

K95 TYPE -40°C +105°C 5000H

RoHS Compliant

- Design optimized for high ripple current and long life application.
- Miniaturized design.
- Surge-proof capacitor in aluminium can with insulation sleeve.
- Snap in terminals for PCB mounting.

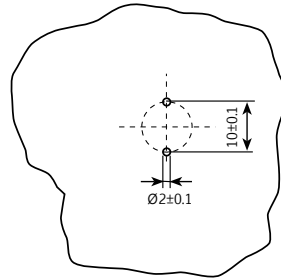
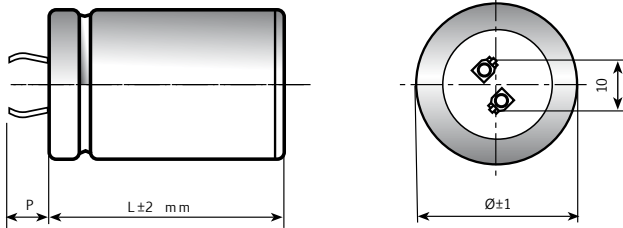
APPLICATIONS

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

Dimensions in mm.

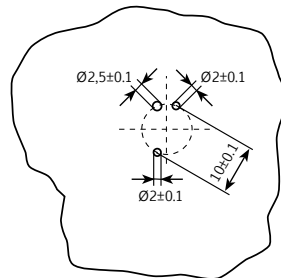
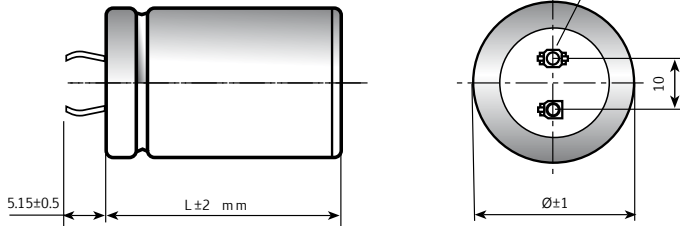
Circuit board hole dimensions

2 PIN CAPACITOR

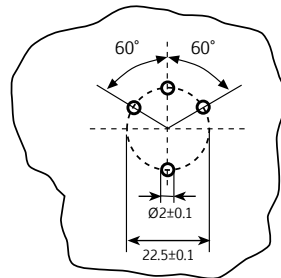
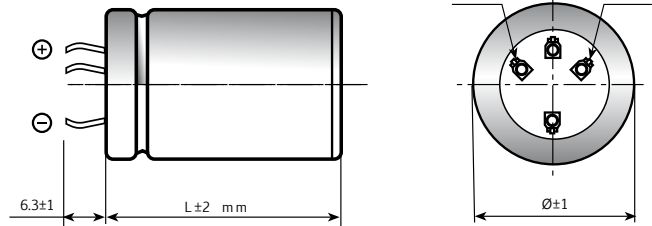


PIN LENGTH
P 4.5 short pin - P 6.3 long pin (standard)

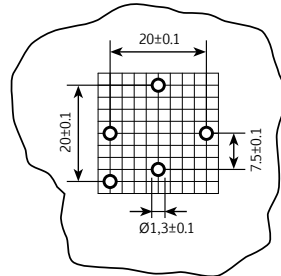
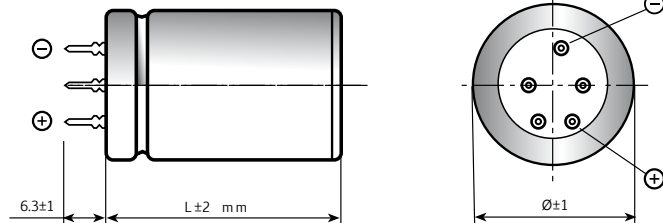
3 PIN CAPACITOR



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 350V to 450V DC								
Surge Voltage (V_p)	V _p = 1.10 V _r								
Rated Capacitance Range	from 150 µF to 1000 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, 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	≤ 1% (during useful life)								
Failure rate	≤ 40 fit (40 10 ⁻⁹ /h)								
Self inductance	Approx. 15 nH								
Damp heat test (V_n 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								

