



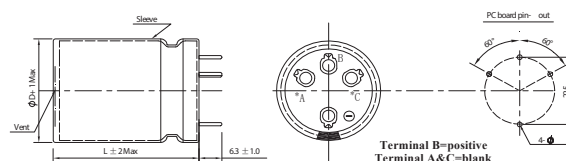
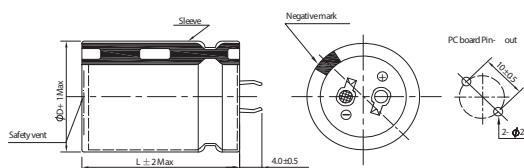
◆ SPECIFICATIONS

SPECIFICATIONS												
Item	Performance Characteristics											
Category Temperature Range	-25 ~ +105℃											
Working Voltage Range	400 ~ 450Vdc											
Capacitance Range	68 ~ 680μF											
Capacitance Tolerance	±20% (at 25℃ and 120Hz)											
Dissipation Factor (tanδ) (at 25℃, 120Hz)	<table><tr><td>Rated Voltage (V)</td><td>400</td><td>420</td><td>450</td></tr><tr><td>tanδ(Max)</td><td>0.15</td><td>0.20</td><td>0.20</td></tr></table>				Rated Voltage (V)	400	420	450	tanδ(Max)	0.15	0.20	0.20
Rated Voltage (V)	400	420	450									
tanδ(Max)	0.15	0.20	0.20									
Leakage Current	$I \leq 3\sqrt{CV}$ I : Leakage current (μA) C : Rated capacitance (μF) V : Rated voltage (V) Impress the rated voltage for 5 minutes											
Low Temperature Characteristics Impedance Ratio(MAX)	<table><tr><td>Rated voltage (V)</td><td>400</td><td>420 ~ 450</td></tr><tr><td>Z(-25℃)/Z(+20℃)</td><td>4</td><td>8</td></tr></table> (at 120Hz)				Rated voltage (V)	400	420 ~ 450	Z(-25℃)/Z(+20℃)	4	8		
Rated voltage (V)	400	420 ~ 450										
Z(-25℃)/Z(+20℃)	4	8										
Endurance	The following specifications shall be satisfied when the capacitors are restored to 25℃ after subjected to DC voltage with the rated ripple current is applied for 2,000 hours at 105℃. <table><tr><td>Capacitance change</td><td>≧ ±20% of the initial value</td></tr><tr><td>Dissipation factor(tanδ)</td><td>≧ 200% of the specified value</td></tr><tr><td>Leakage current</td><td>≧ The initial specified value</td></tr></table>				Capacitance change	≧ ±20% of the initial value	Dissipation factor(tanδ)	≧ 200% of the specified value	Leakage current	≧ The initial specified value		
Capacitance change	≧ ±20% of the initial value											
Dissipation factor(tanδ)	≧ 200% of the specified value											
Leakage current	≧ The initial specified value											
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 25℃ after exposing them for 1,000 hours at 105℃ without voltage applied. <table><tr><td>Capacitance change</td><td>≧ ±15% of the initial value</td></tr><tr><td>Dissipation factor(tanδ)</td><td>≧ 150% of the specified value</td></tr><tr><td>Leakage current</td><td>≧ The initial specified value</td></tr></table>				Capacitance change	≧ ±15% of the initial value	Dissipation factor(tanδ)	≧ 150% of the specified value	Leakage current	≧ The initial specified value		
Capacitance change	≧ ±15% of the initial value											
Dissipation factor(tanδ)	≧ 150% of the specified value											
Leakage current	≧ The initial specified value											
Others	Conforms to JIS-C-5101-4 (1998), characteristic W											

◆ **DIMENSIONS (mm)**

Terminal Code : ND : Standard

Terminal Code :K6 (ø35)



◆ **PART NUMBER SYSTEM(Example : 420V 680μF)**

S	P	O	2	S	6	8	1	M	N	D	3	5	5						
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Special Request

Size code(3555 : 35×55)

Terminal length code

Lead forming Type code

Capacitance tolerance code(M:±20%)

Capacitance code (680μF)

Voltage code (420V)

Series code (SPO)

◆ Case size & Permissible rated ripple current (A rms) 120Hz / 105°C

Vdc ΦD uF	400								420							
	Φ 22		Φ 25.4		Φ30		Φ35		Φ 22		Φ 25.4		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	0.60						
100	22×25	0.66							22×30	0.63	25.4×25	0.63				
120	22×30	0.67							22×35	0.77	25.4×25	0.77				
150	22×35	0.84	25.4×30	0.84					22×40	0.80	25.4×30	0.80	30×25	0.80		
180	22×40	0.90	25.4×30	0.90					22×45	0.86	25.4×35	0.86	30×30	0.86		
220	22×45	1.05	25.4×35	1.05	30×30	1.05			22×50	0.99	25.4×40	0.99	30×30	0.99	35×25	0.99
270	22×50	1.16	25.4×40	1.16	30×30	1.16	35×30	1.16			25.4×45	1.18	30×40	1.18	35×30	1.18
330			25.4×50	1.36	30×35	1.36	35×30	1.36			25.4×55	1.35	30×40	1.35	35×35	1.35
390			25.4×55	1.47	30×40	1.47	35×35	1.47					30×45	1.53	35×40	1.53
470					30×45	1.50	35×40	1.50					30×50	1.76	35×40	1.76
560					30×55	1.80	35×40	1.80							35×50	1.99
680							35×50	2.01							35×55	2.09

Vdc ΦD uF	450							
	Φ 22		Φ 25.4		Φ30		Φ35	
	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
68	22×25	0.48						
82	22×30	0.53						
100	22×30	0.60	25.4×25	0.60				
120	22×35	0.68	25.4×30	0.68				
150	22×40	0.75	25.4×35	0.75	30×25	0.75		
180	22×50	0.82	25.4×40	0.82	30×30	0.82		
220			25.4×45	0.95	30×35	0.95	35×30	0.95
270			25.4×50	1.13	30×40	1.13	35×30	1.13
330					30×45	1.38	35×35	1.38
390					30×50	1.47	35×40	1.47
470							35×45	1.65
560							35×50	1.80

◆ RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Vdc	Frequency (Hz)					
	50	120	300	1K	10K	50K
400 ~ 450	0.77	1.00	1.16	1.30	1.41	1.43