

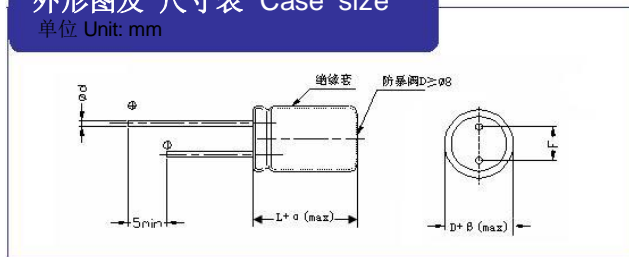
- 宽温度产品, 105°C, 1000~2000 小时寿命, 体积小, 容量大  
Wide temperature range, 105°C, Load life: 1000 hours, small size, large capacity ● 适用于开关电源、适配器、DVD、背投彩电、空调等线路中。  
Used in Smmps, Adapter, DVD, color-TV, air conditioning circuits etc.
- ROHS 指令已对应完毕。Adapted to the ROHS directive.

## 主要技术性能 Specifications

项目 Item	特性 Performance 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	6.3 ~ 100V	160 ~ 450V																								
标称容量范围 Nominal capacitance range	0.1~22000μF	0.47~470μF																								
标称容量允许偏差 Capacitance tolerance	± 20% (120Hz, +20°C)																									
漏电流 Leakage current	I ≤ 0.01CV 或 3(μA) 2分钟 取较大者 (at 20°C, after 2 minutes) (whichever is greater)	I ≤ 0.03CV + 15 (μA) 1分钟 (1 minute)																								
损耗角正切值 (tg δ) Dissipation factor (+20°C, 120Hz)	<table border="1"> <thead> <tr> <th>U<sub>R</sub> (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>160-450</th> </tr> </thead> <tbody> <tr> <td>tg δ</td> <td>0.25</td> <td>0.20</td> <td>0.17</td> <td>0.15</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td>0.08</td> <td>0.20</td> </tr> </tbody> </table> <p>容量大于 1000μF 者, 每增加 1000μF, 其损耗角正切值增加 0.02 When nominal capacitance exceeds 1000μF, add 0.02 to the value above for each 1000μF increase.</p>		U <sub>R</sub> (V)	6.3	10	16	25	35	50	63	100	160-450	tg δ	0.25	0.20	0.17	0.15	0.12	0.10	0.09	0.08	0.20				
U <sub>R</sub> (V)	6.3	10	16	25	35	50	63	100	160-450																	
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温度特性 Temperature characteristics (Impedance ratio at 120Hz)	<table border="1"> <thead> <tr> <th>U<sub>R</sub> (V)</th> <th>6.3</th> <th>10</th> <th>16-50</th> <th>63-100</th> <th>160-250</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>Z-25°C / +20°C</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>3</td> <td>6</td> <td>7</td> </tr> <tr> <td>Z-40°C / +20°C</td> <td>≤8</td> <td>≤6</td> <td>≤4</td> <td>≤3</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table>		U <sub>R</sub> (V)	6.3	10	16-50	63-100	160-250	400	450	Z-25°C / +20°C	-	-	-	-	3	6	7	Z-40°C / +20°C	≤8	≤6	≤4	≤3	-	-	-
U <sub>R</sub> (V)	6.3	10	16-50	63-100	160-250	400	450																			
Z-25°C / +20°C	-	-	-	-	3	6	7																			
Z-40°C / +20°C	≤8	≤6	≤4	≤3	-	-	-																			
耐久性 Load life	<p>+105°C加额定电压 1000~2000 小时, 恢复 16 小时后: After applying rated voltage for 1000~2000 hours at +105°C and then resumed for 16 hours: φD ≤ 6 1000H φD ≥ 8 2000H</p> <p>电容量变化率 Capacitance change : ±20%初始测量值以内 ±20% of the initial measured value 漏 电 流 Leakage current : ≤初始规定值 ≤the initial specified value 损耗角正切值 Dissipation factor : ≤2 倍初始规定值 ≤2times of the initial specified value</p>																									
高温贮存 Shelf life	<p>+105°C, 1000 小时贮存后, 恢复 16 小时后: After storage for 1000 hours at +105°C and then resumed 16 hours</p> <p>电容量变化率 Capacitance change : ±20%初始测量值以内 ±20% of the initial measured value 漏 电 流 Leakage current : ≤2 倍初始规定值 ≤2times of the initial specified value 损耗角正切值 Dissipation factor : ≤2 倍初始规定值 ≤2times of the initial specified value</p>																									

