

**KS Series**

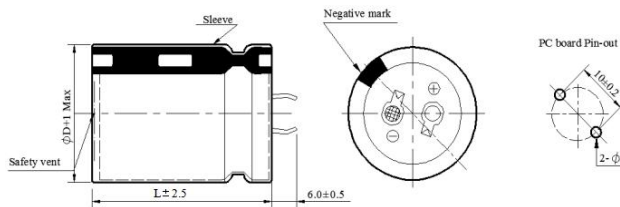
- Long life and high temperature, down size and high ripple current.
- Load life 3,000 hours at 105°C.

◆ **SPECIFICATIONS**

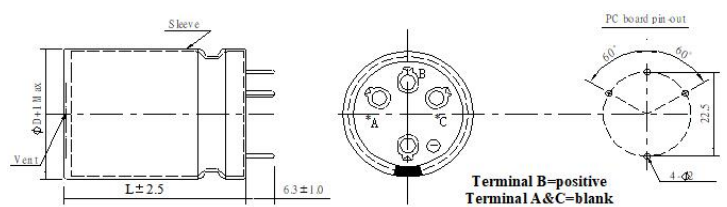
Item	Performance Characteristics									
Category Temperature Range	-25 ~ +105°C									
Working Voltage Range	200 ~ 500Vdc									
Capacitance Range	56 ~ 2,200μF									
Capacitance Tolerance	±20% (at 20°C and 120Hz)									
Dissipation Factor (tan δ) (at 20°C, 120Hz)	Rated Voltage (V)	200	220	250	350	400	420	450	500	
	tan δ (Max)	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.20	
The above values should be increased by 0.02 for every additional 1000μF										
Leakage Current	$I \leq 3 \sqrt{CV}$ I : Leakage current (μA) C : Rated capacitance (μF) V : Rated voltage (V) Apply rated voltage the rated voltage for 5 minutes.									
Low Temperature Characteristics Impedance Ratio(MAX)	Rated Voltage (V)	200~250		350	400	420 ~ 450		500		(at 120Hz)
	Z(-25°C)/Z(+20°C)	4		4	4	8		8		
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for 3,000 hours at 105°C.									
	Capacitance change	≒ ±20% of the initial value								
	Dissipation factor(tan δ)	≒ 200% of the specified value								
	Leakage current	≒ specified value								
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 20°C after the rated voltage applied for 1,000 hours at 105°C without voltage applied.									
	Capacitance change	≒ ±15% of the initial value								
	Dissipation factor(tan δ)	≒ 150% of the specified value								
	Leakage current	≒ 200% of the specified value								
Others	Conforms to JIS-C-5101-4 (1998)									

◆ **DIMENSIONS(mm)**

Terminal Code :S2



Terminal Code :S4



◆ **PART NUMBER SYSTEM( Example : 450V 330μF )**

E	K	S	4	5	0	M	3	3	1	Q	3	0	S	2	6	0	A	A
																		Special Request
																		Lead size
																		Lead type
																		Height code (L: 30mm)
																		Diameter code (Q: φ30)
																		Capacitance code (330 μ F)
																		Capacitance tolerance code (M: ±20%)
																		Voltage code (450V)
																		Series code (KS)
																		Category code

# KS Series

◆ Case size & Permissible rated ripple current: (mA rms) at 105°C / 120Hz.

uF	Vdc		200								uF	Vdc		220							
	ΦD	RC	Φ 22		Φ 25		Φ30		Φ35			ΦD	RC	Φ 22		Φ 25		Φ30		Φ35	
			ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC				ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
270			22×25	1100							220			22×25	1000						
330			22×30	1250							270			22×30	1150						
390			22×35	1340	25×25	1350					330			22×35	1250	25×25	1250				
470			22×40	1540	25×30	1500					390			22×40	1400	25×30	1400				
560			22×45	1670	25×35	1670	30×25	1670			470			22×45	1520	25×35	1450	30×25	1450		
680			22×50	1780	25×40	1780	30×30	1750			560			22×50	1700	25×40	1700	30×30	1700		
820					25×45	2040	30×35	2040	35×25	2040	680					25×45	1780	30×35	1780	35×25	1780
1000					25×50	2450	30×40	2300	35×30	2300	820					25×50	2100	30×40	2100	35×30	2100
1200							30×45	2650	35×35	2650	1000							30×45	2400	35×35	2400
1500							30×50	2800	35×40	3080	1200							30×50	2600	35×40	2600
1800									35×45	3480	1500									35×45	3000
2200									35×50	3520	1800									35×50	3130

