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.**

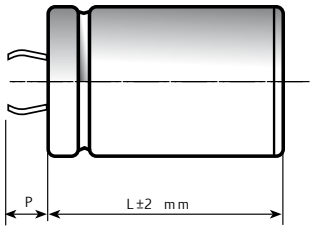
APPLICATIONS

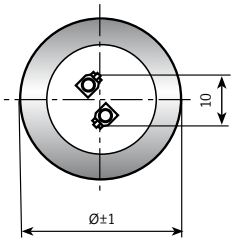
Designed for professional application.
Ultra compact UPS, Solar inverters, High ripple current converters, Motor drives.

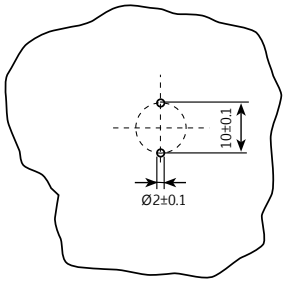
Dimensions in mm.

Circuit board hole dimensions

2 PIN CAPACITOR

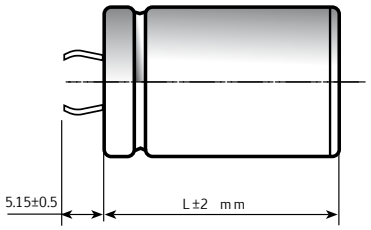


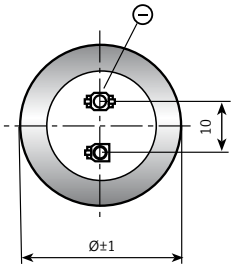


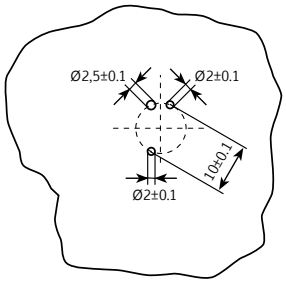


PIN LENGTH
P 4.5 short pin - P 6.3 long pin (standard)

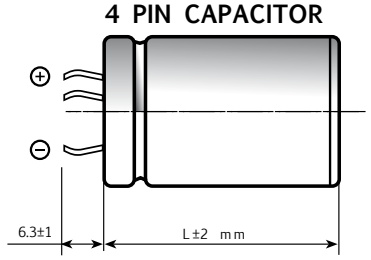
3 PIN CAPACITOR

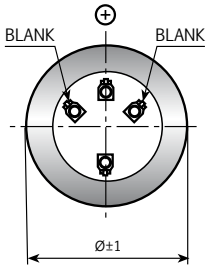


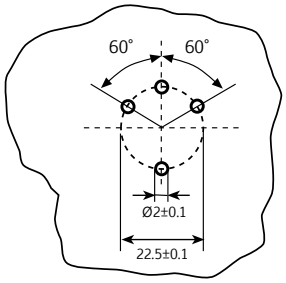




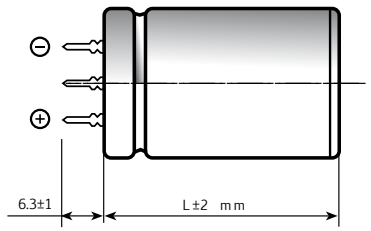
4 PIN CAPACITOR

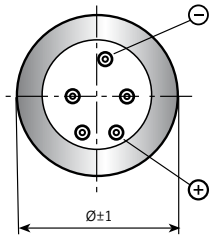


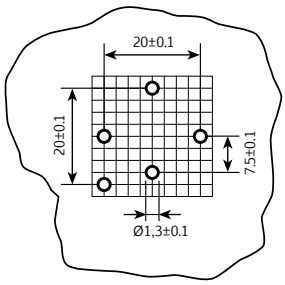




5 PIN CAPACITOR







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

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		
Withstand voltage **(between terminals bundled and plate)**	2500 VAC for 1 min		
Life test **(105°C, Vn, Ir applied)**	After 2,000 hours application of rated voltage at 105°C capacitors meet characteristics aside	Cap change tan δ Leakage current (I_L) Impedance (Z)	≤ 10% ≤ 130% < initial limit ≤ 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 tan δ Leakage current (I_L)	≤ ±15% ≤ 150% < initial limit
Useful life **(105°C, Vn, Ir applied)**	≥ 5.000 h at 105°C	Cap change tan δ Leakage current (I_L) Impedance (Z)	≤ 20% ≤ 200% < initial limit ≤ 200%
Failure percentage **Failure rate**	≤ 1% (during useful life) ≤ 40 fit (40 10^{-9}/h)		
Self inductance	Approx. 15 nH		
Damp heat test **(Vn applied, 2000 hours, 85% RH)**	Stable electrical parameters in humidity ambient condition 85°C		
Electrolyte	All the capacitors of this series have self-extinguishing electrolyte in accordance with IEC EN 60695-11-10		
Marking information	minus pole band aside within an angle of 41° ± 25°		
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	RATED VOLTAGE VDC
560	25x30	0.09	106	39	1.90	K75200561_PM0C030	200V
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	

