

KSL Series

- Mechanically open-mode capacitor (no fire, smoke and electrolyte outside)
- Endurance with ripple current : 105°C 2000 hours
- Non Solvent-proof

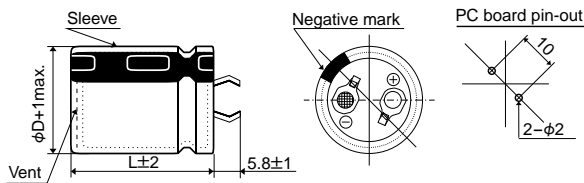


◆SPECIFICATIONS

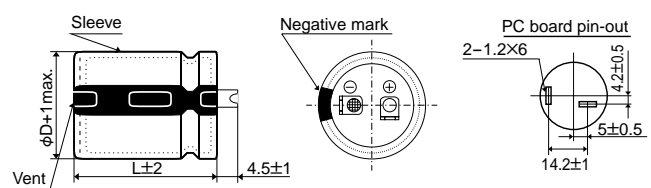
Items	Characteristics						
Category							
Temperature Range	-25 to +105°C						
Rated Voltage	200 & 400V _{dc}						
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)						
Leakage Current	$I \leq 3\sqrt{CV}$ Where, I : Max. leakage current (µA), C : Nominal capacitance (µF), V : Rated voltage (V) (at 20°C after 5 minute)						
Dissipation Factor (tanδ)	0.15max. (200V _{dc}), 0.10max. (400V _{dc}) (at 20°C, 120Hz)						
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after DC voltage with rated ripple current is applied for 2000 hours at 105°C.						
	<table border="1"> <tr> <td>Capacitance change</td> <td>≤±20% of the initial value</td> </tr> <tr> <td>D.F. (tanδ)</td> <td>≤200% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤The initial specified value</td> </tr> </table>	Capacitance change	≤±20% of the initial value	D.F. (tanδ)	≤200% of the initial specified value	Leakage current	≤The initial specified value
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D.F. (tanδ)	≤200% of the initial specified value						
Leakage current	≤The initial specified value						
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours at 105°C without voltage applied.						
	<table border="1"> <tr> <td>Capacitance change</td> <td>≤±15% of the initial value</td> </tr> <tr> <td>D.F. (tanδ)</td> <td>≤150% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤The initial specified value</td> </tr> </table>	Capacitance change	≤±15% of the initial value	D.F. (tanδ)	≤150% of the initial specified value	Leakage current	≤The initial specified value
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◆DIMENSIONS [mm]

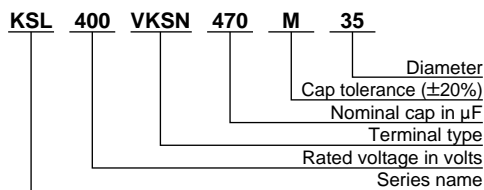
- Terminal Type : VKSN (φ30 & φ35)



- Terminal Type : LTSN (φ30 & φ35)



◆PART NUMBERING SYSTEM



◆RATED RIPPLE CURRENT MULTIPLIERS

- Frequency Multipliers

Frequency (Hz)	50	120	300	1k	10k	50k
200V _{dc}	0.81	1.00	1.17	1.32	1.45	1.50
400V _{dc}	0.77	1.00	1.16	1.30	1.41	1.43

◆STANDARD RATINGS

μF	V _{dc} φD	200			400		
		30		35	30		35
180					30×34	0.92	
220					30×39	1.06	
270					30×44	1.21	35×34
330					30×49	1.39	35×39
390					30×54	1.55	35×44
470							35×49
560	30×34	1.57					35×54
680	30×39	1.80					
820	30×44	2.00	35×34	2.04			
1,000	30×49	2.30	35×39	2.30			
1,200	30×54	2.60	35×44	2.65			
1,500			35×49	3.08			

Rated ripple current (Arms) at 105°C, 120Hz
case size φD×L (mm)

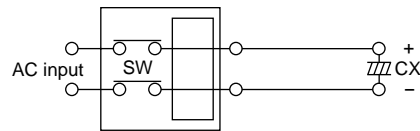
◆DC OVERVOLTAGE TEST CONDITIONS

The safety function will be operated and the capacitor shall become an open circuit without fire, smoke and electrolyte outside when the following excess DC voltage is applied.

●DC voltage test

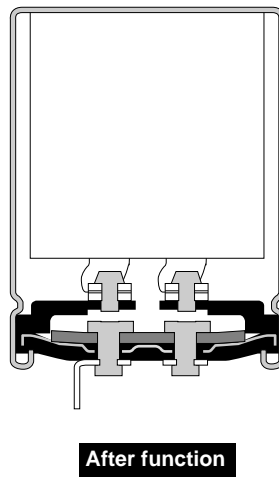
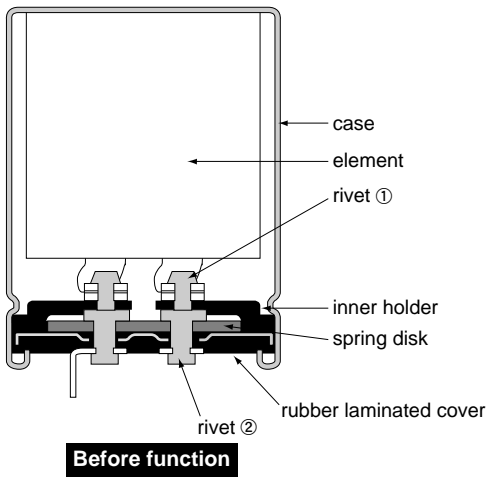
Rated Voltage	Capacitance	Current limit	Test DC voltage
200V _{dc}	< 330μF	4A	300/375V _{dc}
	330 ≤ C < 470μF	5A	
	≥ 470μF	7A	
400V _{dc}	< 100μF	2A	500/600V _{dc}
	100 ≤ C < 220μF	4A	
	≥ 220μF	7A	

●Test circuit



Constant DC voltage/current power supply

◆INSIDE STRUCTURE



Note : Conformal coating between the cover of the capacitors and the PC board should be avoided.