

AK series

- Protective countermeasure against DC over-voltage, 105°C 2000 hours.
- RoHS Compliance.
- DC過電壓安全對策105°C 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		
Leakage Current 洩漏電流	I ≤ 0.04CV +100 (μA) (After 1 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
	tan δ(Max)	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
	Z(-25℃)/Z(20℃)	4	6
Load Life 負荷壽命	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied for 2,000 hours at 105℃.		
	Capacitance Change	Within ± 20% of Initial Value	
	tan δ	200% or less of the 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 ± 20% of Initial Value	
	tan δ	200% or less of Initial Specified Value	
	Leakage Current	Initial Specified Value or less	
Standards 參照標準	IEC 60384-4 (JIS C5101-4)		

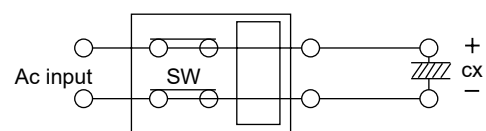
◆ DC over voltage test conditions

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	Current Limit	Test DC Voltage
200 Vdc	4A	300 / 375 Vdc
400 Vdc	2A	500 / 600 Vdc

TEST CIRCUIT

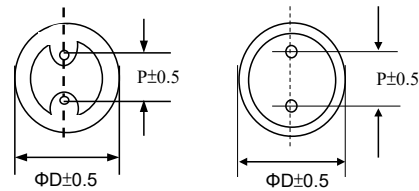
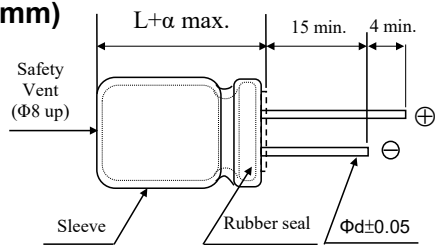


Frequency Coefficient of Permissible Ripple Current

Rated Voltage (V)	Capacitance (μF)	Frequency (Hz)				
		60(50)	120	150	1K	$\geq 10K$
200	22 ~ 470	0.85	1.00	1.30	1.50	1.85
	4.7 ~ 68	0.85	1.00	1.20	1.30	1.50
400	82 ~ 220	0.85	1.00	1.10	1.15	1.20

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DIMENSIONS(mm)



ΦD	10	12.5	16	18	20	22
P	5.0	5.0	7.5	7.5	10	10
Φd	0.6	0.6	0.8	0.8	0.8	0.8

α	(L < 20) 1.5
	(L ≥ 20) 2.0

STANDARD RATINGS

DxL(mm), R.C.(mA rms) at 105°C 120 Hz

V	Cap (μF)	D x L	R.C.
200	22	10x20	120
	33	10x25	160
		12.5x20	160
	47	10x30	195
		12.5x20	195
	56	12.5x25	210
	68	12.5x25	250
		16x22	250
	82	12.5x32	285
		16x22	285
		16x26	305
	100	12.5x35	335
		16x26	335
		16x36	350
		18x21	335
	120	16x26	450
		16x31.5	500
		18x25	500
	150	16x31.5	560
		16x36	585
		18x21	560
		18x25	585
	180	16x36	600
		16x40	645
	220	18x31.5	645
		18x31.5	680
		18x35.5	700
		18x40	735
	330	18x35.5	775
		18x40	810
		18x45	920
	390	18x40	850
		22x40	920
	470	18x45	1120
		22x40	1270

V	Cap (μF)	D x L	R.C.
400	4.7	10x10	60
		10x12.5	63
	10	10x16	87
	15	10x20	105
	18	10x25	115
	22	12.5x25	135
		12.5x30	145
		16x22	145
		16x26	180
	33	12.5x25	175
		16x26	195
		18x21	225
		18x25	255
		12.5x32	370
	47	16x26	268
		16x31.5	275
		16x36	290
		18x21	275
		18x25	290
		18x31.5	310
		16x31.5	326
	56	16x36	338
		16x40	350
		18x31.5	320
		16x36	320
	68	16x40	360
		18x25	350
		18x31.5	360
		18x35.5	380
		16x31.5	395
	82	18x25	395
		18x31.5	400
		18x40	420
	100	18x28	450
		18x31.5	470
		18x35.5	490
		18x40	510
	120	18x31.5	515
		18x35.5	530
		18x40	550
	150	18x35.5	770
		18x40	790
	180	22x35	800
	220	22x40	1000

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