

ALUMINUM ELECTROLYTIC CAPACITORS

LHC series

LONG LIFE 4000~5000HRS

長壽命 4000~5000 小時

FEATURES 特性

- Load Life:105°C 4000~5000 hours
壽命: 105°C 4000~5000 小時
- High Ripple Current
高紋波
- For Electronic Ballast, Power Supply
針對電子安定器, 電源供應器使用

SPECIFICATIONS

Item 項目	Characteristics 特性									
Operating Temperature Range 工作溫度範圍	-40°C ~ +105°C									
Rated Voltage Range 額定電壓範圍	160V~500W.V.									
Capacitance Range 靜電容量範圍	1~470 μ F									
Capacitance Tolerance 靜電容量誤差	\pm 20% (20°C, 120Hz)									
Leakage Current 洩漏電流	Nominal Capacitance \leq 10 μ F I=0.02CV +25uA(After 2 minutes) 額定容量 \leq 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)	160	200	250	350	400~420	450	500	MAX	
	Tan δ 損失角正切值	0.15	0.15	0.15	0.20	0.20	0.20	0.20	(20°C, 120Hz)	

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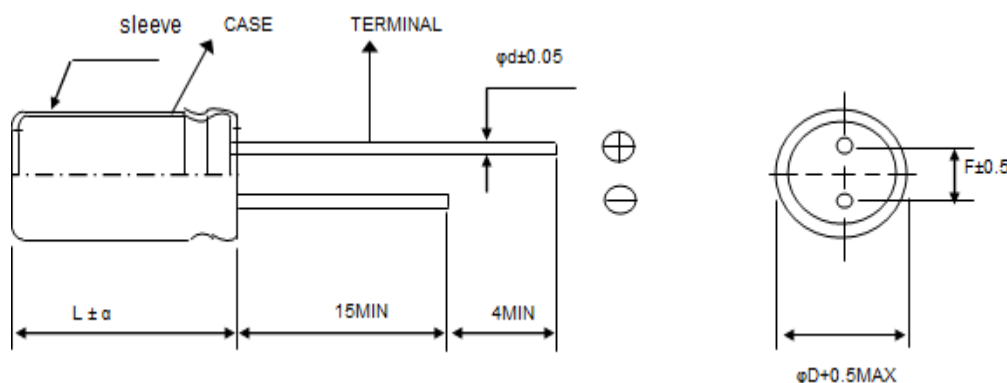
Low Temperature Stability Impedance Ratio(MAX) 低溫特性阻抗比率	Rated voltage (V) 額定電壓(V)	160	200	250	350	400~420	450~500	MAX (120Hz)
	Z(-25°C)/Z(+20°C)	3	3	3	6	6	6	
	Z(-40°C)/Z(+20°C)	8	8	8	17	17	17	
Load Life 負荷壽命	After life test at conditions stated in the table below, the capacitors shall meet the following requirement. 依據以下壽命要求印加額定紋波電流後，電容需符合以下要求。							
	Leakage Current 洩漏電流	Not more than the specified value. 不超出規格值.					Case Dia	Life Time(hrs)
	Capacitance Change 容量變化率	Within ±20% of initial value. 初始值±20%以內					$\phi D \leq 8$	4000
	Dissipation Factor 散逸因素	Not more than 200% of the specified value. 不超出規格值的 2 倍					$\phi D \geq 10$	5000
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。							
	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 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						
Standard 參照標準	According to JIS C-5101 依據 JIS C 5101 標準							

Frequency coefficient

頻率系數

Frequency(Hz)	120	1k	10k	100k ≤
Coefficient	0.7	0.80	0.90	1.00

DIMENSIONS 尺寸(mm)





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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 ≤ 19: $\alpha = 1.5$, L ≥ 20: $\alpha = 2.0$							
$\varphi D \geq 20 + 1.0\text{MAX}$								

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STANDARD SIZES AND RIPPLE CURRENT

