

ALUMINUM ELECTROLYTIC CAPACITORS

SC series

FEATURES

- 105°C Electrolytic Capacitors with Safety Measures

SPECIFICATIONS

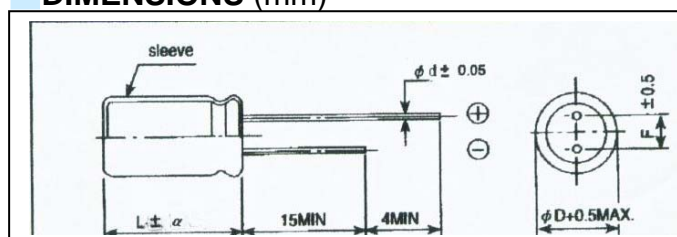
Item	Performance Characteristics													
Operating Temperature Range	-25°C ~ +105°C													
Rated Voltage Range	160V ~ 500 W.V.													
Capacitance Range	3.3~180uF													
Capacitance Tolerance	±20% (20°C, 120Hz)													
Leakage Current (MAX)	$I=0.04CV + 100\mu A$ (2minute) $I=0.02CV + 25\mu A$ (5minutes) $I=$ Leakage Current(μA) , $C=$ Nominal Capacitance(μF) , $V=$ Rated Voltage(V)													
Dissipation Factor (tan δ)	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>200</td> <td>250</td> <td>400</td> <td>450</td> <td>500</td> <td rowspan="2">MAX (20°C, 120Hz)</td> </tr> <tr> <td>Tan δ</td> <td>0.20</td> <td>0.20</td> <td>0.25</td> <td>0.25</td> <td>0.25</td> </tr> </table>	Rated voltage (V)	200	250	400	450	500	MAX (20°C, 120Hz)	Tan δ	0.20	0.20	0.25	0.25	0.25
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Tan δ	0.20	0.20	0.25	0.25	0.25									
Low Temperature Stability Impedance Ratio	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>200</td> <td>250</td> <td>400</td> <td>450</td> <td>500</td> <td rowspan="2">MAX (120Hz)</td> </tr> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>3</td> <td>5</td> <td>8</td> <td>17</td> <td>17</td> </tr> </table>	Rated voltage (V)	200	250	400	450	500	MAX (120Hz)	Z(-25°C)/Z(+20°C)	3	5	8	17	17
Rated voltage (V)	200	250	400	450	500	MAX (120Hz)								
Z(-25°C)/Z(+20°C)	3	5	8	17	17									
Load Life	<p>After 2000 hours' application of rated voltage at 105°C, capacitors meet the characteristics requirement listed at right.</p> <table border="1"> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> <tr> <td>Capacitance Change</td> <td>Within ±25% of initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> </table>	Leakage Current	Not more than the specified value.	Capacitance Change	Within ±25% of initial value.	Dissipation Factor	Not more than 200% of the specified value.							
Leakage Current	Not more than the specified value.													
Capacitance Change	Within ±25% of initial value.													
Dissipation Factor	Not more than 200% of the specified value.													
Shelf Life	After leaving capacitors under no load at 105°C for 1000 hours and applying voltage according to JIS C-5102 4-3, they meet the specified value for load life characteristics listed above.													
Standard	According to JIS C-5141													

MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

Frequency(Hz)	60(50)	120	1k	10k	≥ 100k
Coefficient	0.8	1.0	1.25	1.40	1.50

DIMENSIONS (mm)



ϕD	6.3	8	10	12.5	16	18
ϕd	0.5	0.6	0.6	0.6	0.8	0.8
F	2.5	3.5	5.0	5.0	7.5	7.5
α	$L \leq 16: \alpha = 1.5, \quad L \geq 20: \alpha = 2.0$					

ALUMINUM ELECTROLYTIC CAPACITORS

SC series

STANDARD SIZES AND PERMISSIBLE RIPPLE CURRENT

SIZE φ DxL(mm)Ripple Current(mA 105°C) r.m.s

W.V		200		250		400		450		500	
		SIZE	RIPPLE 120HZ	SIZE	RIPPLE 120HZ	SIZE	RIPPLE 120HZ	SIZE	RIPPLE 120HZ	SIZE	RIPPLE 120HZ
3.3	3R3	6.3x11	22			8x11.5	35	8x16	45	10X16	75
						8x16	41	10x12.5	60		
4.7	4R7	8x11.5	50			8x11.5	60	10x12.5	65	10x20	80
						10x16	70	10x16	70		
6.8	6R8	8x11.5	60			8x16	70	10x16	80	10x23	130
						10x12.5	72				
10	100	8x11.5	70	8x16	75	10x16	85	12.5x20	145	12.5x20	155
						10x12.5	90				
15	150	10x12.5	110	10x12.5	110	10x20	117	12.5x20	150	16x20	170
						12.5x16	120				
22	220	10x12.5	125	10x20	160	10x25	130	16x25	190	16X25	200
						10x16	145				
33	330	10x20	165	12.5x16	181	10x40	200	12.5x30	220	16x31.5	280
						12.5x16	181				
47	470	10x20	185	12.5x25	350	12.5x25	200	16x25	270	18x31.5	300
						10x23	230				
56	560	12.5x20	223	12.5x25	250	12.5x35	282	16x35.5	350	18x35.5	380
						12.5x40	290				
68	680	12.5x20	253	16x25	450	16x25	282	16x31.5	350	18x40	400
						16x20	285				
82	820					12.5x35	325	16x31.5	380	18x45	410
						16x30	325				
100	101					16x31.5	325	18X35.5	490	20X46.5	550
						18x20	325				
120	121					18x25	375	18X35.5	490	20X46.5	550
						18X25	430				
150	151					18X31.5	500	18X40	525		
						16X40	510				
180	181					18X35.5	548	18X45	840		
						18X45	670				
						18X45	670	20X46.5	950		