

K75 TYPE -40°C +105°C 5000H

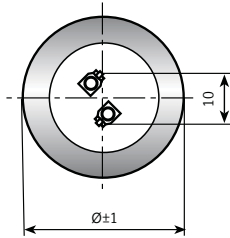
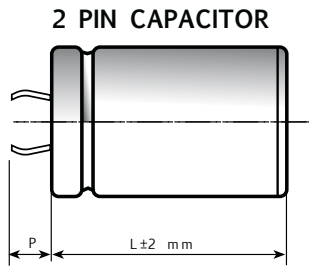
RoHS Compliant

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

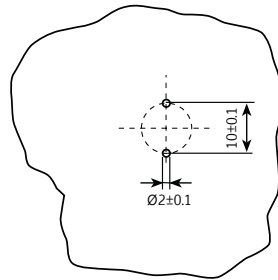
APPLICATIONS

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

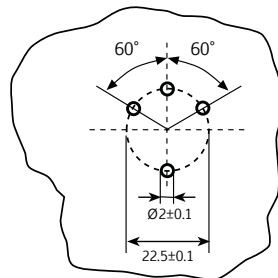
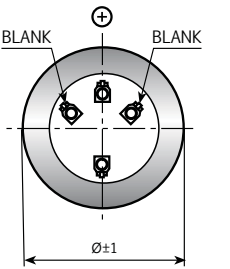
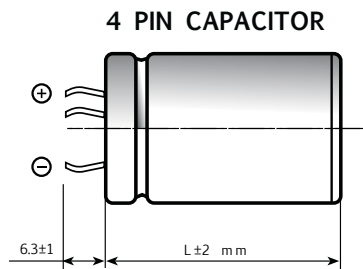
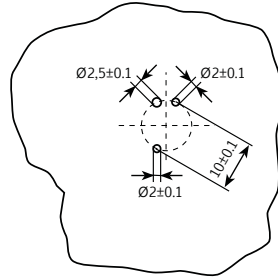
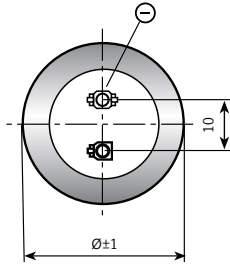
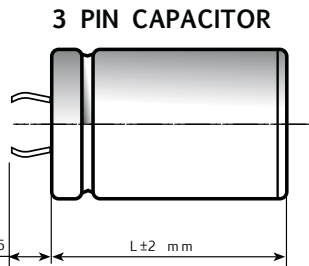
Dimensions in mm.



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 +105°C 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]	
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 105°C and 100Hz :	
	FREQUENCY	50Hz 100Hz 500Hz 1000Hz >10kHz
	MULTIPLIER	0.88 1.0 1.45 1.5 1.55
	AMBIENT TEMP	35°C 45°C 55°C 65°C 75°C 85°C 95°C 105°C
	MULTIPLIER	3.0 2.8 2.6 2.4 2.2 1.8 1.5 1
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 (105°C, V_n, I_r applied)	After 2,000 hours application of rated voltage at 105°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 105°C, when restored at 20°C meet specifications aside	Cap change ≤ ±15% tan δ ≤ 150% Leakage current (I _L) < initial limit
Useful life (105°C, V_n, I_r applied)	≥ 5.000 h at 105°C	Cap change ≤ 20% tan δ ≤ 200% Leakage current (I _L) < initial limit Impedance (Z) ≤ 200%
Failure percentage Failure rate	≤ 1% (during useful life) ≤ 40 fit (40 10 ⁻⁹ /h)	
Self inductance	Approx. 15 nH	
Reference standards	CECC 30.300 IEC 60384-4 LONG LIFE GRADE	

