

K85 TYPE -40°C +105°C 8000H

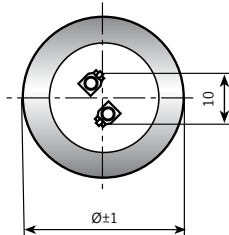
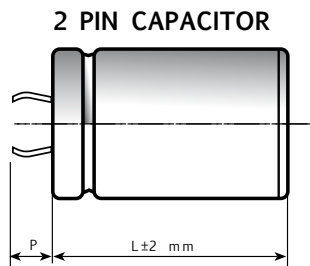
RoHS Compliant

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

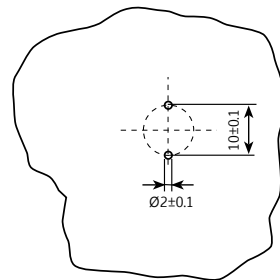
APPLICATIONS

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

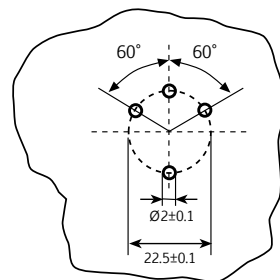
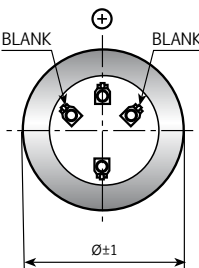
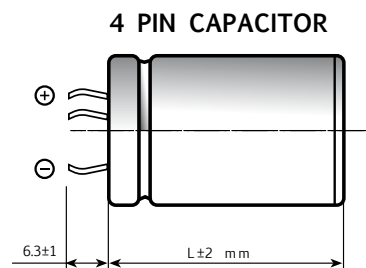
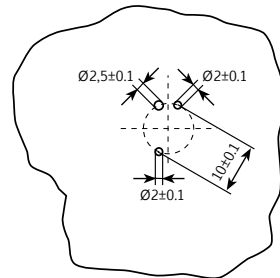
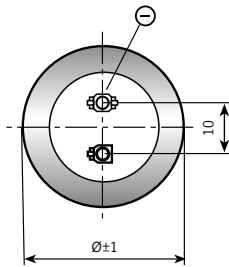
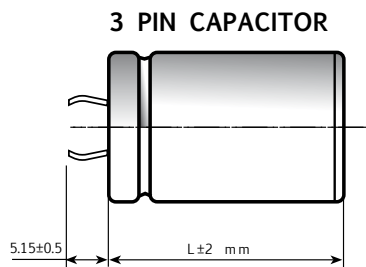
Dimensions in mm.



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 350V to 450V DC																																																			
Surge Voltage (V _p)	V _p = 1.10 V _r																																																			
Rated Capacitance Range	from 100 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 : <table><tr><td>FREQUENCY</td><td>50Hz</td><td>100Hz</td><td>500Hz</td><td>1000Hz</td><td>>10kHz</td><td colspan="4"></td></tr><tr><td>MULTIPLIER</td><td>0.88</td><td>1.0</td><td>1.45</td><td>1.5</td><td>1.55</td><td colspan="4"></td></tr><tr><td>AMBIENT TEMP</td><td>35°C</td><td>45°C</td><td>55°C</td><td>65°C</td><td>75°C</td><td>85°C</td><td>95°C</td><td>105°C</td><td colspan="2"></td></tr><tr><td>MULTIPLIER</td><td>3.0</td><td>2.8</td><td>2.6</td><td>2.4</td><td>2.2</td><td>1.8</td><td>1.5</td><td>1</td><td colspan="2"></td></tr></table>										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		
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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 3,000 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, V _n , I _r applied)	≥ 8.000 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																																																			
Reference standards	CECC 30.300 IEC 60384-4 LONG LIFE GRADE																																																			

K85 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
180	25x30	0.06	240	136	1.35	K85350181_PM0C030
220	25x35	0.06	199	121	1.57	K85350221_PM0C035
220	30x30	0.06	209	128	1.64	K85350221_PM0D030
330	25x45	0.06	136	83	2.10	K85350331_PM0C045
330	30x35	0.06	144	86	2.07	K85350331_PM0D035
390	25x50	0.06	134	83	2.29	K85350391_PM0C050
390	30x35	0.06	140	86	2.11	K85350391_PM0D035
390	30x40	0.06	140	86	2.46	K85350391_PM0D040
390	35x30	0.06	138	85	2.33	K85350391_PM0E030
470	25x55	0.07	96	77	2.59	K85350471_PM0C055
470	35x35	0.07	96	78	2.51	K85350471_PM0E035
560	30x55	0.07	78	48	3.10	K85350561_PM0D055
560	35x40	0.07	88	54	2.98	K85350561_PM0E040
680	35x45	0.07	75	45	3.20	K85350681_PM0E045
680	35x50	0.07	74	44	3.32	K85350681_PM0E050
720	35x50	0.07	67	42	3.45	K85350721_PM0E050
820	35x55	0.07	63	39	3.78	K85350821_PM0E055
1000	35x60	0.08	60	39	4.00	K85350102_PM0E060

