K05 TYPE

- Surge-proof electrolytic 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.

SPECIFICATIONS

GENERAL CHARACTERISTICS

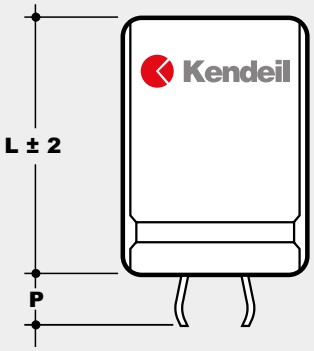
Temperature Range	Operating: -40°C +105°C [Environmental classification 40/105/56 IEC-68] Storage : Preferably below +25°C, not exceeding +40°C
Rated Voltage Range (V_r)	from 16V to 450V DC
Surge Voltage (V_p)	$V_p = 1.15\ V_r$ (V_r 250V DC) $V_p = 1.10\ V_r$ (V_r > 250V DC)
Rated Capacitance Range	from 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 Kendeil product limit : $I_L = 0.003\ C_r\ V_r$ At 85°C max $I_L = 0.02\ C_r\ V_r$ µA
Ripple current (I_r)	Refer to table at 105°C and 100Hz. For different temperature and frequency multiplier must be used as follows:

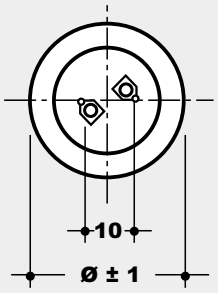
FREQUENCY	50Hz	100Hz	500 Hz	1000Hz	>10kHz
MULTIPLIER (0-25V V_r DC)	0.91	1.0	1.15	1.15	1.2
MULTIPLIER (40-100V V_r DC)	0.88	1.0	1.35	1.40	1.45
MULTIPLIER (160-450V V_r DC)	0.88	1.0	1.45	1.50	1.55

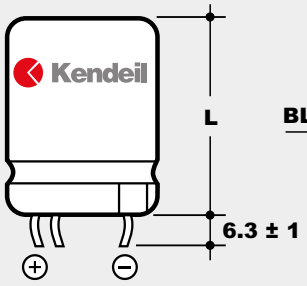
AMBIENT TEMP.	35°C	45°C	55°C	65°C	75°C	85°C	95°C	105°C
MULTIPLIER	3.0	2.80	2.60	2.40	2.20	1.80	1.50	1.0

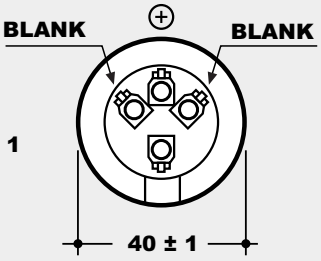
Maximum internal temperature 108°C

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 tan δ Leakage current (I_L) Impedance (Z)	20% 200% < initial limit 200%
Shelf life	After leaving capacitors under no load for 500 hours at 85°C, when restored at 20°C meet specifications aside	Cap change tan δ Leakage current (I_L)	±15% 150% < 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) 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		

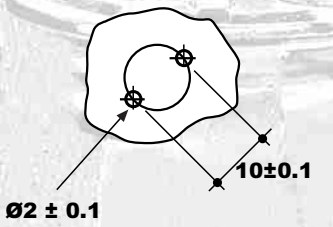








PIN LENGTH
P 4.5 short pin
6.3 long pin (standard)



Circuit board hole dimensions