K95 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	25x30	0.10	247	136	1.20	K95350221_PM0C030
270	25x35	0.10	223	111	1.39	K95350271_PM0C035
330	25x35	0.10	165	91	1.50	K95350331_PM0C035
330	30x30	0.10	165	91	1.53	K95350331_PM0D030
390	25x40	0.10	135	75	1.75	K95350391_PM0C040
390	30x35	0.10	135	75	1.80	K95350391_PM0D035
470	25x50	0.10	131	70	2.11	K95350471_PM0C050
470	35x30	0.10	131	70	2.11	K95350471_PM0E030
560	25x55	0.11	115	60	2.45	K95350561_PM0C055
560	30x40	0.11	120	60	2.23	K95350561_PM0D040
560	35x35	0.11	120	70	2.26	K95350561_PM0E035
680	30x55	0.11	108	65	2.85	K95350681_PM0D055
680	35x40	0.11	108	68	2.59	K95350681_PM0E040
820	35x50	0.11	85	46	3.15	K95350821_PM0E050
1000	35x60	0.11	63	40	3.82	K95350102_PM0E060

**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	I _r a.c. A max 100 Hz 105°C	PART NUMBER termination digit excluded
150	25x30	0.10	351	186	1.05	K95400151_PM0C030
180	25x30	0.10	297	159	1.14	K95400181_PM0C030
220	25x35	0.10	240	130	1.34	K95400221_PM0C035
220	30x30	0.10	247	136	1.41	K95400221_PM0D030
270	25x40	0.10	199	107	1.55	K95400271_PM0C040
270	30x35	0.10	201	111	1.60	K95400271_PM0D035
330	25x50	0.10	165	90	1.86	K95400331_PM0C050
330	30x35	0.10	167	91	1.80	K95400331_PM0D035
330	35x30	0.10	167	91	1.90	K95400331_PM0E030
390	25x55	0.10	141	68	2.20	K95400391_PM0C055
390	30x40	0.10	145	70	2.10	K95400391_PM0D040
390	35x35	0.10	148	75	2.10	K95400391_PM0E035
470	30x50	0.10	138	69	2.51	K95400471_PM0D050
470	35x40	0.10	138	69	2.53	K95400471_PM0E040
560	30x55	0.11	115	60	2.79	K95400561_PM0D055
560	35x40	0.11	115	60	2.65	K95400561_PM0E040
680	35x50	0.11	108	59	3.18	K95400681_PM0E050
820	35x55	0.11	85	46	3.65	K95400821_PM0E055
920	35x60	0.11	63	40	3.95	K95400921_PM0E060

**RATED
VOLTAGE
VDC**

400V

K95 TYPE STANDARD RATINGS

**RATED
VOLTAGE
VDC**

420V

Cap μF	$\varnothing \times L$ mm	Tan δ MAX 100 Hz 20°C	ESR TYP $\text{m}\Omega$ 100 Hz 20°C	Z TYP $\text{m}\Omega$ 10 kHz 20°C	I _r a.c. A max 100 Hz 105°C	PART NUMBER termination digit excluded
150	25x30	0.10	351	186	1.05	K95420151_PM0C030
180	25x30	0.10	297	159	1.14	K95420181_PM0C030
220	25x35	0.10	240	133	1.34	K95420221_PM0C035
220	30x30	0.10	247	136	1.41	K95420221_PM0D030
270	25x40	0.10	199	107	1.55	K95420271_PM0C040
270	30x35	0.10	201	111	1.64	K95420271_PM0D035
330	25x50	0.10	165	90	1.86	K95420331_PM0C050
330	30x35	0.10	167	91	1.80	K95420331_PM0D035
330	35x30	0.10	167	91	1.90	K95420331_PM0E030
390	25x55	0.10	141	68	2.20	K95420391_PM0C055
390	30x40	0.10	145	70	2.10	K95420391_PM0D040
390	35x35	0.10	148	75	2.10	K95420391_PM0E035
470	30x50	0.10	138	69	2.51	K95420471_PM0D050
470	35x40	0.10	138	69	2.53	K95420471_PM0E040
560	30x55	0.11	115	60	2.79	K95420561_PM0D055
560	35x45	0.11	115	60	2.85	K95420561_PM0E045
680	35x50	0.11	108	59	3.18	K95420681_PM0E050
820	35x60	0.11	85	46	3.85	K95420821_PM0E060

