

K25 TYPE -40°C +105C 8000H

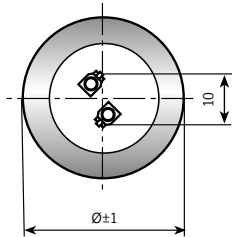
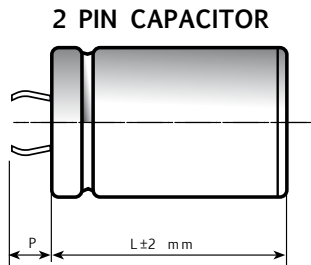
RoHS Compliant

- Surge-proof capacitor in aluminium can with insulation sleeve
- Snap in terminals for PCB mounting.
- Design optimized for high ripple current applications

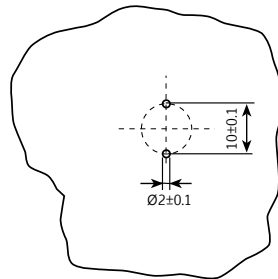
APPLICATIONS

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

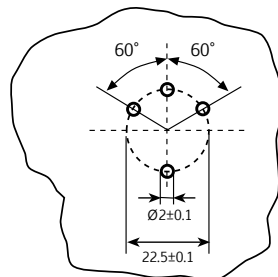
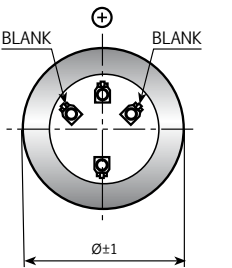
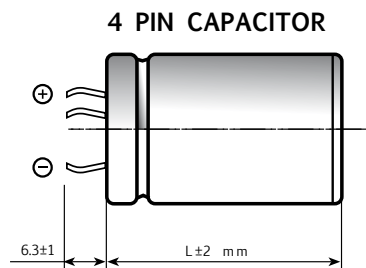
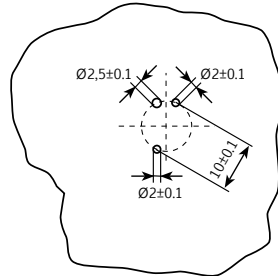
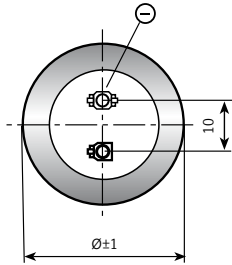
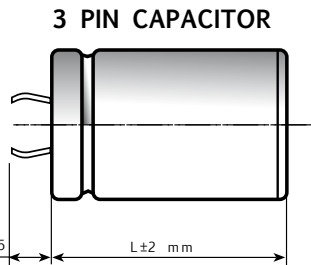
Dimensions in mm.



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	[Environmental classification 40/85/56 IEC-68]
Rated Voltage Range (V_r)	from 400V to 450V DC	
Surge Voltage (V_p)	V _p = 1.10 V _r	
Rated Capacitance Range	from 820 µF to 2200 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 = 0.003 C _r V _r + 4 µA	
Ripple current (I_r)	Refer to table at 105°C and 100Hz:	
	FREQUENCY	50Hz 100Hz 500 Hz 1000Hz >10kHz
	MULTIPLIER	0.88 1.0 1.45 1.50 1.55
	AMBIENT TEMP.	35°C 45°C 55°C 65°C 75°C 85°C 95°C 105°C 110°C
	MULTIPLIER	3.0 2.8 2.6 2.4 2.2 1.8 1.5 1.0 0.5
	Maximum internal temperature	110°C
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	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 (V_n, Temp rated I ripple applied)	> 250000 h at 40°C > 8000 h at 105°C	
Failure percentage Failure rate	≤ 1% (during useful life) ≤ 40 fit (40 10 ⁻⁹ /h)	
Self inductance	Approx. 20 nH	
Reference standards	CECC 30.300 - IEC 60384-4 LONG LIFE GRADE	

K25 TYPE STANDARD RATINGS

Cap μF	$\varnothing \times L$ mm	Tan δ MAX 100 Hz 20°C	ESR TYP m Ω 100 Hz 20°C	Z TYP m Ω 10 kHz 20°C	I _r a.c. A max 100 Hz 105°C	PART NUMBER termination digit excluded
1200	40x77	0.10	89	64	3.6	K25400122_PM0F077
1200	45x60	0.10	89	64	3.6	K25400122_PM0N060
1500	40x97	0.10	75	55	4.8	K25400152_PM0F097
1500	45x77	0.10	75	55	4.7	K25400152_PM0N077
1500	50x60	0.10	75	55	4.4	K25400152_PM0V060
1800	45x97	0.10	69	60	5.6	K25400182_PM0N097
1800	50x77	0.10	69	60	5.5	K25400182_PM0V077
2200	45x105	0.10	47	40	6.1	K25400222_PM0N105
2700	50x105	0.10	37	30	6.5	K25400272_PM0V105

**RATED
VOLTAGE
VDC**

400V

Cap μF	$\varnothing \times L$ mm	Tan δ MAX 100 Hz 20°C	ESR TYP m Ω 100 Hz 20°C	Z TYP m Ω 10 kHz 20°C	I _r a.c. A max 100 Hz 105°C	PART NUMBER termination digit excluded
820	35x77	0.10	104	85	3.0	K25420821_PM0E077
1000	40x60	0.10	99	74	3.6	K25420102_PM0F060
1200	40x77	0.10	94	64	3.7	K25420122_PM0F077
1200	45x60	0.10	94	64	3.6	K25420122_PM0N060
1500	40x97	0.10	75	55	4.6	K25420152_PM0F097
1500	45x77	0.11	75	55	4.5	K25420152_PM0N077
1500	50x60	0.10	75	55	4.4	K25420152_PM0V060
1800	45x97	0.11	69	51	5.6	K25420182_PM0N097
1800	50x77	0.10	69	51	5.5	K25420182_PM0V077
2200	45x105	0.12	47	40	6.1	K25420222_PM0N105
2700	50x105	0.10	37	30	6.5	K25420272_PM0V105

**RATED
VOLTAGE
VDC**

420V

Cap μF	$\varnothing \times L$ mm	Tan δ MAX 100 Hz 20°C	ESR TYP m Ω 100 Hz 20°C	Z TYP m Ω 10 kHz 20°C	I _r a.c. A max 100 Hz 105°C	PART NUMBER termination digit excluded
820	40x60	0.10	104	85	3.3	K25450821_PM0F060
1000	40x77	0.10	99	74	3.8	K25450102_PM0F077
1000	45x60	0.10	99	74	3.6	K25450102_PM0N060
1200	40x97	0.10	94	64	4.6	K25450122_PM0F097
1200	45x77	0.10	94	64	4.3	K25450122_PM0N077
1200	50x60	0.10	94	64	4.2	K25450122_PM0V060
1500	45x97	0.11	75	55	5.1	K25450152_PM0N097
1500	50x77	0.10	75	55	5.3	K25450152_PM0V077
1800	45x105	0.11	69	51	5.1	K25450182_PM0N105
2200	50x105	0.10	47	40	6.2	K25450222_PM0V105

**RATED
VOLTAGE
VDC**

450V