K75 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 105°C	PART NUMBER termination digit excluded
560	25x30	0.09	106	39	1.90	K75200561_PM0C030
680	25x35	0.09	85	32	2.25	K75200681_PM0C035
820	25x40	0.09	67	25	2.52	K75200821_PM0C040
820	30x30	0.09	84	34	2.40	K75200821_PM0D030
1000	25x45	0.10	61	23	2.93	K75200102_PM0C045
1000	30x35	0.10	68	30	2.83	K75200102_PM0D035
1000	35x30	0.10	75	37	2.75	K75200102_PM0E030
1200	25x50	0.10	53	22	3.27	K75200122_PM0C050
1200	30x40	0.10	58	25	3.19	K75200122_PM0D040
1200	35x30	0.10	69	33	2.86	K75200122_PM0E030
1500	30x45	0.10	50	22	3.64	K75200152_PM0D045
1500	35x35	0.10	58	26	3.24	K75200152_PM0E035
1800	35x40	0.10	53	27	3.70	K75200182_PM0E040
2200	35x45	0.10	46	24	4.17	K75200222_PM0E045
2200	35x50	0.10	46	24	4.61	K75200222_PM0E050
2700	35x60	0.10	33	17	5.51	K75200272_PM0E060
3300	40x60	0.10	32	18	6.00	K75200332_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 105°C	PART NUMBER termination digit excluded
390	25x30	0.09	141	52	1.65	K75250391_PM0C030
470	25x35	0.09	111	42	1.96	K75250471_PM0C035
560	30x30	0.09	106	44	2.14	K75250561_PM0D030
680	25x45	0.09	80	33	2.54	K75250681_PM0C045
760	30x35	0.09	82	35	2.51	K75250761_PM0D035
820	30x40	0.09	75	30	2.84	K75250821_PM0D040
820	35x30	0.09	84	36	2.53	K75250821_PM0E030
1000	30x45	0.10	60	26	3.30	K75250102_PM0D045
1000	35x35	0.10	66	32	3.04	K75250102_PM0E035
1200	30x50	0.10	55	22	3.60	K75250122_PM0D050
1200	35x40	0.10	55	22	3.50	K75250122_PM0E040
1500	35x50	0.10	48	22	4.22	K75250152_PM0E050
2200	35x60	0.10	39	18	5.03	K75250222_PM0E060
2500	40x60	0.10	31	18	5.98	K75250252_PM0F060

**RATED
VOLTAGE
VDC**

250V

K75 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 105°C	PART NUMBER termination digit excluded
330	25x35	0.09	238	117	1.34	K75350331_PM0C035
370	25x35	0.09	238	115	1.34	K75350371_PM0C035
390	30x30	0.09	225	114	1.47	K75350391_PM0D030
470	30x30	0.09	208	107	1.53	K75350471_PM0D030
560	30x35	0.09	169	87	1.79	K75350561_PM0D035
620	30x40	0.09	149	76	2.00	K75350621_PM0D040
620	35x30	0.09	161	86	2.00	K75350621_PM0E030
680	30x45	0.09	127	66	2.26	K75350681_PM0D045
680	35x35	0.09	142	79	2.16	K75350681_PM0E035
780	30x45	0.09	123	63	2.30	K75350781_PM0D045
780	35x35	0.09	139	77	2.19	K75350781_PM0E035
820	30x50	0.09	111	57	2.51	K75350821_PM0D050
900	35x40	0.09	118	65	2.48	K75350901_PM0E040
1000	35x45	0.10	102	56	2.78	K75350102_PM0E045
1200	35x50	0.10	88	49	3.12	K75350122_PM0E050
1500	35x60	0.10	72	40	3.71	K75350152_PM0E060
2000	40x60	0.10	68	38	4.29	K75350202_PM0F060
2200	45x60	0.10	48	26	4.80	K75350222_PM0N060
2700	45x77	0.10	39	22	6.22	K75350272_PM0N077
2700	50x60	0.10	43	26	5.40	K75350272_PM0V060
2900	40x97	0.10	42	25	6.22	K75350292_PM0F097
3300	50x77	0.10	36	22	6.00	K75350332_PM0V077
3700	45x105	0.10	27	15	7.60	K75350372_PM0N105
4700	50x105	0.10	25	15	8.30	K75350472_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 105°C	PART NUMBER termination digit excluded
220	25x35	0.09	328	148	1.15	K75400221_PM0C035
270	25x35	0.09	270	125	1.26	K75400271_PM0C035
330	25x40	0.09	240	110	1.39	K75400331_PM0C040
330	30x30	0.09	240	110	1.43	K75400331_PM0D030
370	30x30	0.09	238	108	1.44	K75400371_PM0D030
470	30x35	0.09	190	91	1.69	K75400471_PM0D035
470	30x40	0.09	168	81	1.88	K75400471_PM0D040
510	30x40	0.09	166	80	1.89	K75400511_PM0D040
510	35x30	0.09	189	89	1.78	K75400511_PM0E030
560	30x45	0.09	140	68	2.15	K75400561_PM0D045
560	35x35	0.09	156	81	2.06	K75400561_PM0E035
630	30x45	0.09	139	66	2.17	K75400631_PM0D045
630	35x35	0.09	154	80	2.07	K75400631_PM0E035
680	30x50	0.09	126	60	2.37	K75400681_PM0D050
680	35x40	0.09	132	68	2.35	K75400681_PM0E040
820	30x60	0.09	102	49	2.82	K75400821_PM0D060
820	35x45	0.09	114	59	2.64	K75400821_PM0E045
1000	35x50	0.10	97	51	2.96	K75400102_PM0E050
1200	35x60	0.10	79	41	3.54	K75400122_PM0E060
1500	40x60	0.10	68	39	4.10	K75400152_PM0F060
1800	45x60	0.10	53	27	5.03	K75400182_PM0N060
2000	45x77	0.10	44	23	5.10	K75400202_PM0N077
2200	40x97	0.10	46	26	5.10	K75400222_PM0F097
2200	50x60	0.10	48	27	4.80	K75400222_PM0V060
2700	50x77	0.10	39	22	5.70	K75400272_PM0V077
2900	45x105	0.10	31	16	7.90	K75400292_PM0N105
3900	50x105	0.10	27	16	8.20	K75400392_PM0V105

