

ALUMINUM ELECTROLYTIC CAPACITORS

SC series

FEATURES 特性

● 105°C Electrolytic Capacitors with Safety Measures

105°C 符合安全對策要求之電解電容

SPECIFICATIONS

Item 項目	Performance Characteristics 特性							
Operating Temperature Range 工作溫度範圍	-40 ~+105℃							
Rated Voltage Range 額定電壓範圍	200~ 500 W.V.							
Capacitance Range 靜電容量範圍	4.7~220uF							
Capacitance Tolerance 靜電容量誤差	±20% (20℃,120Hz)							
Leakage Current 洩漏電流	Nominal Capacitance ≤ 10 μ F I=0.02CV +25uA(After 2 minutes) 額定容量 ≤ 10 μ F I=0.02CV +25uA(2 分鐘後) Nominal Capacitance > 10 μ F I=0.02CV(After 2 minutes) 額定容量 > 10 μ F I=0.02CV(2 分鐘後)) I=Leakage Current(μ A) , C=Nominal Capacitance(μ F) , V=Rated Voltage(V) I=洩漏電流 (μ A) , C=額定容量(μ F) , V=額定電壓(V)							
Dissipation Factor (tan δ) 散逸因素 (損失角正切值)								
	Rated voltage (V) 額定電壓(V)	200	250	400	420	450	500	MAX (20℃,120Hz)
	Tan δ 損失角正切值	0.20	0.20	0.25	0.25	0.25	0.25	
Low Temperature Stability Impedance Ratio(MAX) 低溫特性阻抗比率								
	Rated voltage (V) 額定電壓(V)		200	250~350		400~500		MAX (120Hz)
	Z(-25℃)/Z(+20℃)		3	5		8		
	Z(-40℃)/Z(+20℃)		8	8		17		

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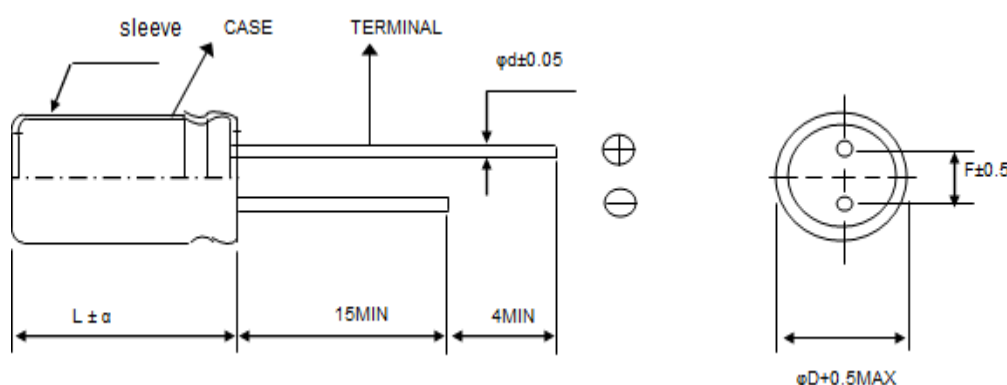
Load Life 負荷壽命	After 2000 hours' application of rated voltage at 105°C, capacitors meet the characteristics requirement listed below. 在 105°C 下印加額定電壓 2000 小時後, 電容特性需滿足以下要求。 <table border="1"> <tr> <td>Leakage Current 洩漏電流</td><td>Not more than the specified value. 不超出規格值。</td></tr> <tr> <td>Capacitance Change 容量變化率</td><td>within ±20% of the initial value 初始值±20%以內</td></tr> <tr> <td>Dissipation Factor 散逸因素</td><td>Not more than 200% of the specified value 不超出規格值的 2 倍</td></tr> </table>	Leakage Current 洩漏電流	Not more than the specified value. 不超出規格值。	Capacitance Change 容量變化率	within ±20% of the initial value 初始值±20%以內	Dissipation Factor 散逸因素	Not more than 200% of the specified value 不超出規格值的 2 倍
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Capacitance Change 容量變化率	within ±20% of the initial value 初始值±20%以內						
Dissipation Factor 散逸因素	Not more than 200% of the specified value 不超出規格值的 2 倍						
Shelf Life 放置壽命	After leaving capacitors under no load at 105°C for 1000 hours, the capacitors shall meet the following requirements 電容放置在 105°C 無印加電壓的情況下儲存 1000 小時後, 電容需符合以下要求。 <table border="1"> <tr> <td>Leakage Current 洩漏電流</td><td>Not more than the specified value. 不超出規格值。</td></tr> <tr> <td>Capacitance Change 容量變化率</td><td>within ±20% of the initial value 初始值±20%以內</td></tr> <tr> <td>Dissipation Factor 散逸因素</td><td>Not more than 200% of the specified value 不超出規格值的 2 倍</td></tr> </table>	Leakage Current 洩漏電流	Not more than the specified value. 不超出規格值。	Capacitance Change 容量變化率	within ±20% of the initial value 初始值±20%以內	Dissipation Factor 散逸因素	Not more than 200% of the specified value 不超出規格值的 2 倍
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Dissipation Factor 散逸因素	Not more than 200% of the specified value 不超出規格值的 2 倍						
Standard 參照標準	According to JIS C-5101 依據 JIS C-5101						

