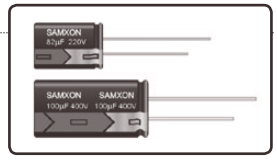
SAMXON®
Aluminum Electrolytic Capacitors

+105˚C, Withstanding Overvoltage Design (耐過電壓品)

FEATURES

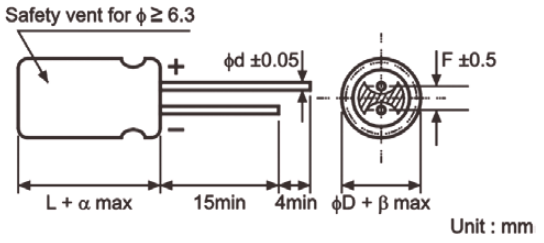


- Doesn't spark with DC over voltage.
- Load life: 2,000 hours at 105˚C.

SPECIFICATIONS

Item	Performance Characteristics
Operating Temperature Range	-25 to +105˚C
Rated Working Voltage Range	200 & 400V
Nominal Capacitance Range	22 to 330μF
Capacitance Tolerance	±20% at 120Hz, +20˚C
Leakage Current	I ≤0.03CV +40 (μA) after 2 minutes application of rated working voltage at +20˚C
tan δ (120Hz, +20˚C)	Working Voltage (V): 200 / 400 tan δ (max.): 0.20 / 0.24
Low Temperature Characteristics	Impedance ratio max. at 120Hz Rated Voltage (V): 200 / 400 Z-25˚C / Z+20˚C: 3 / 6
High Temperature Loading	Test time : 2,000 hours Test temperature : +105˚C Test conditions : Rated DC working voltage with rated ripple current Post test requirements at +20˚C Leakage current : ≤Initial specified value Cap. change : within ±20% of the initial measured value tan δ : ≤200% of the initial specified value
Shelf Life	At +105˚C no voltage applied after 1,000 hours and then being stabilized at +20˚C the capacitors shall meet the following limits Leakage current : ≤Initial specified value Cap. change : within ±20% of the initial measured value tan δ : ≤200% of the initial specified value
Industrial Standard	JIS C - 5101-4 (IEC 60384-4)

CASE SIZE TABLE



ΦD	16	18
F	7.5	7.5
Φd	0.8	0.8
α	(L <20) 1.5	(L ≥20) 2.0
β	(D <20) 0.5	(D ≥20) 1.0

RIPPLE CURRENT MULTIPLIER

Frequency Coefficient

Coefficient / Freq. (Hz) / Cap (μF)	50	120	300	1k	10k~
22~220	0.80	1.00	1.25	1.40	1.60
270~330	0.90	1.00	1.10	1.13	1.15

PART NUMBER SYSTEM (EXAMPLE : 200V 100μF)

1	2 3	4 5 6	7	8 9	10	11 12	13 14
E	OM	107	M	2D	K	25	RR

- 13 14: Type (Radial Bulk)
- 11 12: Case Length (25mm)
- 10: Diameter (16mm)
- 8 9: Voltage (200V)
- 7: Tolerance (±20%)
- 4 5 6: Capacitance (100μF)
- 2 3: Series
- 1: E-CAP

STANDARD RATINGS

Voltage (Code)		200V (2D)		400V (2G)	
Cap. (μF)	Code	Case Size	Ripple Current	Case Size	Ripple Current
22	226			16 x 20	145
33	336			16 x 25	220
				18 x 20	225
39	396			16 x 30	245
				18 x 25	250
47	476			16 x 30	275
				18 x 25	280
56	566			16 x 40	350
				18 x 30	315
68	686			18 x 35	350
82	826	16 x 20	230	18 x 40	395
100	107	16 x 25	425	18 x 40	450
		18 x 20	250		
120	127	16 x 30	500		
		18 x 25	475		
150	157	16 x 30	560		
		18 x 25	530		
180	187	16 x 40	645		
		18 x 30	630		
220	227	18 x 35	725		
270	277	18 x 45	830		
330	337	18 x 45	920		

Maximum Allowable Ripple Current (mArms) at 105˚C 120Hz

Case Size ΦD x L (mm)

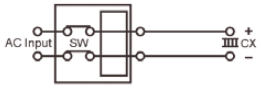
DC OVERVOLTAGE TEST CONDITIONS

They vent will operate and the capacitor shall become an open circuit without buming materials when the following excess DC voltage is applied.

- **Test DC voltage**

Rated voltage	Current limit	Test DC voltage
200Vdc	4A	300 / 375Vdc
400Vdc	2A	500 / 600Vdc

- **Test circuit**



Constant DC voltage / current power supply