

K05 TYPE -40°C +105°C 5000H

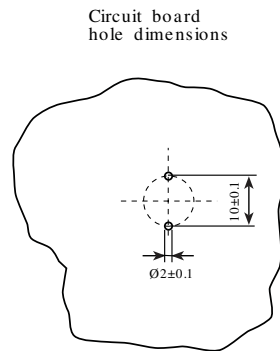
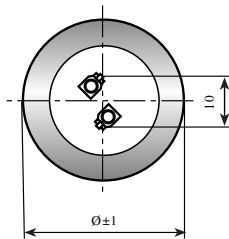
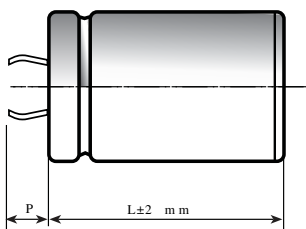
- Surge-proof capacitor in aluminium can with insulation sleeve
- Safety vent at bottom case or aside case.
- Snap in terminals for PCB mounting.
- Very high CV for unit volume with low ESR.
- High ripple current, in small dimensions case size.
- Extended temperature range with outstanding reliability.

APPLICATIONS

Professional switch mode power supplies. Professional power electronics.

Dimensions in mm.

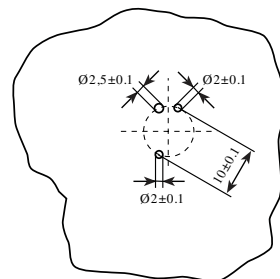
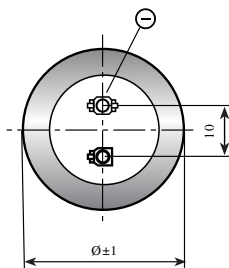
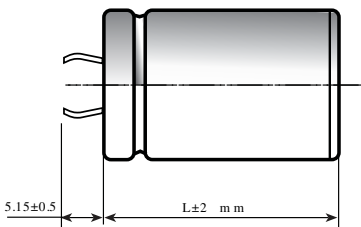
2 PIN CAPACITOR



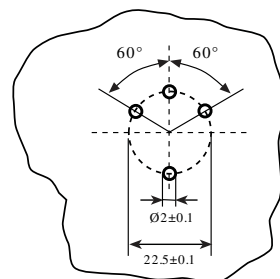
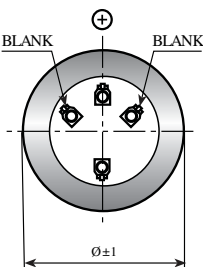
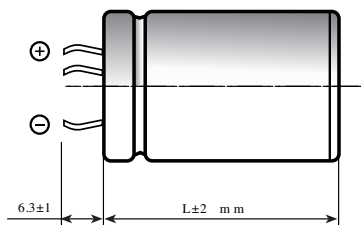
PIN LENGTH

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

3 PIN CAPACITOR



4 PIN CAPACITOR



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

On demand, only for caps 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/ 105/ 56 IEC-68]
Rated Voltage Range (V_r)	from 16V to 450V DC	
Surge Voltage (V_p)	V _p = 1.15 V _r (V _r ≤ 250V DC) V _p = 1.10 V _r (V _r > 250V DC)	
Rated Capacitance Range	from 68 μF to 47,000 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 At 85°C max I _L = 0.02 C _r V _r μA	Kendeil product limit : I _L = 0.003 C _r V _r
Ripple current (I_r)	Refer to table at 105°C and 100Hz. For different temperature and frequency multiplier must be used as follows:	
	FREQUENCY	50Hz 100Hz 500 Hz 1000Hz >10kHz
	MULTIPLIER (0-25V V _r DC)	0.91 1.0 1.15 1.15 1.2
	MULTIPLIER (40-100V V _r DC)	0.88 1.0 1.35 1.40 1.45
	MULTIPLIER (160-450V V _r DC)	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 2.80 2.60 2.40 2.20 1.80 1.50 1.0 0.5
	Maximum internal temperature 108°C	
Insulation Resistance	At 100V DC for 1 min is >100 MΩ across insulating sleeve and terminals.	
Vibration Resistance	Frequency range: 10 Hz to 500 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 ≤ 20% tan δ ≤ 200% Leakage current (I _L) < initial limit Impedance (Z) ≤ 200%
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	250,000 h at 40°C 15,000 h at 85°C 5,000 h at 105°C	
Failure percentage Failure rate	≤ 1% (during useful life) ≤ 30 fit (30 10 ⁻⁹ / h) (V _r ≤ 160V DC) ≤ 40 fit (40 10 ⁻⁹ / h) (V _r > 160V DC)	
Self inductance	Approx. 20 nH	
Reference standards	CECC 30.301 - IEC 60384-4 LONG LIFE GRADE	