

ALUMINUM ELECTROLYTIC CAPACITORS



VJ Series

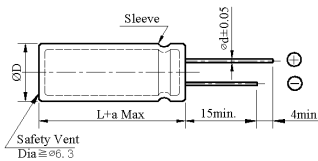
- Capacitor For Over Voltage Application
- Load life 10,000 hours at 105°C



◆ SPECIFICATIONS

Item	Performance Characteristics			
Category Temperature Range	-25 ~ +105°C			
Working Voltage Range	160 ~ 450Vdc			
Capacitance Range	22 ~ 680 µF			
Capacitance Tolerance	±20% (at 25°C and 120Hz)			
Dissipation Factor (tanδ) (at 25°C, 120Hz)	Rated Voltage (V)	160 ~ 250	400 ~ 450	
	tanδ(Max)	0.12	0.15	
Leakage Current	I=0.02CV or 3000 µA whichever is smaller I : Leakage current (µA) C : Rated capacitance (µF) V : Rated voltage (V) Impress the rated voltage for 2 minutes			
Low Temperature Characteristics Impedance Ratio(MAX)	Rated voltage (V)	160~250	400	420 ~ 450
	Z(-25°C)/Z(+20°C)	3	5	6
Charge and Discharge	The following specifications shall be satisfied when the capacitors are restored to 25°C after subjected to charge and discharge test with the voltage waveform shown below at room temperature(15 to 35°C)			
	Frequency	Number of cycles	Voltage waveform	
	5Hz	200million times		
			Capacitance change	≡ ±20% of the initial value
			Dissipation factor(tanδ)	≡ 200% of the specified value
			Leakage current	≡ specified value
Endurance	The following specifications shall be satisfied when the capacitors are restored to 25°C after subjected to DC voltage with the rated ripple current is applied for 10,000 hours at 105°C.			
	Capacitance change	≡ ±20% of the initial value		
	Dissipation factor(tanδ)	≡ 200% of the specified value		
	Leakage current	≡ specified value		
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 25°C after the rated voltage applied for 1,000 hours at 105°C without voltage applied.			
	Capacitance change	≡ ±20% of the initial value		
	Dissipation factor(tanδ)	≡ 200% of the specified value		
	Leakage current	≡ 200% of the specified value		
Others	Conforms to JIS-C-5101-4 (1998), characteristic W			

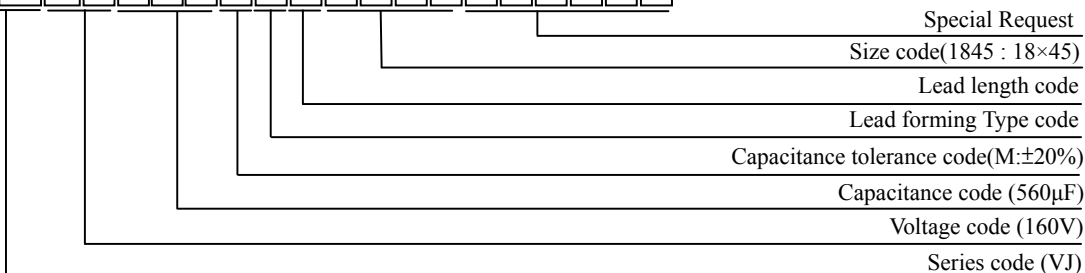
◆ DIMENSIONS (mm)



ΦD	10	12.5 L < 35	12.5 L ≥ 35	16	18
ΦD	ΦD + 0.5 Max				
Φd	0.6	0.6	0.8	0.8	0.8
F	5.0	5.0		7.5	7.5
a	L + 1.5 Max	≦ 35 L + 1.5 Max ≧ 40 L + 2.0 Max		L + 1.5 Max	

◆ PART NUMBER SYSTEM(Example : 160V 560µF)

V J 2 C 5 6 1 M N N 1 8 4 5





VJ Series

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

uF \ Vdc	160		200		220		250	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
68					10×40	410	10×45	425
82			10×40	440	10×45	460	10×50	480
100	10×35	430	10×45	470	10×50	525	12.5×40	550
120	10×40	505	10×50	535	12.5×40	560	12.5×50	590
							16×30	570
150	10×50	585	12.5×40	630	12.5×45	645	16×35.5	710
	12.5×35	570						
180	12.5×40	650	12.5×45	715	12.5×50	740	16×40	790
220	12.5×45	755	12.5×50	865	16×40	895	16×50	1005
	16×30	730	16×35.5	850			18×40	970
270	12.5×50	870	16×40	875	16×45	950	18×45	1080
	16×35.5	845	18×31.5	860	18×35.5	940		
	18×30	835						
330	16×40	920	16×45	1165	16×50	1220	18×50	1330
	18×31.5	905	18×35.5	1240	18×40	1250		
470	18×40	1220	18×45	1400	18×50	1420		
560	18×45	1345	18×50	1490				
680	18×50	1460						

uF \ Vdc	400		420		450	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
22			10×35	230	10×40	250
27	10×35	270	10×40	275	10×45	300
33	10×40	285	10×45	310	10×50	325
					12.5×35	315
39	10×45	310	10×50	330	12.5×40	350
47	10×50	355	12.5×40	370	12.5×45	420
	12.5×35	345				
56	12.5×40	380	12.5×45	400	12.5×50	490
68	12.5×45	460	12.5×50	500	16×40	605
			16×35.5	490		
82	12.5×50	560	16×40	595	16×45	660
	16×35.5	550			18×35.5	640
100	16×40	630	16×45	700	18×40	770
	18×31.5	610	18×35.5	685		
120	16×45	750	18×45	770	18×50	845
	18×40	735				
150	18×45	855	18×50	920		
180	18×50	960				

◆ RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Vdc	Frequency (Hz)				
	50/60	120	1K	10K	100K
160 ~ 450	0.80	1.00	1.30	1.40	1.50