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	RATED VOLTAGE VDC
390	25x30	0.09	141	52	1.65	K75250391_PM0C030	250V
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	

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	RATED VOLTAGE VDC
330	25x35	0.09	238	117	1.34	K75350331_PM0C035	350V
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	

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	RATED VOLTAGE VDC
220	25x35	0.09	328	148	1.15	K75400221_PM0C035	400V
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

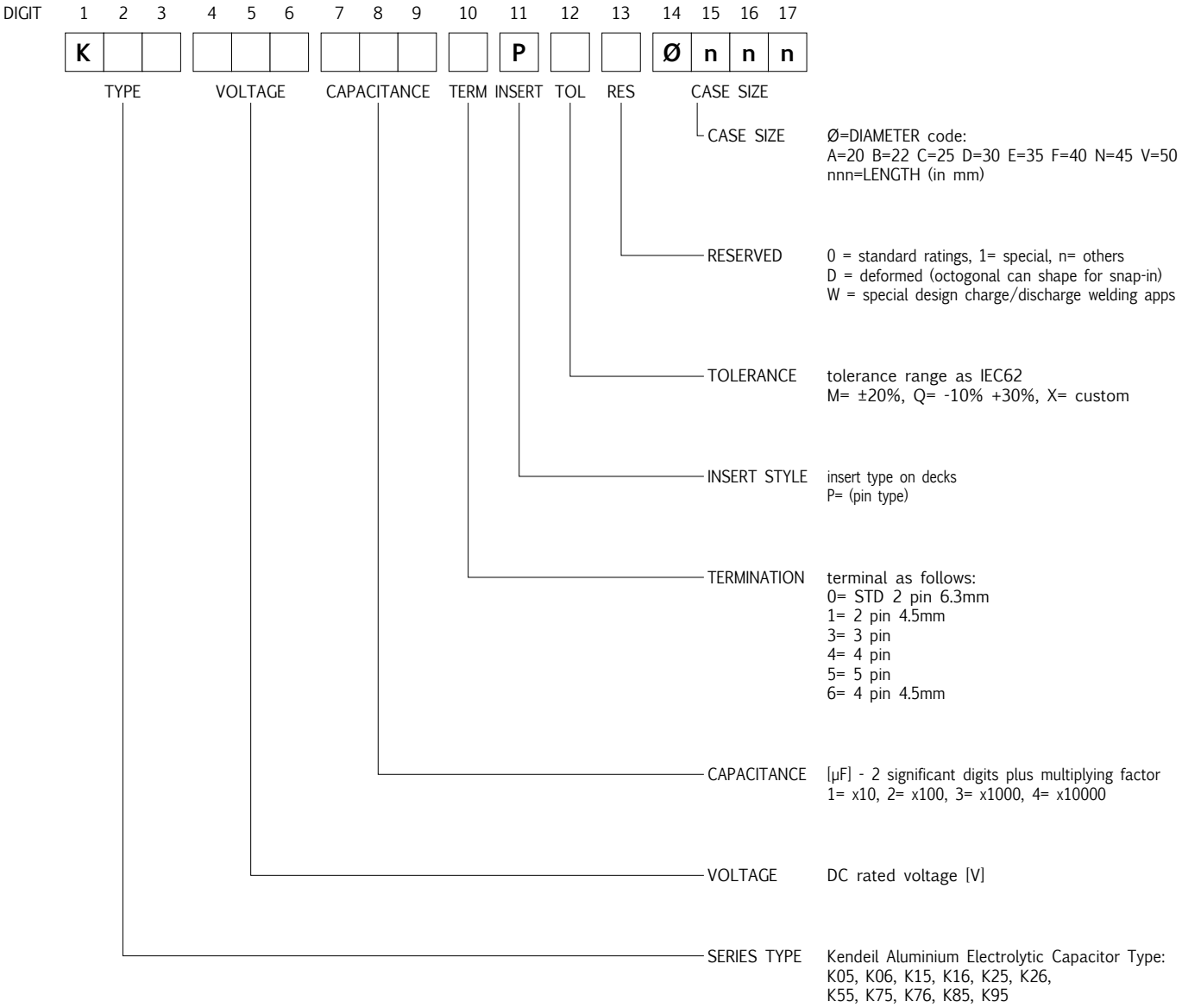
Cap µF	Ø x L mm	Tan δ MAX 100 Hz 20°C	ESR TYP mΩ 100 Hz 20°C	Z TYP mΩ 10 kHz 20°C	Ir a.c. A max 100 Hz 105°C	PART NUMBER termination digit excluded	RATED VOLTAGE VDC
220	25x35	0.09	329	144	1.14	K75420221_PM0C035	420V
250	25x35	0.09	292	129	1.21	K75420251_PM0C035	
330	30x30	0.09	256	118	1.38	K75420331_PM0D030	
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_PM0D050	
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	

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	RATED VOLTAGE VDC
220	25x35	0.09	325	145	1.10	K75450221_PM0C035	450V
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	

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

K05 450V 470µF, standard pin, ±20%, 35x50

Specifications subject to change without notice

Kendeil™