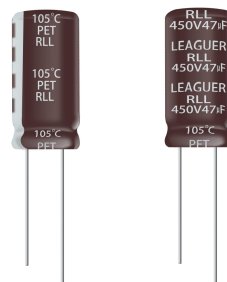


RLL Series 铝电解电容器长寿命品

Long life products of aluminum electrolytic capacitor

- 寿命: +105 °C 5000 小时 Life time: +105 °C 5000Hrs
- 符合 RoHS 指令 RoHS compliance



主要技术性能 Specifications

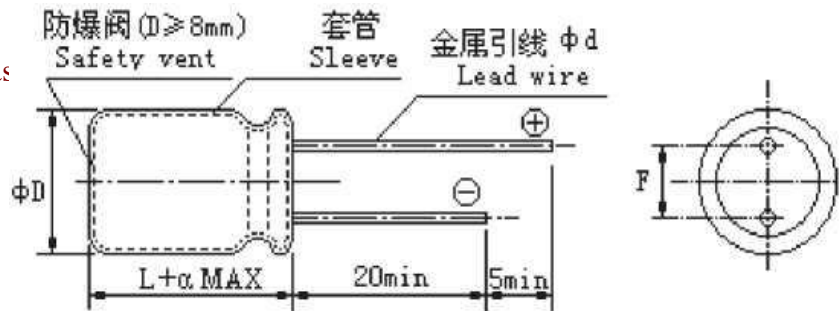
项目 Items	特 性 Characteristics																																																			
使用温度范围 Operating Temperature Range	-40~+105°C	-25~+105°C																																																		
额定电压范围 Rated Voltage Range	10~100V. DC	160~450V. DC																																																		
标称电容量允许偏差 Capacitance Tolerance	±20% (120Hz, 20°C)																																																			
漏电流(20°C) Leakage Current	10~100V.DC	160~450V.DC																																																		
	$I \leq 0.01CV(\mu A)$ 或 $3\mu A$ 取较大者 (2 分钟) $I \leq 0.01CV$ or $3\mu A$ Whichever is greater (after 2 minutes)	$CV \leq 1000$ $I = 0.1CV + 40\mu A$ (1minute) $I = 0.03CV + 15\mu A$ (5minutes)	$CV > 1000$ $I = 0.04CV + 100\mu A$ (1 minute) $I = 0.02CV + 25\mu A$ (5 minutes)																																																	
损耗角正切值 Dissipation Factor (120Hz 20°C)	<table border="1"> <thead> <tr> <th>WV</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>160</th> <th>200</th> <th>250</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>tg δ</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.12</td> <td>0.10</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> <td>0.24</td> <td>0.24</td> </tr> </tbody> </table>													WV	10	16	25	35	50	63	100	160	200	250	400	450	tg δ	0.24	0.20	0.16	0.14	0.12	0.12	0.10	0.20	0.20	0.20	0.24	0.24													
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容量大于 1000 μ F 者, 每增加 1000 μ F, 其损耗角正切值增加 0.02 For capacitance exceeding 1000 μ F, add 0.02 per increment of 1000 μ F																																																				
温度特性 (120Hz) Temperature Characteristics Impedance Ratio (120Hz)	<table border="1"> <thead> <tr> <th>WV</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>160</th> <th>200</th> <th>250</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>$Z_{-25^\circ C} / Z_{+20^\circ C}$</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>5</td> <td>6</td> </tr> <tr> <td>$Z_{-40^\circ C} / Z_{+20^\circ C}$</td> <td>12</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>6</td> <td>-</td> </tr> </tbody> </table>													WV	10	16	25	35	50	63	100	160	200	250	400	450	$Z_{-25^\circ C} / Z_{+20^\circ C}$	4	3	2	2	2	2	3	3	3	3	5	6	$Z_{-40^\circ C} / Z_{+20^\circ C}$	12	8	6	4	3	3	4	4	4	4	6	-
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耐久性 Load Life	+105°C 施加额定电压 5000 小时, 恢复 16 小时后, 电容器应满足要求 After applying rated voltage for 5000 hours at +105°C and then resumed 16 hours. The capacitor shall meet the following limits.																																																			
	电容量变化率 Capacitance Change	≤ ±25% 初始测量值 ≤ ±25% of Initial measured value																																																		
	漏电流值 Leakage	≤ 规定值 ≤ The specified value																																																		
	损耗角正切值 Dissipation Factor	≤ 2 倍规定值 ≤ 200% of the specified value																																																		
高温贮存 Shelf Life	+105°C, 1000 小时, 然后按 JISC5101-4 第 4.1 项预处理后测量。 After storage for 1000 hours at +105°C, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JISC5101-4.																																																			
	电容量变化率 Capacitance Change	≤ ±20% 初始测量值 ≤ ±20% of Initial measured value																																																		
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RLL Series

