13.00	K76420392_PM0V105

**RATED
VOLTAGE
VDC**

450V

Cap µF	Ø x L mm	Tan δ MAX 100 Hz 20°C	ESR TYP mΩ 100 Hz 20°C	Z TYP mΩ 10 kHz 20°C	I _r a.c. A max 100 Hz 85°C	PART NUMBER termination digit excluded
220	25x35	0.09	325	145	1.87	K76450221_PM0C035
270	25x35	0.09	283	132	1.89	K76450271_PM0C035
330	30x30	0.09	228	107	2.13	K76450331_PM0D030
390	30x35	0.09	200	92	2.51	K76450391_PM0D035
470	30x40	0.09	165	80	2.85	K76450471_PM0D040
560	30x45	0.09	150	70	3.24	K76450561_PM0D045
560	35x35	0.09	154	76	3.12	K76450561_PM0E035
620	30x50	0.09	140	66	3.53	K76450621_PM0D050
680	35x40	0.09	133	65	3.56	K76450681_PM0E040
750	35x45	0.09	126	64	3.95	K76450751_PM0E045
820	35x50	0.09	109	56	4.41	K76450821_PM0E050
1000	35x60	0.10	91	45	5.33	K76450102_PM0E060
1500	40x60	0.10	74	32	6.22	K76450152_PM0F060
1600	45x60	0.10	58	30	6.5	K76450162_PM0N060
2000	40x97	0.10	50	27	7.2	K76450202_PM0F097
2000	45x77	0.10	48	25	7.6	K76450202_PM0N077
2000	50x60	0.10	52	29	7.3	K76450202_PM0V060
2400	50x77	0.10	43	24	9.70	K76450242_PM0V077
2700	45x105	0.10	33	17	10.50	K76450272_PM0N105
3300	50x105	0.10	30	17	12.10	K76450332_PM0V105
3600	50x105	0.10	29	16	12.20	K76450362_PM0V105

PLEASE TO CONTACT OUR TECHNICAL SERVICE FOR MORE INFORMATION.

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