K75 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	I _r a.c. A max 100 Hz 105°C	PART NUMBER termination digit excluded
220	25x35	0.09	329	144	1.14	K75420221_PM0C035
250	25x35	0.09	292	129	1.21	K75420251_PM0C035
330	30x30	0.09	256	118	1.38	K75420331_PM0D030
390	30x35	0.09	206	96	1.62	K75420391_PM0D035
470	30x40	0.09	178	81	1.83	K75420471_PM0D040
470	35x30	0.09	198	98	1.73	K75420471_PM0E030
560	30x45	0.09	149	69	2.09	K75420561_PM0D045
560	35x35	0.09	165	82	2.01	K75420561_PM0E035
620	30x50	0.09	135	62	2.28	K75420621_PM0D060
650	35x40	0.09	140	66	2.28	K75420651_PM0E040
680	35x45	0.09	121	60	2.55	K75420681_PM0E045
820	35x50	0.09	105	53	2.85	K75420821_PM0E050
1000	35x60	0.10	84	44	3.41	K75420102_PM0E060
1300	40x60	0.10	73	40	4.00	K75420132_PM0F060
1500	45x60	0.10	56	28	4.50	K75420152_PM0N060
1800	45x77	0.10	47	24	5.30	K75420182_PM0N077
2000	40x97	0.10	48	26	5.50	K75420202_PM0F097
2000	50x60	0.10	50	27	4.80	K75420202_PM0V060
2400	50x77	0.10	42	23	5.70	K75420242_PM0V077
2700	45x105	0.10	32	16	7.05	K75420272_PM0N105
3500	50x105	0.10	28	16	7.90	K75420352_PM0V105

**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 105°C	PART NUMBER termination digit excluded
220	25x35	0.09	325	145	1.10	K75450221_PM0C035
270	30x30	0.09	283	132	1.28	K75450271_PM0D030
330	30x35	0.09	228	107	1.50	K75450331_PM0D035
390	30x40	0.09	200	92	1.70	K75450391_PM0D040
470	30x45	0.09	165	80	1.94	K75450471_PM0D045
470	35x35	0.09	180	90	1.88	K75450471_PM0E035
560	30x50	0.09	150	70	2.12	K75450561_PM0D050
560	35x40	0.09	154	76	2.12	K75450561_PM0E040
680	35x45	0.09	133	65	2.38	K75450681_PM0E045
820	35x50	0.09	115	57	2.66	K75450821_PM0E050
1000	35x60	0.10	91	45	3.31	K75450102_PM0E060
1200	40x60	0.10	79	43	3.74	K75450122_PM0F060
1500	45x60	0.10	59	32	4.30	K75450152_PM0N060
1800	40x97	0.10	52	30	5.10	K75450182_PM0F097
1800	45x77	0.10	50	25	5.20	K75450182_PM0N077
1800	50x60	0.10	53	29	4.60	K75450182_PM0V060
2200	50x77	0.10	44	24	5.60	K75450222_PM0V077
2700	45x105	0.10	34	17	6.50	K75450272_PM0N105
3300	50x105	0.10	30	17	7.50	K75450332_PM0V105