Frequency coefficient

頻率系數

Frequency(Hz)	60(50)	120	1k	10k	≥ 100k
Coefficient	0.80	1.00	1.45	1.65	1.75

DIMENSIONS 尺寸(mm)



ϕD	6.3	8	10	12/12.5/13	16	18	20	22
ϕd	0.5	0.6	0.6	0.6	0.8	0.8	0.8	1.0
F	2.5	3.5	5.0	5.0	7.5	7.5	10.0	10.0
α	$L \leq 19: \alpha = 1.5, \quad L \geq 20: \alpha = 2.0$							
	$\phi D \geq 20 + 1.0 \text{ MAX}$							

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STANDARD SIZES AND RIPPLE CURRENT

尺寸及紋波標準

SIZE ϕ DxL(mm) Ripple Current(mA 105°C 120Hz) r.m.s

W.V Cap(μ F)		200(2D)		250(2E)		400(2G)		420(2H)		450(2W)		500(2Z)	
		Size	Ripple Current	Size	Ripple Current	Size	Ripple Current	Size	Ripple Current	Size	Ripple Current	Size	Ripple Current
4.7	4R7	8x11.5	40			8x10 8x11.5	50 60						
10	100	8x11.5	55										
22	220					12.5x20	160						
33	330	12.5x20	120			10x40 12.5x20 16x20 16x25	200 200 230 240			12.5x30 16x25	220 240	16x31.5	280
47	470					13x25 12.5x30 16x20	210 230 250			16x20 16x25 18x25	250 270 280	18x31.5	300
56	560			12.5x25	200	12.5x35 16x25	282 282			16x35.5	350	18x35.5	380
68	680			16x25	270	12.5x35 16x30 18x25	325 325 367			16x30 16x31.5 18x30	350 350 380	18x40	400
82	820			16x25	290	18x25	375	18x25	390	16x35.5 18x25 18x31.5	370 390 390	16x35.5 18x45	370 410
100	101	16x25	270	16x31.5	325	18x25 18x30	430 435	16x31.5	420	16x31.5 18x35.5	420 490	16x40 20x46.5	420 550
120	121	16x25	290	16x31.5	350	18x30 16x35 16x40	500 455 510			16x45 18x40	480 525		
150	151	16x31.5	325	16x31.5	375	18x35 18x40	548 578	18x40	700	18x45	840		
180	181	16x31.5	350	16x35.5	400	18x45	670			20x46.5	950		
220	221	18x40	610			22x35	950						