■ 额定纹波电流的频率系数 Frequency coefficient of rated ripple current

频率 (Hz) CAP (μ)	60 (50)	120	500	1K	10K≤
0.47~1μF	0.50	1.0	1.20	1.30	1.50
2.2~4.7μF	0.65	1.0	1.20	1.30	1.50
10~47μF	0.80	1.0	1.20	1.30	1.50
100~1000μF	0.80	1.0	1.10	1.15	1.20
2200μF	0.80	1.0	1.05	1.10	1.15

■ 外形图及尺寸 Cas



mm

$\Phi D \pm 0.5$	5	6.3	8	10	12.5 or 13	16	18
L	11	11	12, 16	12, 16, 20, 20	20, 25	25, 32, 36	32, 36, 40, 45
$F \pm 0.5$	2.0	2.5	3.5	5.0		7.5	
$\Phi d \pm 0.05$	0.5			0.6		0.8	
a	1.5(WV ≤ 100); 2.0(WV > 100)					2.0	



鋁電解電容器

Aluminum Electrolytic Capacitor

RLL Series

■ 规格壳号、最大允许纹波电流

Standard sizes & Maximum permissible ripple current

CAP \ WV	10V		16V		25V		35V		50V		63V	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
10									5×11	307	5×11	318
22									5×11	39	6.3×11	40
33									6.3×11	60	6.3×1	63
47					5×11.5	52 55	5×11 6.3×11	55 68	8×12	90	8×12	94
100	5×11	66	5×11 6.3×11	66 85	6.3×12	95	6.3×11 8×12	95 120	8×16	140	8×16	145
220	6.3×11	100	6.3×11 8×12	105 160	8×12	125	8×16	197	10×16	234	10×16	240
330	6.3×11 8×12	100 180	8×12 8×16	185 252	8×16	255	10×16	278	10×20	293	10×20	299
470	8×12 8×16	180 278	8×16	284	10×16	321	10×20	349				
1000	10×16	300	10×16	310	10×20	450						
2200	10×20	450										

CAP(μF) \ WV	100V		160V		200V		250V		400V		450V	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
4.7									10×16	98	10×16	105
6.8									10×16	120	10×20	170
10							10×16	155	10×20	170	13×20	280
22	8×12	111	10×16	190	10×16	205	13×20	210	13×25	320	16×25	40
33	10×12	183	10×20	255	10×20	280	13×20	355	16×25	425	16×32	480
47	10×12	204	10×20	265	13×20	330	16×25	560	16×32	530	18×32	575
68	10×16	235	13×20	430	13×25	480	16×25	600	18×32	600	18×40	655
100	10×20	285	13×25	540	16×20	570	16×32	700	18×40	700		
120	10×20	296	16×20	555	16×25	700	18×32	790	18×45	780		
150	13×20	335	16×25	645	16×32	750	18×36	875				
180	13×20	365	16×32	745	18×32	830	18×40	980				
220	13×25	440	18×32	825	18×36	900	18×45	1100				
270	16×25	478	18×36	930	18×40	1100						
330	16×32	688	18×40	995	18×45	1250						

I~额定纹波电流 Rated ripple current: (mA, 105°C, 120Hz)