



HIGH VOLTAGE TYPE

Features

- 160~450V Rated Voltage, 85°C、 1000 hours assured
160~450V 耐壓，85°C、1000 小時壽命保證
- For generat purpose application
一般標準品應用

CHARACTERISTICS

ITEMS	CHARACTERISTIC																					
Operating Temperature Range 工作溫度範圍	-40°C ~ +85°C																					
Capacitance Tolerance 容量公差	±10%、±20% (at 20°C 120Hz)																					
Leakage Current 漏電流	$I = 0.03CV + 15 (\mu A) (CV \leq 1000)$; $I = 0.02CV + 25 (\mu A) (CV > 1000)$ (after 5 minutes applying the rated DC working voltage at 20°C) (在 20°C 施加直流額定電壓 5 分鐘以後) where: C = rated capacitance in μF . (容量值。單位：微法拉) V = rated DC working voltage in V. (額定工作電壓。單位：伏特)																					
Dissipation Factor (Tan δ) (At 20°C, 120 Hz) 損耗角	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>Tan δ</td> <td>0.15</td> <td>0.15</td> <td>0.20</td> <td>0.20</td> <td>0.24</td> <td>0.24</td> </tr> </table> For capacitors whose capacitance exceeds 1,000 μF , the specification of tan δ is increased by 0.02 for every addition of 1,000 μF . 當電容量超過 1000 μF ，容量每增加 1000 μF ，損耗角正切值就增加 0.02	Rated voltage (V)	160	200	250	350	400	450	Tan δ	0.15	0.15	0.20	0.20	0.24	0.24							
Rated voltage (V)	160	200	250	350	400	450																
Tan δ	0.15	0.15	0.20	0.20	0.24	0.24																
Surge Voltage 突破電壓	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>Surge voltage (V)</td> <td>200</td> <td>250</td> <td>300</td> <td>400</td> <td>450</td> <td>500</td> </tr> </table>	Rated voltage (V)	160	200	250	350	400	450	Surge voltage (V)	200	250	300	400	450	500							
Rated voltage (V)	160	200	250	350	400	450																
Surge voltage (V)	200	250	300	400	450	500																
Low Temperature Characteristics 低溫特性	Impedance ratio at 120Hz. 阻抗測試頻率為 120Hz <table border="1"> <tr> <td>Rated voltage (V)</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>Z (-25°C) / Z (+20°C)</td> <td>3</td> <td>6</td> <td>8</td> <td>12</td> <td>14</td> <td>16</td> </tr> <tr> <td>Z (-40°C) / Z (+20°C)</td> <td>4</td> <td>8</td> <td>10</td> <td>-</td> <td>-</td> <td>-</td> </tr> </table>	Rated voltage (V)	160	200	250	350	400	450	Z (-25°C) / Z (+20°C)	3	6	8	12	14	16	Z (-40°C) / Z (+20°C)	4	8	10	-	-	-
Rated voltage (V)	160	200	250	350	400	450																
Z (-25°C) / Z (+20°C)	3	6	8	12	14	16																
Z (-40°C) / Z (+20°C)	4	8	10	-	-	-																
Load Life 負荷壽命	After 1000 hours application of rated voltage at 85°C, capacitors meet the characteristics requirements listed at right. 在額定電壓 105°C 條件下，經過 1000 小時後，電容特性要求如下表： <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±20% of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>Less than 200% of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </table>	Capacitance Change	Within ±20% of initial value	Dissipation Factor	Less than 200% of specified value	Leakage Current	Within specified value															
Capacitance Change	Within ±20% of initial value																					
Dissipation Factor	Less than 200% of specified value																					
Leakage Current	Within specified value																					
Shelf Life 無負荷壽命	After leaving capacitors under no load at 85°C for 1000 hours and applying voltage they meet the specified value for load life characteristics listed above (Refer to JIS C 5102). 將電容器放置在溫度為 85°C、無電壓負荷狀況下，經過 1000 小時後，再加電壓於電容器，其所測值標準應與有負荷時測試值相同(依據 JIS C 5102 標準)。																					
Frequency Coefficient Of Allowable Ripple Current 允許紋波電流的頻率系數	<table border="1"> <tr> <td rowspan="2">Cap. (μF) \ Freq. (Hz)</td> <td>60</td> <td>120</td> <td>500</td> <td>1k</td> <td>10K up</td> </tr> <tr> <td>Under 100</td> <td>0.70</td> <td>1.00</td> <td>1.30</td> <td>1.40</td> <td>1.50</td> </tr> <tr> <td></td> <td>100 to 330</td> <td>0.75</td> <td>1.00</td> <td>1.20</td> <td>1.30</td> <td>1.35</td> </tr> </table>	Cap. (μF) \ Freq. (Hz)	60	120	500	1k	10K up	Under 100	0.70	1.00	1.30	1.40	1.50		100 to 330	0.75	1.00	1.20	1.30	1.35		
Cap. (μF) \ Freq. (Hz)	60		120	500	1k	10K up																
	Under 100	0.70	1.00	1.30	1.40	1.50																
	100 to 330	0.75	1.00	1.20	1.30	1.35																
Allowable Ripple Current Vs. Ambient Temperature 環境溫度對比允許紋波電流的比值	<table border="1"> <tr> <td>Temperature (°C)</td> <td>Under 50</td> <td>70</td> <td>85</td> </tr> <tr> <td>Multiplier</td> <td>1.78</td> <td>1.40</td> <td>1.00</td> </tr> </table>	Temperature (°C)	Under 50	70	85	Multiplier	1.78	1.40	1.00													
Temperature (°C)	Under 50	70	85																			
Multiplier	1.78	1.40	1.00																			
Marking 標示	Printed with white color letter on black sleeve. 黑色套管印刷白色字體。																					
Other Standards 其它標準	Satisfies Characteristic W of JIS C5101-4. 符合日本工業標準 C5101-4。																					



