

KS Series

Features

- Snap-in, general purpose, long life
- Endurance with ripple current: 105°C 3000 hours
- High ripple current capability
- Safety vent designed on aluminum case
- RoHS2.0 Compliant

Applications

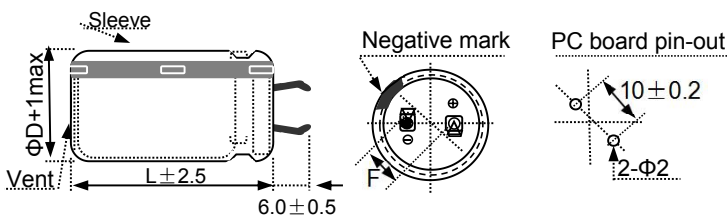
- Professional power supply
- Inverter
- UPS
- Air conditioner, general purpose inverter
- Professional arena power amplifier
- Frequency converters
- Medical power supply
- And others

规格表 Specifications

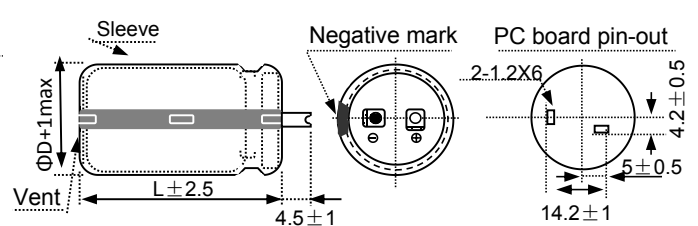
项目 Items	特性参数 Characteristics		
使用温度范围 Category Temperature Range	-25 ~ +105°C		
额定工作电压范围 Rated Voltage Range	160 ~ 450V.DC		
电容量允许偏差 Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)		
漏电流 Leakage Current	$I = 3\sqrt{CV}$ 施加额定工作电压5分钟 After 5 minutes application of rated voltage. Note: I= Max. leakage current (µA), C = Nominal capacitance (µF), V = Rated voltage (V) (at 20°C)		
损耗角正切值 tanδ Dissipation Factor	Rated voltage(V)	160 ~ 400	420 ~ 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		
	Rated voltage(V)	160 ~ 400	420 ~ 450
	Z(-25°C)/Z(+20°C)	4	8
(at 120Hz)			
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3000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 3000 hours at 105°C.		
	Capacitance change	≅ ±20% of the initial value	
	D.F.(tanδ)	≅ 200% 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
160 ~ 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)	160(2C)				180(2Z)					200(2D)			
390					22×25					22×25			
					1.37					1.37			
470	22×25									22×30	22X35		
	1.50									1.57	1.68		
560					22×30	25×25				22×35	25×25		
					1.71	1.70				1.75	1.70		
680	22×30	25×25			22×35					22×40	25×30		
	1.89	1.87			1.93					1.97	1.92		
820	22×35	25×30			22×40	25×35	30×25			22×45	25×35	30×25	
	2.12	2.11			2.16	2.11	2.29			2.20	2.20	2.29	
1,000	22×40	22×45	25×35		22×45	22×50	25×35	25×40	30×30	22×50	25×40	30×30	35×25
	2.38	2.43	2.43		2.43	2.48	2.43	2.48	2.55	2.48	2.48	2.55	2.69
1,200	22×50	25×40	30×30	35×25		25×45	30×35	35×25		25×45	25×50	30×35	35×30
	2.72	2.71	2.80	2.94		2.80	2.86	2.94		2.80	2.81	2.86	2.99
1,500		25×45	30×35			25×40	30×40	35×30		30×40	35×35		
		3.08	3.20			3.13	3.29	3.37		2.29	3.39		
1,800		25×50	30×40	35×30				30×45	35×35		30×45	30×45	35×40
		3.43	3.60	3.65				3.69	3.71		3.69	3.75	3.84
2,200			30×45	35×35				30×50	35×40				35×40
			4.08	4.10				4.14	4.25				4.35
2,700		30×50	35×40	35×40				35×45	35×50				35×50
		4.59	4.70	4.81				4.81	4.91				4.91
3,300				35×50									
				5.43									

Cap.(μF) \ WV(V)	250(2E)				315(2F)					400(2G)			
120										22×25			
										0.80			
150										22×30			
										0.93			
180					22×25					22×35	25×25		
					0.98					1.05	1.02		
220					22×30	25×25				22×40	25×30		
					1.13	1.13				1.18	1.16		
270	22×25				22×35					22×45	25×35	30×30	
	1.14				1.27					1.32	1.33	1.32	
330	22×30				22×40	25×30	30×25			22×50	25×40	30×30	35×25
	1.32				1.43	1.41	1.47			1.50	1.50	1.48	1.55
390	22×35	25×25			22×45	22×50	25×35				25×45	25×50	30×35
	1.47	1.43			1.59	1.62	1.60				1.66	1.69	1.64
470	22×40	25×30				25×40	30×30	35×25				30×40	35×30
	1.64	1.60				1.79	1.76	1.85				1.85	1.88
560	22×45	25×35	30×25			25×45	25×50	30×35	35×30		30×45	30×50	35×35
	1.82	1.82	1.90			1.99	2.02	1.96	2.05		2.07	2.15	2.08
680	22×50	25×40	30×30	35×25				30×40	35×35			35×40	35×45
	2.05	2.05	2.11	2.22				2.22	2.29			2.37	2.43
820			25×45	30×35			30×45	30×50	35×40				35×50
			2.29	2.37			2.50	2.54	2.60				2.72
1,000		25×50	30×40	35×30					35×45				
		2.56	2.69	2.73					2.94				
1,200		30×45	30×50	35×35					35×50				
		3.02	3.07	3.03					3.28				
1,500			35×40	35×45	← Case size: ΦD×L(mm) ← 外壳尺寸: 直径X长度(毫米) ← Maximum allowable ripple current at 105°C/120Hz(A.r.m.s) 在105°C/120Hz下的最大允许纹波电流(有效值, 单位: 安)								
			3.51	3.59									
1,800				35×50									
				4.01									

※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°C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



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◆ 标准品一览表 Standard Ratings

wv(V) Cap.(μF)	420(W6)				450(2W)								
	82					22×25 0.67							
100	22×25 0.73												
120	22×30 0.84	25×25 0.84			22×30 0.84	22×30 0.87	25×25 0.84						
150	22×35 0.97				22×40 0.97	25×30 0.97							
180	22×40 0.97	22×50 1.07	25×35 1.05	30×25 1.09	22×45 1.09	25×35 1.09	30×25 1.09						
220	22×45 1.20	22×50 1.23	25×35 1.21	30×30 1.21	22×50 1.23	25×40 1.23	30×30 1.21	35×25 1.27					
270		25×40 1.36	25×45 1.39	35×25 1.41	25×45 1.39	25×50 1.41	30×35 1.37	35×30 1.43					
330	25×50 1.55	30×35 1.51	30×40 1.55	35×30 1.58			30×40 1.55		35×35 1.74				
390			30×45 1.73	35×35 1.74			30×45 1.73	30×50 1.76	35×45 2.02				
470			30×50 1.93	35×40 1.98				35×40 1.98	35×50 2.25				
560				35×45 2.20	← Case size: ΦD×L(mm) ← 外壳尺寸: 直径X长度 (毫米)								
680				35×50 2.48	← Maximum allowable ripple current at 105°C/120Hz(A.r.m.s) ← 在105°C/120Hz下的最大允许纹波电流 (有效值, 单位: 安)								

※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 current has to be reduced.