**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
150	25x30	0.06	291	160	1.23	K85400151_PM0C030
180	25x35	0.06	240	136	1.44	K85400181_PM0C035
180	30x30	0.06	240	136	1.53	K85400181_PM0D030
220	25x45	0.06	184	102	1.81	K85400221_PM0C045
220	30x35	0.06	196	110	1.79	K85400221_PM0D035
270	25x50	0.06	185	95	1.88	K85400271_PM0C050
270	30x35	0.06	170	98	1.91	K85400271_PM0D035
270	35x30	0.06	162	92	2.07	K85400271_PM0E030
330	25x55	0.06	121	67	2.41	K85400331_PM0C055
330	30x40	0.06	152	84	2.12	K85400331_PM0D040
330	35x35	0.06	153	89	2.24	K85400331_PM0E035
390	30x50	0.06	103	55	2.71	K85400391_PM0D050
390	35x40	0.06	114	63	2.73	K85400391_PM0E040
470	30x55	0.07	97	52	3.01	K85400471_PM0D055
470	35x45	0.07	95	52	3.07	K85400471_PM0E045
560	35x50	0.07	85	45	3.20	K85400561_PM0E050
680	35x55	0.07	75	45	3.51	K85400681_PM0E055

K85 TYPE STANDARD RATINGS

**RATED
VOLTAGE
VDC**

420V

Cap μ F	$\varnothing \times L$ mm	Tan δ MAX 100 Hz 20°C	ESR TYP m Ω 100 Hz 20°C	Z TYP m Ω 10 kHz 20°C	Ir a.c. A max 100 Hz 105°C	PART NUMBER termination digit excluded
120	25x30	0.06	312	181	1.19	K85420121_PM0C030
150	25x35	0.06	253	146	1.40	K85420151_PM0C035
180	30x30	0.06	240	136	1.53	K85420181_PM0D030
220	25x45	0.06	184	102	1.81	K85420221_PM0C045
220	30x35	0.06	196	110	1.79	K85420221_PM0D035
250	25x50	0.06	170	92	1.96	K85420251_PM0C050
250	30x35	0.06	185	103	1.83	K85420251_PM0D035
250	35x30	0.06	172	96	2.00	K85420251_PM0E030
270	30x40	0.06	152	84	2.12	K85420271_PM0D040
330	25x55	0.06	121	67	2.41	K85420331_PM0C055
330	35x35	0.06	153	89	2.24	K85420331_PM0E035
390	30x55	0.06	103	55	2.91	K85420391_PM0C055
390	35x40	0.06	114	63	2.71	K85420391_PM0E040
470	35x50	0.07	97	45	3.15	K85420471_PM0E050
560	35x55	0.07	85	45	3.30	K85420561_PM0E055
680	35x60	0.07	75	45	3.54	K85420681_PM0E060

**RATED
VOLTAGE
VDC**

450V

Cap μ F	$\varnothing \times L$ mm	Tan δ MAX 100 Hz 20°C	ESR TYP m Ω 100 Hz 20°C	Z TYP m Ω 10 kHz 20°C	Ir a.c. A max 100 Hz 105°C	PART NUMBER termination digit excluded
100	25x30	0.06	388	214	1.07	K85450101_PM0C030
120	25x35	0.06	324	178	1.24	K85450121_PM0C035
150	25x40	0.06	250	142	1.48	K85450151_PM0C040
150	30x30	0.06	260	144	1.45	K85450151_PM0D030
150	30x40	0.06	250	142	1.66	K85450151_PM0D040
180	25x45	0.06	212	119	1.68	K85450181_PM0C045
180	30x35	0.06	223	126	1.67	K85450181_PM0D035
220	25x50	0.06	183	101	1.89	K85450221_PM0C050
220	30x40	0.06	197	110	1.97	K85450221_PM0D040
220	35x30	0.06	185	104	1.92	K85450221_PM0E030
270	30x45	0.06	159	86	2.21	K85450271_PM0D045
270	35x35	0.06	166	95	2.12	K85450271_PM0E035
330	30x50	0.06	127	68	2.53	K85450331_PM0D050
330	35x40	0.06	127	68	2.57	K85450331_PM0E040
390	30x55	0.06	110	59	2.82	K85450391_PM0D055
390	35x45	0.06	119	63	2.77	K85450391_PM0E045
470	35x50	0.06	106	58	3.06	K85450471_PM0E050
560	35x55	0.07	91	54	3.30	K85450561_PM0E055
560	35x60	0.07	91	54	3.42	K85450561_PM0E060
680	35x77	0.07	81	41	4.07	K85450681_PM0E077

PLEASE TO CONTACT OUR TECHNICAL SERVICE FOR MORE INFORMATION.



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