**RATED
VOLTAGE
VDC**

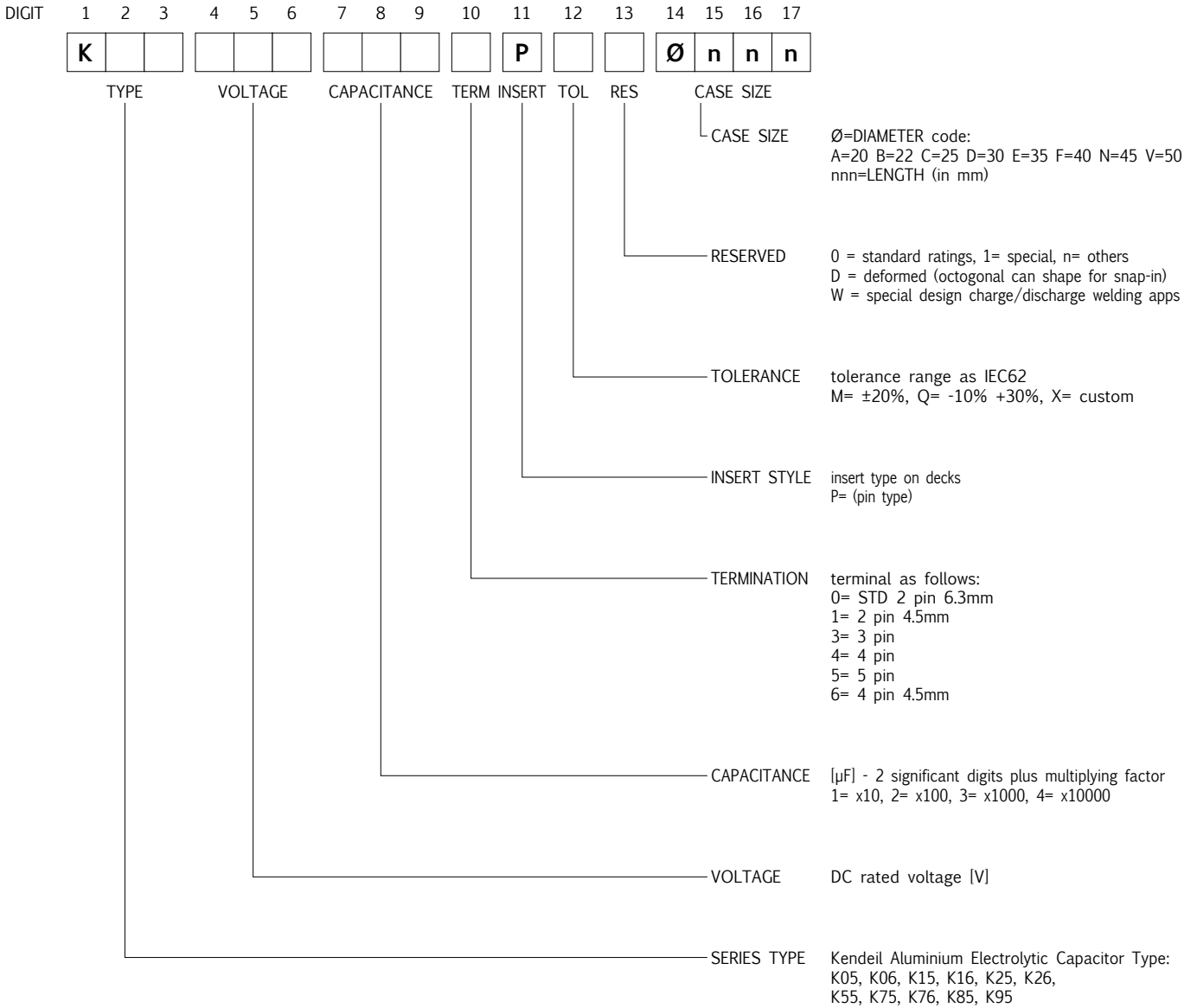
450V

Cap μF	$\varnothing \times L$ mm	Tan δ MAX 100 Hz 20°C	ESR TYP $\text{m}\Omega$ 100 Hz 20°C	Z TYP $\text{m}\Omega$ 10 kHz 20°C	I _r a.c. A max 100 Hz 105°C	PART NUMBER termination digit excluded
150	25x30	0.10	367	186	1.02	K95450151_PM0C030
150	30x30	0.10	367	186	1.15	K95450151_PM0D030
180	25x40	0.10	287	146	1.30	K95450181_PM0C040
180	30x30	0.10	293	152	1.28	K95450181_PM0D030
220	25x40	0.10	255	136	1.38	K95450221_PM0C040
220	30x30	0.10	255	136	1.36	K95450221_PM0D030
220	35x30	0.10	255	136	1.57	K95450221_PM0E030
270	30x40	0.10	204	106	1.71	K95450271_PM0D040
270	35x30	0.10	204	106	1.71	K95450271_PM0E030
330	30x50	0.10	173	90	2.11	K95450331_PM0D050
330	35x40	0.10	173	90	2.12	K95450331_PM0E040
390	30x50	0.10	155	75	2.26	K95450391_PM0D050
390	35x40	0.10	155	75	2.26	K95450391_PM0E040
470	35x50	0.10	142	71	2.73	K95450471_PM0E050
560	35x55	0.11	120	60	3.10	K95450561_PM0E055
680	35x60	0.11	110	59	3.40	K95450681_PM0E060

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