尺寸及紋波標準

SIZE $\varphi D \times L$ (mm) Ripple Current(mA 105°C, 100KHz) r.m.s

Cap(μF)	W.V	160(2C)		200(2D)		250(2E)		350(2V)		400(2G)		420(2H)		450(2W)		500(2Z)	
		Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
1	010									6.3x11	50			8x11.5	40		
2.2	2R2									6.3x11 8x16	55 60			8x11.5	55		
3.3	3R3									8x11.5 10x16	100 135						
4.7	4R7					8x11.5	160			8x11.5 10x12.5	120 135			10x12.5	112	10x16	120
5.6	5R6									10x12.5	150						
6.8	6R8					8x11.5	160	10x16	170	8x11.5 10x12.5	125 165			10x16	120		
8.2	8R2			10x12.5	155					8x11.5 10x12.5	130 185						
10	100			8x11.5 10x12.5	180 200	10x12.5	220	10x16	190	8x16 10x10 10x20	180 180 230	10x15	220	10x12.5 12.5x16	200 242		
12	120					10x16	250			10x20	250			10x16	250		
15	150			8x11.5 10x12.5	200 250	8x16 10x12.5	250 300			10x12.5 10x16 12.5x16	210 250 270			10x16 12.5x16	270 300	10x40	350
18	180									12.5x16	300						
22	220	10x16	400	8x20 10x12.5 12.5x13	250 320 400	8x20 10x20	270 480	12.5x20	280	10x16 12.5x16 16x20	250 320 425	10x20	320	12.5x18 16x20	380 430	18x20	600



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SIZE \varnothing DxL(mm)Ripple Current(mA 105°C,100KHz) r.m.s

W.V		160(2C)		200(2D)		250(2E)		350(2V)		400(2G)		420(2H)		450(2W)		500(2Z)	
Cap(μ F)		Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
27	270			10x12.5	335	8x18	300			10x20 12.5x18	350 400	8x55	560	8x60 10x40	580 560		
33	330	10x20	450	10x16 12.5x20	460 490	10x16 12.5x16	460 480	12.5x20 16x25	370 400	10x20 12.5x20 13x18 16x16	400 470 470 485	12.5x25 16x20	530 600	12.5x20 16x20	500 540	16x25	650
39	390			8x25	450					16x20	575	10x40	620	10x45 12.5x40 16x20	760 700 550		
47	470	10x16	490	10x20 12.5x20	540 550	10x30 12.5x20	540 560	16x25	530	12.5x20 13x25 16x18 18x20	420 460 600 650	10x45 12.5x40 18x20	640 700 675	10x50 12.5x40 16x20 18x20	750 760 580 650	16x31.5	720
56	560			10x18	550	12.5x25	600			12.5x40 16x20 18x20	540 630 700	10x55 12.5x30	740 850	10x45 12.5x40 16x25 18x25	850 980 650 840		
68	680	12.5x16	550	12.5x20 16x25	600 700	12.5x25 16x20	650 700	16x31.5	680	16x20 18x20 18x31.5	650 600 800	16x25 18x25 18x31.5	760 740 810	12.5x40 16x25 18x25 18x31.5	800 770 870 990	16x35.5 18x25	800 800
82	820			16x20	680	12.5x30 16x18	690 730			13x30 16x25 18x20	800 740 820	16x25 16x31.5 18x25	800 900 1000	12.5x40 14.5x50 16x30 16x40 18x25	900 1220 900 1100 960	18x40	1120
100	101	12.5x20	850	16x20	900	12.5x30 16x20 16x31.5	710 800 980			12.5x45 14.5x35.5 16x30 18x30	1000 1000 1000 1040	16x31.5 18x30	980 1050	12.5x45 16x30 18x30 20x35	1080 1000 1250 1550	18x33	1050
120	121			16x25	1075	16x20	1000			12.5x45 16x30 18x25 18x31.5	1000 950 1000 1150	13x50 14.5x45 16x35.5 18x31.5	1050 1200 1100 1120	14.5x45 16x35.5 18x31.5	1320 1400 1350	18x45	1250
150	151	16x31.5	1100	16x35.5	1200	16x30 18x31.5	1150 1300			16x35.5 18x30	1450 1450	16x45 18x31.5 18x40	1500 1500 1600	16x50 18x35.5 20x40 22x31.5	1550 1550 1635 1700		



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180	181			16x25	1150					18x35 18x45	1520 1600	16x45 18x40	1600 1630	16x50 18x40 20x46.5	1600 1650 1800		
200	201													18x45 18x50	1750 1820		

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SIZE φ DxL(mm)Ripple Current(mA 105°C,100KHz) r.m.s

W.V		160(2C)		200(2D)		250(2E)		350(2V)		400(2G)		420(2H)		450(2W)		500(2Z)	
Cap(μ F)		Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
220	221	16x31.5	1130	12.5x45 16x35.5 18x31.5	1250 1350 1425	18x30	1300			18x40	1630	18x45	1750	16x55 18x50 20x48	1750 1850 1860		
250	251													20x50	2050		
270	271			18x25	1300	18x31.5	1550							20x50	2100		
330	331			18x30	1450												
390	391			18x35.5	1650	18x40	1600										
470	471	18x40	1450	18x40	1700												