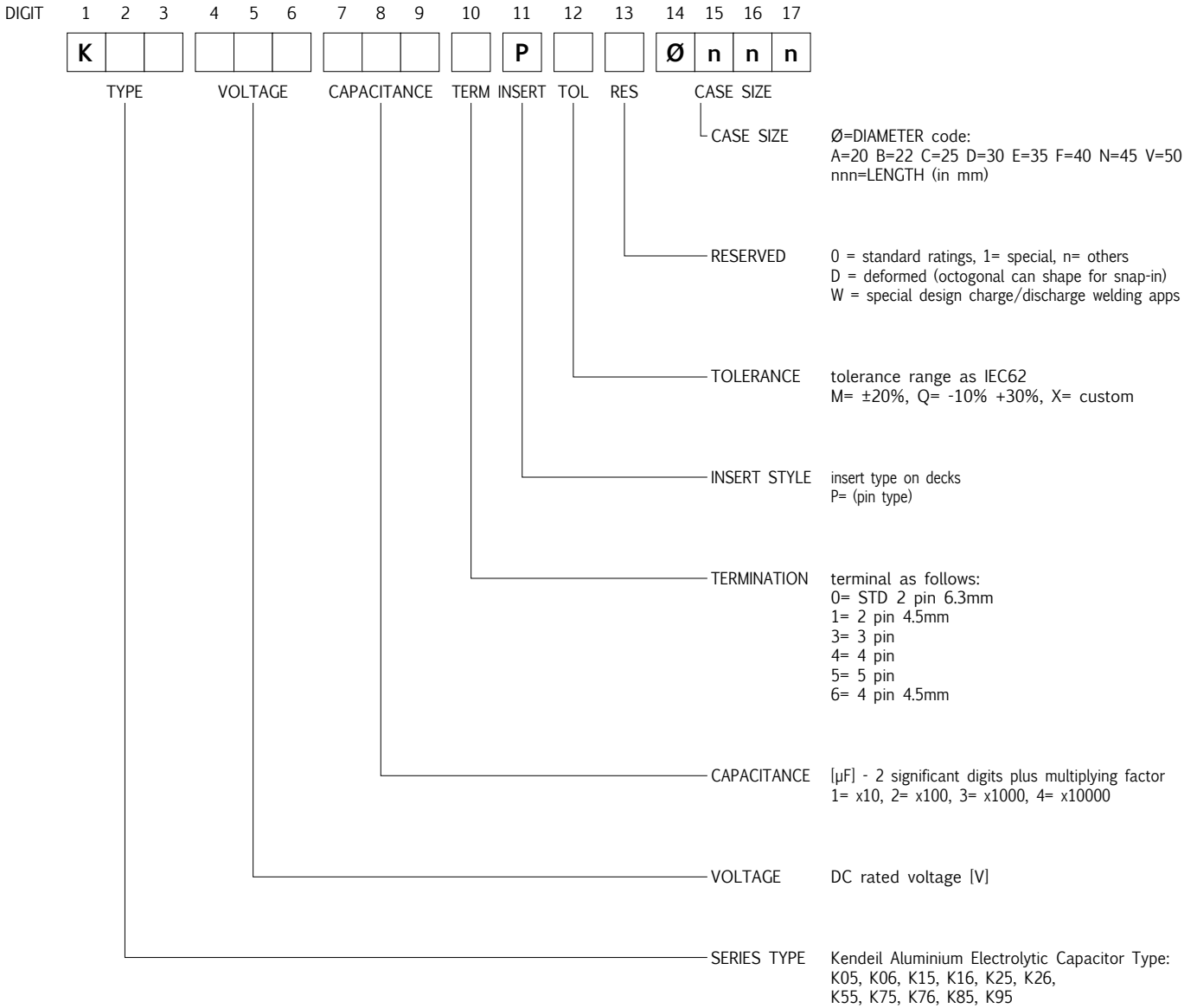
**RATED
VOLTAGE
VDC**

450V

PLEASE TO CONTACT OUR TECHNICAL SERVICE FOR MORE INFORMATION.

PART NUMBER SYSTEM FOR SNAP-IN TYPE CAPACITORS

New PART-NUMBER CODE in use since Sep 2010. Total length is 17 digits.
Please see examples below and have a reference code from the standard ratings capacitors pages.



EXAMPLES

K	0	5	4	5	0	4	7	1	0	P	M	0	E	0	5	0
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K05 450V 470µF, standard pin, ±20%, 35x50

Specifications subject to change without notice