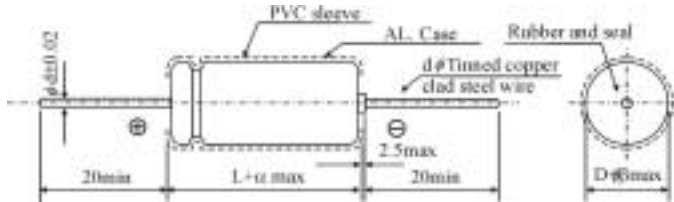
Axial Type Aluminum Electrolytic Capacitors

THV

臥式鋁質電解電容器

HIGH VOLTAGE TYPE

DIAGRAM OF DIMENSIONS



ΦD	6.3	8	10	13	16	18	22	25
Φd	0.6				0.8			
α	1.5			2.0				
β	0.5			1.0				

DIMENSIONS & RIPPLE CURRENT

Diameter (D φ) × Length(L) m/m
尺寸：直徑(D φ) × 長度(m/m)

RIPPLE CURRENT . mA at 85°C, 120Hz

紋波電流(mA)：溫度 85°C，測試頻率 120Hz

μF	V.DC Contents	200V (2C)		250V (2E)		350V (2V)		400V (2G)		450V (2W)			
		φ D×L	mA	φ D×L	mA	φ D×L	mA	φ D×L	mA	φ D×L	mA		
		6.3×13	7	6.3×13	9	6.3×13	12	8×16	13	8×16	14	8×16	15
	2R2	6.3×13	15	8×13	16	8×16	17	8×20	19	10×17	21	10×21	23
3.3	3R3	8×13	21	8×16	26	8×20	31	8×20	33	10×17	34	10×21	36
4.7	4R7	8×16	31	10×17	33	10×17	38	10×21	44	10×26	45	10×26	46
10	100	10×17	60	10×21	66	10×21	69	13×22	72	13×22	79	13×27	81
22	220	10×21	121	13×22	121	13×27	117	13×27	121	16×33	121	16×36	130
33	330	13×22	150	13×27	166	16×28	148	16×33	159	16×36	159	16×42	168
47	470	13×27	197	16×33	214	16×33	190	16×42	200	18×42	200	18×42	204
100	101	16×33	320	16×36	343	16×42	355	22×43	315	25×43	339	25×52	346
220	221	18×42	539	22×43	539	22×43	514						
330	331	22×43	630										