uF	Vdc		250								uF	Vdc		400							
	ΦD	RC	Φ 22		Φ 25		Φ30		Φ35			ΦD	RC	Φ 22		Φ 25		Φ30		Φ35	
			ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC				ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
150											82			22×25	580						
180											100			22×30	700						
220			22×25	1000							120			22×35	770	25×25	770				
270			22×30	1110	25×25	1180					150			22×40	900	25×30	880				
330			22×35	1250	25×30	1300					180			22×45	1020	25×35	1020	30×25	1020		
390			22×40	1420	25×35	1400	30×25	1450			220			22×50	1150	25×40	1100	30×30	1100		
470			22×45	1610	25×40	1650	30×30	1650	35×25	1610	270					25×45	1220	30×35	1290	35×25	1220
560			22×50	1790	25×45	1790	30×35	1800	35×30	1800	330					25×50	1470	30×40	1470	35×30	1440
680					25×50	2000	30×40	2000	35×35	2000	390							30×45	1660	35×35	1600
820							30×45	2140	35×40	2160	470							30×50	1900	35×40	1900
1000							30×50	2470	35×45	2470	560									35×45	2070
1200									35×50	2760	680									35×50	2270

uF	Vdc		420								uF	Vdc		450							
	ΦD	RC	Φ 22		Φ 25		Φ30		Φ35			ΦD	RC	Φ 22		Φ 25		Φ30		Φ35	
			ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC				ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
82			22×25	640							68										
100			22×30	700							82			22×25	640						
120			22×35	810	25×25	810					100			22×30	690	25×25	690				
150			22×40	930	25×30	950					120			22×35	810	25×30	810				
180			22×45	1040	25×35	1020	30×25	1060			150			22×40	940	25×35	930	30×25	930		
220			22×50	1200	25×40	1180	30×30	1180	35×25	1180	180			22×45	1060	25×40	1060	30×30	1060		
270					25×45	1360	30×35	1360	35×30	1300	220			22×50	1200	25×45	1200	30×35	1180	35×25	1240
330					25×50	1500	30×40	1480	35×35	1550	270					25×50	1320	30×40	1340	35×30	1400
390							30×45	1700	35×40	1710	330							30×45	1520	35×35	1500
470							30×50	1900	35×45	1950	390							30×50	1730	35×40	1710
560									35×50	2170	470									35×45	1950
680									35×55	2200	560									35×50	2010

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◆ Case size & Permissible rated ripple current: (mA rms) at 105°C / 120Hz.

Vdc ΦD uF	500							
	Φ 22		Φ 25		Φ30		Φ35	
	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
56	22×25	510						
68	22×30	580						
82	22×35	720	25×25	740				
100	22×40	830	25×30	820				
120	22×45	930	25×35	930	30×25	910		
150	22×50	1020	25×40	1020	30×30	1040		
180			25×45	1200	30×35	1170	35×25	1100
220			25×50	1300	30×40	1310	35×30	1320
270					30×45	1410	35×35	1420
330					30×50	1510	35×40	1560
390							35×45	1700
470							35×50	1900

◆ RIPPLE CURRENT MULTIPLIERS

**Frequency Multipliers**

Vdc	Frequency (Hz)				
	50	120	1K	10K	≥50K
200 ~ 250	0.81	1.00	1.32	1.45	1.50
350 ~ 500	0.77	1.00	1.30	1.41	1.43