

Aluminum Electrolytic Capacitor

AZ series

- Protective countermeasure against DC over-voltage, 105°C 2000hours load life.
- RoHS Compliance
- DC過電壓安全對策，壽命保證 2000小時。

SPECIFICATIONS

Items 項目	Characteristics 特性			
Capacitance Tolerance 靜電容量誤差	± 20%(120Hz,20℃)			
Operating Temperature Range 適用溫度範圍	-25 ~ +105℃			
Rated Voltage Range 額定電壓範圍	200VDC、400VDC、420VDC			
Leakage Current 洩漏電流	$I \leq 3\sqrt{CV}$ (μA) (After 5 minutes application of DC rated voltage, at 20 ℃)			
Dissipation Factor 散逸因素(tan δ)	Measurement Frequency: 120Hz. Temperature: 20℃			
	Rated Voltage(V)	200	400	420
	tan δ(Max)	0.15	0.15	0.15
Low Temperature Stability 低溫特性 Impedance Ratio(Max) 阻抗比率(最大值)	Measurement Frequency: 120Hz.			
	Rated Voltage(V)	200	400、420	
	Z(-25℃)/Z(20℃)	3	8	
Load Life 負荷壽命	2000hours,with application of rated voltage at 105℃			
	Capacitance Change	Within ± 20% of the Initial Value		
	tan δ	200% or less of Initial Specified Value		
	Leakage Current	Initial Specified Value or less		
Shelf Life 放置壽命	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours 105℃ without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.			
	Capacitance Change	Within ± 15% of the Initial Value		
	tan δ	≤150% of the Initial Specified Value		
	Leakage Current	Initial Specified Value or less		
Standards 參照標準	JIS C 5101-4 (IEC 60384)			

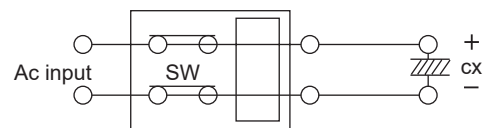
◆ DC over voltage test conditions

The vent will be operated and the capacitor shall become an open circuit without burning materials when the following excess DC voltage is applied.

TEST DC VOLTAGE

Rated Voltage	Capacitance (μF)	Current Limit	Test DC Voltage
200 Vdc	$C < 330$	4A	300 / 375 Vdc
	$330 \leq C < 470$	5A	
	$470 \leq C$	7A	
400 Vdc	$C < 100$	2A	500 / 600 Vdc
	$100 \leq C < 220$	4A	
	$220 \leq C$	7A	
420 Vdc	$C < 100$	2A	520 / 630 Vdc
	$100 \leq C < 220$	4A	
	$220 \leq C$	7A	

TEST CIRCUIT



Frequency Coefficient of Permissible Ripple Current

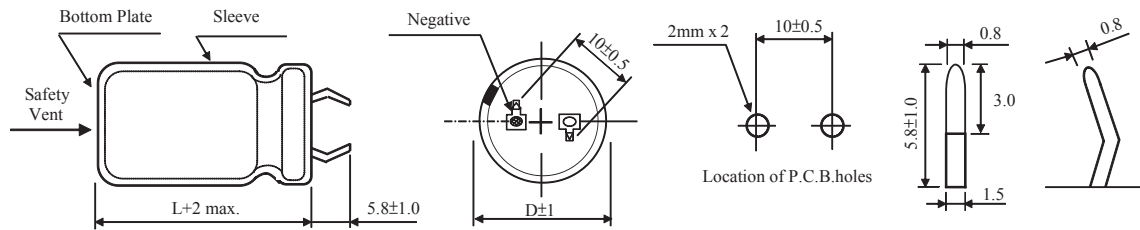
Rated Voltage (V)	Frequency (Hz)					
	50	60	120	500	1K	$\geq 10K$
200	0.80	0.80	1.00	1.10	1.14	1.18
400 ~ 420	0.80	0.80	1.00	1.05	1.10	1.15

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.

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DIMENSIONS(mm)



D×L(mm) ; R.C.(A rms) at 105°C 120Hz

Cap (μF)	V (Code)	200 (2D)		400 (2G)		420 (2M)	
	Item	D x L	R.C.	D x L	R.C.	D x L	R.C.
33				22x20	0.22	22x25	0.25
39				22x20	0.30		
47	22x20	0.35		22x25	0.35	22x25	0.35
				25x20	0.35		
				30x20	0.40		
56				22x25	0.38	22x25	0.38
				25x20	0.38		
68				22x25	0.40	22x30	0.45
				25x25	0.45		
				30x20	0.50	25x25	0.45
82				22x30	0.50	22x35	0.64
				25x25	0.50		
				30x20	0.50	25x30	0.64
100	22x20	0.50		22x35	0.55	22x40	0.69
				25x30	0.53	25x30	0.69
				30x25	0.53	30x25	0.69
				35x20	0.55		
120				22x40	0.60	22x45	0.75
				25x30	0.60	25x35	0.75
				30x25	0.60	30x30	0.75
						35x25	0.75
150				22x45	0.70	25x40	0.82
				25x35	0.70	30x30	0.82
				30x30	0.70		
				35x25	0.70	35x25	0.82
180	22x25	0.70		22x50	0.80	25x45	0.90
				25x40	0.80	30x35	0.90
	30x20	0.70		30x30	0.80	35x30	0.90
				35x25	0.80		
220	22x25	0.74		25x45	0.90	30x40	1.00
				30x35	0.90	35x35	1.00
				35x30	0.90		
270				30x40	0.98	30x45	1.10
				35x35	0.96	35x40	1.10
330				30x50	1.21	35x45	1.20
				35x40	1.21		
390				35x45	1.32		
470							
560							
680							
820							
1000							
1200							