

KQ Series

Features

- Snap-in, high reliability, non solvent resistant type
- Endurance with ripple current: 105°C 10000 hours
- High ripple current capability
- Safety vent designed on aluminum case
- RoHS2.0 Compliant

Applications

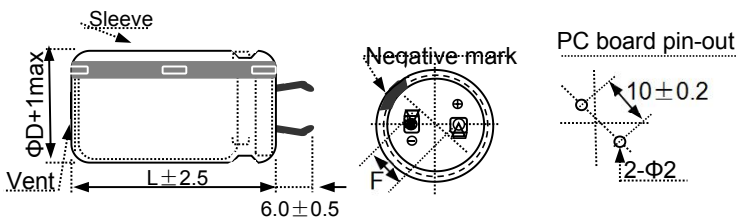
- Professional power supply
- Inverter
- UPS
- Air conditioner, general purpose inverter
- Professional arena power amplifier
- Frequency converters
- Medical power supply
- And others

规格表 Specifications

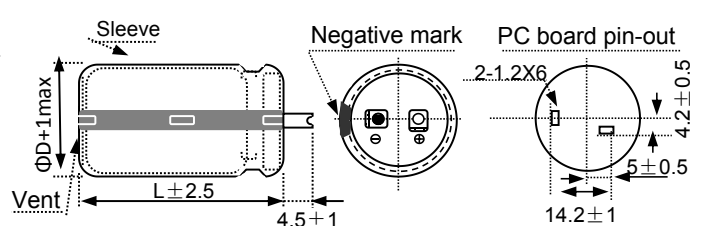
项目 Items	特性参数 Characteristics		
使用温度范围 Category Temperature Range	-25 ~ +105°C		
额定工作电压范围 Rated Voltage Range	200 ~ 450V.DC		
电容量允许偏差 Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)		
漏电流 Leakage Current	I ≤ 3√CV 施加额定工作电压5分钟 After 5 minutes application of rated voltage. Note: I = Max. leakage current (μA), C = Nominal capacitance (μF), V = Rated voltage (V) (at 20°C)		
损耗角正切值 tanδ Dissipation Factor	Rated voltage(V)	200 ~ 400	450
	tanδ (Max.)	0.15	0.20
标称容量超过1000μF, 则每增加1000μF, 损耗角正切值增加0.02 When nominal capacitance exceeds 1000μF, add 0.02 to the value above for each 1000μF increase. (at 20°C, 120Hz)			
低温特性 Low Temperature Characteristics (Max. Impedance Ratio)	阻抗比值不得超过下表中列出的值 The impedance ratio shall not exceed the values listed in the below table. (at 120Hz)		
	Rated voltage(V)	200 ~ 400	450
	Z(-25°C)/Z(+20°C)	4	8
耐久性 Endurance	在105°C环境中, 不超过额定电压的范围内叠加最大允许纹波电流, 连续10000小时, 经恢复到20°C后, 电容器满足以下各项要求。 The following specifications shall be satisfied when the capacitors are restored to 20°C after applied within maximum allowable ripple current and not over rated voltage range for 10000 hours at 105°C.		
	Capacitance change	≅ ±20% of the initial value	
	D.F.(tanδ)	≅ 250% of the initial specified value	
	Leakage current	≅ The initial specified value	
高温储存特性 Shelf Life	在105°C环境中, 不施加电压条件下储存1000小时, 经恢复到20°C后, 电容器满足以下各项要求。 The following specifications shall be satisfied when the capacitors are restored at 20°C after exposing them for 1000 hours at 105°C without voltage applied.		
	Capacitance change	≅ ±15% of the initial value	
	D.F.(tanδ)	≅ 150% of the initial specified value	
	Leakage current	≅ 200% of the initial specified value	

尺寸图 (单位: mm) DIMENSIONS (Unit:mm)

● Standard Terminal Type : S (Φ22 ~ Φ35)



● Terminal Type : P (Φ35)



纹波电流修正系数 Rated Ripple Current Coefficient

● 频率系数 Frequency Coefficient

Frequency (Hz)	50	120	300	1k	10k	50k
200 ~ 250V	0.81	1.00	1.17	1.32	1.45	1.50
315 ~ 450V	0.77	1.00	1.16	1.30	1.41	1.43

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◆ 标准品一览表 **Standard Ratings**

Cap.(μF) \ WV(V)	200(2D)		250(2E)		400(2G)		450(2W)	
	100							25X35
150			25X30 0.55				25X35 0.75	30X35 0.85
220			22X35 0.65	25X30 0.60	30X35 1		30X45 1.04	35X30 1.02
270					30X40 1.15	35X30 1.13	30X45 1.19	35X50 1.16
330					30X45 1.29		30X50 1.33	35X40 1.35
390			30X30 1.3		30X50 1.44		35X45 1.48	35X60 1.53
470			30X35 1.42		35X45 1.6		35X50 1.64	
560	30X30 1.50		35X30 1.58		35X50 1.79		40X60 1.98	
680	30X35 1.7		30X45 1.80	35X35 1.76	40X50 2.05		← Case size: ΦD×L(mm) ← Maximum allowable ripple current at 105°C/120Hz(A.r.m.s)	
820	30X40 2.00	35X30 2.00	30X50 2.03	35X45 2.01	40X60 2.36			
1000	30X45 2.20	35X35 2.2	35X45 2.3					
1200	35X40 2.4		35X50 2.55	40X45 2.53				
1500				40X50 2.96				
1800				40X60 3.39				

※铝电解电容器由于在纹波电流叠加时自我发热、温度上升而老化，中心温度每升温5℃寿命减少一半。要想保持长寿命请在使用过程中降低纹波电流

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple