

ALUMINUM ELECTROLYTIC CAPACITORS

EP series **105°C 5000HR**
105°C 5000 小時

- 105°C Standard for snap-in Terminals
105°C 自立型產品
- High Ripple Current
高紋波
- Used in Switch Power Supply, Smoothing Circuits.
Adapter, Inverter Lighting System.
應用於開關電源、平流電路
適配器、變壓照明系統

SPECIFICATIONS

Item 項目	Performance Characteristics 特性														
Operating Temperature Range 工作溫度範圍	-40°C ~ +105°C (10~100V) -25°C ~ +105°C (160~450V)														
Rated Voltage Range 額定電壓範圍	10~450W.V														
Capacitance Range 靜電容量範圍	68~47000uF														
Capacitance Tolerance 靜電容量誤差	±20% (120Hz, +20°C)														
Leakage Current 洩漏電流	$I \leq 3\sqrt{CV}$ After 5 minutes with rated working voltage applied at +20°C (印加額定工作電壓 5 分鐘) I =Leakage Current(μ A) C :Nominal capacitance in μ F V :Rated voltage in V I =洩漏電流(μ A) , C =額定容量(μ F) , V =額定電壓(V)														
Dissipation Factor ($\tan \delta$) 散逸因素 (損失角正切值)	(120HZ/ +20°C)														
	<table border="1"> <tr> <td>Rated voltage (V) 額定電壓(V)</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63~100</td> </tr> <tr> <td>Tan δ (MAX) 損失角正切值</td> <td>0.60</td> <td>0.45</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.15</td> </tr> </table>	Rated voltage (V) 額定電壓(V)	10	16	25	35	50	63~100	Tan δ (MAX) 損失角正切值	0.60	0.45	0.30	0.25	0.20	0.15
	Rated voltage (V) 額定電壓(V)	10	16	25	35	50	63~100								
	Tan δ (MAX) 損失角正切值	0.60	0.45	0.30	0.25	0.20	0.15								
<table border="1"> <tr> <td>Rated voltage (V) 額定電壓(V)</td> <td>160~400</td> <td>420~450</td> </tr> <tr> <td>Tan δ (MAX) 損失角正切值</td> <td>0.15</td> <td>0.20</td> </tr> </table>	Rated voltage (V) 額定電壓(V)	160~400	420~450	Tan δ (MAX) 損失角正切值	0.15	0.20									
Rated voltage (V) 額定電壓(V)	160~400	420~450													
Tan δ (MAX) 損失角正切值	0.15	0.20													
For capacitance value > 33000uF, add following calculated value:(rated capacitance-33000uF)/10000uF x 0.1 容量 > 33000uF 時,增加以下計算值:(額定容量-33000uF)/10000uFx0.1															

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Low Temperature Stability Impedance Ratio(MAX) 低溫特性阻抗比率	Rated Voltage (V) 額定電壓(V)	10	16	25	35	50	63~100
	Z(-25°C)/Z(+20°C)	6	6	6	6	4	3
	Z(-40°C)/Z(+20°C)	15	15	15	15	15	15
	Rated Voltage (V) 額定電壓(V)	160	250	315	350	400~420	450
	Z(-25°C)/Z(+20°C)	8	8	8	8	8	8
Load Life 負荷壽命	Application of rated voltage for 5000HRS at 105°C, the capacitor shall meet the characteristics requirement listed as following. 在 105°C 下印加額定電壓 5000 小時後, 電容特性需滿足以下要求.						
	Capacitance Change 容量變化	$\leq \pm 20\%$ of the initial measured value 不超出初始值的 $\pm 20\%$					
	tan δ 損失角正切值	$\leq 200\%$ of the initial specified value 不超出規格值的 2 倍					
	Leakage Current 洩漏電流	\leq The initial specified value 不超出規格值					
Shelf Life 放置壽命	After storing it for 1000HRS at 105°C with no voltage applied. The capacitor 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。						
	Capacitance Change 容量變化	$\leq \pm 15\%$ of the initial measured value 不超出初始值的 $\pm 15\%$					
	tan δ 損失角正切值	$\leq 150\%$ of the initial specified value 不超出規格值的 1.5 倍					
	Leakage Current 洩漏電流	\leq The initial specified value 不超出規格值					

Frequency coefficient

頻率系數

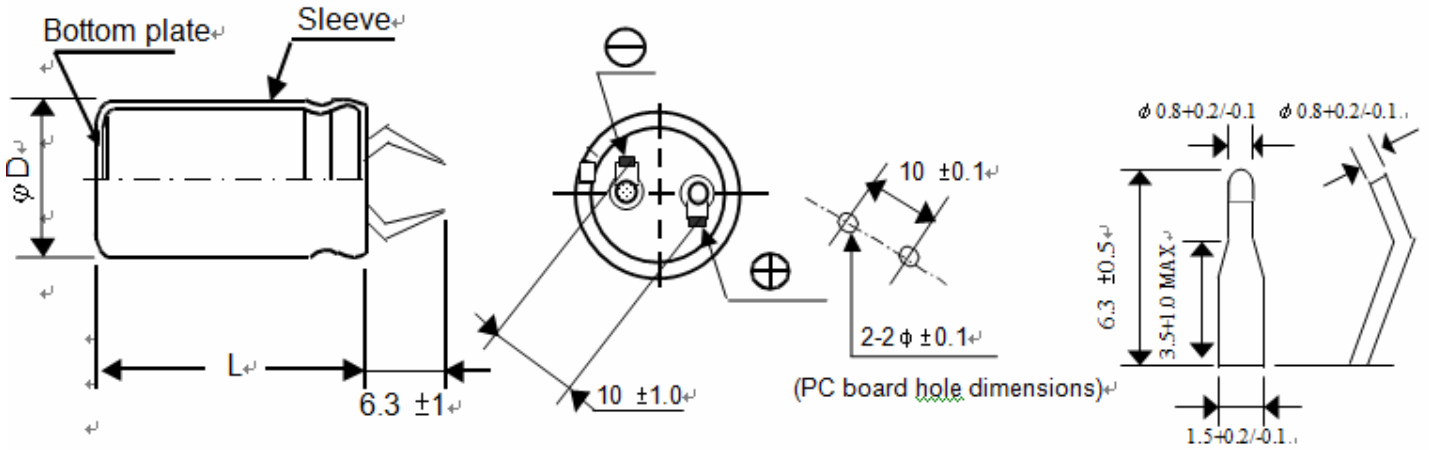
R.V(V) \ Freq(Hz)	60	120	1K	10~100K
10~100V	0.90	1.00	1.15	1.25
160-250V	0.80	1.00	1.25	1.47
315-450V	0.80	1.00	1.30	1.47

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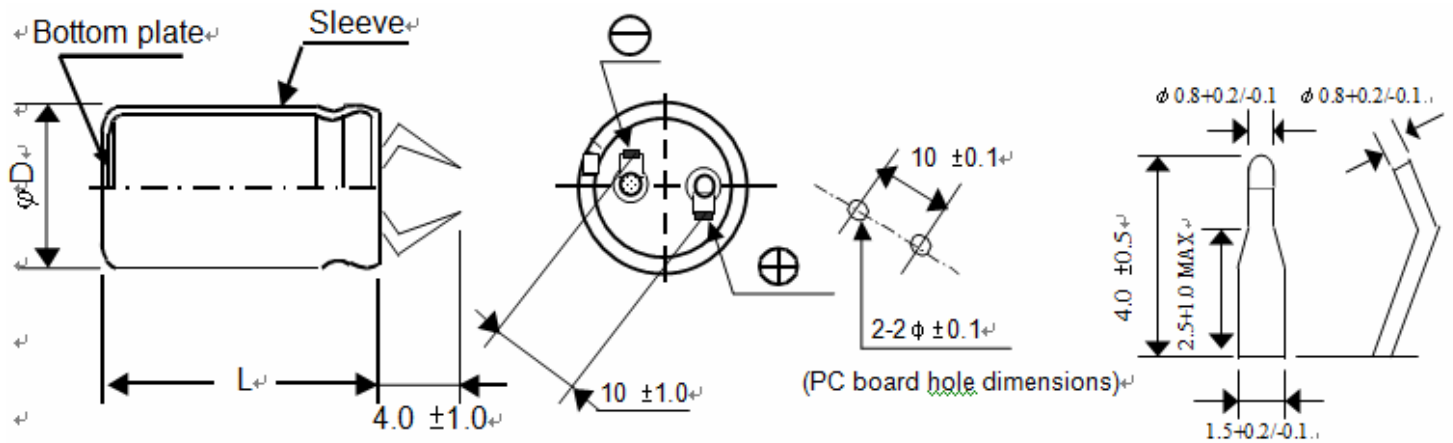
EP series

DIMENSIONS (mm)

●TYPE. TB($22 \leq D \leq 35$)



●TYPE. TC($22 \leq D \leq 35$)



$\varphi D + 1.0 \text{ MAX}$
$L \pm 2.0$



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EP series

STANDARD SIZES AND RIPPLE CURRENT

尺寸及紋波標準

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

Cap(uF)	W.V	10V		16V		25V		35V		50V		63V		80V		100V		
		1A		1C		1E		1V		1H		1J		1K		2A		
390	391																22x25	780
560	561																22x30	990
																	25x25	980
680	681													22x25	970	22x35	1120	
1000	102											22x25	1000	22x35	1700	25x35	1430	
														25x25	1920	30x30	1420	
														35x25		35x25	1450	
1200	122											22x30	1150	22x40	1420	22x50	1600	
												25x25	1150	25x30	1390	25x40	1590	
												30x25		30x25	1410	30x35	1610	
1500	152									22x25	1020	22x35	1320	25x35	1620	25x50	1860	
																30x40	1870	
																35x30	1850	
1800	182									22x30	1170	22x40	1490	22x50	1840	25x40	1820	
										25x25	1170	25x30	1450	25x40	1820	30x30	1780	
												30x25	1480	30x25	1820	30x25	1820	
2200	222							22x25	1100	22x35	1330	25x35	1670	25x50	2110	30x35	2300	
												30x30	1680	30x35	2050	30x50	2400	
												35x25	1710	35x30	2090			
2700	272									22x40	1510	22x50	1920	30x40	2350	35x50	2810	
										25x30	1470	25x40	1900	35x35	2370			
										30x35	1500	30x35	1930					
3300	332							22x30	1420	25x35	1700	25x50	2200	30x50	2750			
								25x25	1410	30x30	1700	35x30	2180	35x40	2730			
										35x25	1740							
3900	392					22x25	1310	22x35	1580	22x50	1910	30x40	2410					
								25x30	1580	25x40	1890	35x35	2430					
4700	472					22x30	1510	22x40	1780	30x35	2110	30x50	2800	35x50	3160			
						25x25	1510	30x25	1770	35x30	2160	35x40	2780					
5600	562			22x25	1440	22x35	1700	25x35	1980	25x50	2380							
						30x30	1980	30x40	1980	30x40	2390							
						35x25	2030	35x35	2030	35x35	2410							
6800	682	22x25	1300	22x30	1660	22x40	1920	22x50	2260	30x50	2790	35x50	3250					
				25x25	1660	25x30	1870	25x40	2240	35x40	2780							
						30x25	1900											
8200	822			22x35	1870	25x35	2140	25x50	2570									
						30x30	2150	30x35	2500									
						35x25	2190	35x30	2550									
10000	103	22x30	1650	22x40	2120	22x50	2450	30x40	2860	35x50	3570							
		25x25	1640	25x30	2070	25x40	2430	35x35	2880									
				30x25	2110													
12000	123	22x35	1850	25x35	2370	25x50	2780	30x50	3320									
		25x30	1850	30x30	2370	30x35	2700	35x40	3300									
		30x25	1890	35x25	2420	35x30	2760											
15000	153	22x40	2120	22x50	2740	30x40	3130											
		25x35	2160	25x40	2710	35x35	3160											



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

Cap(uF)	W.V	10V		16V		25V		35V		50V		63V		80V		100V				
		1A		1C		1E		1V		1H		1J		1K		2A				
18000	183	22x50	2450	25x50	3110	30x50	3440	35x50	3890											
		25x40	2430							30x35	3020									
		30x30	2370							35x30	3090									
		35x25	2420																	
22000	223	30x35	2730	30x40	3460															
		35x30	2790			35x35	3490													
27000	273	25x50	3110	30x50	3670	35x50	3780													
		30x40	3130					35x40	3640											
33000	333	35x35	3490																	
39000	393	30x50	3990	35x50	4160															
		35x40	3960																	
47000	473	35x50	4220																	



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W.V		160V		200V		250V		315V		350V		400V		420V		450V	
Cap(uF)		2C		2D		2E		2F		2V		2G		2H		2W	
68	680															22x25	530
82	820															22x30	640
100	101											22x30	710	22x30	710	22x25 22x35 25x30	700 740 750
120	121									22x30	780	22x35	800	22x35 25x30	800 830	22x40	820
150	151							22x30	860	22x35	900	22x30 22x40 25x35	900 910 990	22x40	910	22x45 25x35 30x30	930 940 1000
180	181							22x35 25x30	980 1010	25x30	1010	22x30 22x45 25x35 30x30	900 1010 1030 1100	22x45 25x40 30x30	1010 1100 1100	22x50 25x40 30x30	1010 1030 1030
220	221					22x30	1090	22x40 30x25	1100 1170	22x45 25x35 30x30	1160 1140 1210	22x50 25x40	1140 1190	25x45 30x35 35x25	1200 1210 1220	22x45 25x35 25x45 30x35 35x30	1050 1060 1160 1170 1240
270	271			22x25	1100	22x35	1280	22x45 25x35	1240 1270	22x50 25x40 30x30	1260 1310 1270	25x50 30x35	1390 1350	25x50 30x30 30x40 35x30	1350 1350 1370 1380	22x50 25x50 30x40 35x30 35x35	1180 1310 1330 1350 1390
330	331					25x30	1420	22x50 25x40 30x30	1690 1450 1400	25x45 30x35	1460 1430	30x45 35x30	1590 1520	30x45 35x35	1500 1540	30x35 30x45 30x50	1380 1500 1580
390	391	22x30	1420	22x35 25x30	1470 1500	22x45 25x35 30x30	1610 1530 1620	25x45	1600	25x50 30x40 35x35	1620 1600 1760	30x35 30x45 35x35	1600 1680 1670	25x50 30x50 30x40 35x40	1610 1720 1650 1730	30x40 35x40	1600 1730
470	471			22x40	1640	22x50	1790	25x50 30x40 35x30	1780 1810 1820	30x45 35x35	1810 1830	30x50 35x40	1890 1900	35x45	1940	30x45 35x40 35x50	1800 1900 1980
560	561	22x35 25x30	1770 1810	22x45 25x35 30x25	1820 1820 1780	25x45 30x35	1980 1950	30x45 35x35	2020 2000	30x50 35x40	2000 2070	35x45	2120	30x35 35x50	1920 2170	35x45	2170
680	681	22x40 25x35 30x25	1980 2010 1960	22x50 25x40 30x30	1900 1980 1980	25x50 30x40 35x30	2210 2180 2150	30x50 35x40	2210 2290	35x45	2340	35x50	2390				
820	821	22x45	2200	25x45 30x35	2200 2220	30x45 35x35	2450 2380	35x45	2570	35x50	2620	30x50 35x50	2690 2690				
1000	102	22x50 25x45 30x35 35x25	2400 2650 2550 2550	25x50 30x40 35x35	2460 2530 2770	30x50 35x40	2680 2720	35x50	2890								
1200	122	25x50 30x40 35x30	2430 2840 2860	25x50 30x45 35x35	2550 2840 2880	35x45	3050										
1500	152	30x35 30x45 35x35	2900 3170 3220	35x40	3340	35x50	3490										
1800	182	30x50 35x40	3230 3360	35x45	3740												
2200	222	35x45	3740														
2700	272	35x50	3980														