## 外形图及 尺寸表 Case size

单位 Unit: mm



D	5	6.3	8	10~12.5	16~18	22
F	2.0	2.5	3.5	5.0	7.5	10
d	0.5		0.5、0.6	0.6	0.8	

α MAX	( L < 20 ) 1.5
	( L ≥ 20 ) 2.0

β MAX	( D < 20 ) 0.5
	( D ≥ 20 ) 1.0

## 频率修正系数 Frequency coefficient

Rated Voltage(V)	Freq.(Hz)	50	120	300	1K	10K	100K
	CAP(μF)						
6.3~100	~47	0.75	1.00	1.35	1.57	2.00	2.30
	100~470	0.80	1.00	1.23	1.34	1.50	1.65
	≥560	0.85	1.00	1.10	1.13	1.15	1.40
160~450	0.47~4.7	0.65	1.00	1.35	1.75	2.30	2.50
	6.8~82	0.75	1.00	1.25	1.50	1.75	1.80
	100~1000	0.80	1.00	1.15	1.30	1.40	1.50

### 尺寸

WV CAP(μF)		6.3V(0J)		10V(1A)		16V(1C)		25V(1E)		35V(1V)		50V(1H)	
		Size	Rippl e	Size	Rippl e	Size	Rippl e	Size	Rippl e	Size	Ripple	Size	Ripple
0.1	0R1											5x11	3
0.22	R22											5x11	4
0.33	R33											5x11	5
0.47	R47											5x11	6
1	010											5x11	13
2.2	2R2											5x11	20
3.3	3R3											5x11	30
4.7	4R7					5x11	20	5x11	20			5x11	40
10	100	5x11	20			5x11	35	5x11	40	5x11	40	5x11	55
22	220			5x11	50	5x11	55	5x11	60	5x11	65	5x11	80
33	330	5x11	55	5x11	60	5x11	65	5x11	75	5x11	80	5x11	100
												6.3x11	115
47	470	5x11	65	5x11	70	5x11	80	5x11	85	5x11	100	6.3x11	135
												8x11.5	160
100	101	5x11	95	5x11	105	5x11	125	6.3x11	160	6.3x11	170	8x11.5	230
						6.3x11	140			8x11.5	200		
220	221	5x11	150	6.3x11	170	6.3x11	215	8x11.5	285	8x11.5	300	10x16	510
		6.3x11	170			8x11.5	250						
330	331	6.3x11	215	6.3x11	240	8x11.5	315	8x11.5	340	10x12.5	420	10x16	590
				8x11.5	280					10x16	470		
470	471	8x11.5	260	6.3x11	285	8x11.5	365	10x12.5	470	10x16	545	10x20	710
				8x11.5	330	10x12.5	430			10x20	590		
680	681	8x11.5	365	8x11.5	410	8x16	465	10x16	620	10x20	680	12.5x20	925
						10x12.5	480						
1000	102	8x11.5	445	8x16	550	10x16	680	10x20	820	12.5x20	1025	12.5x25	1290
				10x12.5	570								
1500	152			10x16	630	10x20	750	12.5x20	900	12.5x25	1125		
2200	222	10x16	740	10x20	900	12.5x20	1110	12.5x25	1460	16x25	1500	16x35	1230
				12.5x20	950					18x20	1460		



CAP(μF)	WV	250V(2E)		350V(2V)		400V(2G)		420V(2M)		450V(2W)	
		Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.47	R4 7							6.3x11	11	6.3x11	11
1	010					6.3x11	15	6.3x11	15	6.3x11	15
2.2	2R 2	6.3x11	23	6.3x11	25	8x11.5	26	8x11.5	26	8x11.5	26
3.3	3R3	6.3x11	28	8x11.5	28	8x11.5	30	8x11.5	30	8x11.5	30
4.7	4R7	8x11.5	45	8x11.5	48	8x11.5	50	8x16	50	8x16	50
6.8	6R8	8x11.5	58	8x14	60	8x12	63	10x16	63	10x16	63
8.2	8R2	8x14	68	8x16	70	8x16	72	10x16	72	10x16	72
10	100	8x16	84	10x16	85	10x16	88	10x16	80	10x20	85
15	150	10x16	112	10x20	113	10x20	115	12.5x20	112	12.5x20	112
22	220	10x20	150	12.5x20	152	12.5x20	155	12.5x25	152	12.5x25	152
27	270	10x20	170	12.5x25	188	12.5x25	190	12.5x25	175	12.5x30	185
33	330	12.5x20	200	12.5x25	205	12.5x25	210	12.5x30	202	12.5x30	202
39	390	12.5x20	210	12.5x30	255	12.5x30	260	16x20	220	16x25	240
47	470	12.5x25	250	16x25	290	16x25	295	16x25	270	16x30	290
56	560	12.5x30	300	16x25	320	16x25	325	16x30	320	16x30	320
68	680	16x20	320	16x30	370	16x30	380	16x30	340	16x35	360
82	820	16x25	390	16x35	440	16x35	450	16x35	405	16x40	430
100	101	16x30	460	16x40	510	16x40	520	16x40	480	18x35	480
120	121	16x30	510	18x40	590	18x40	600	18x40	550	18x40	550
150	151	16x35	620	18x45	690	18x45	700	18x45	650	18x45	650
180	181	16x40	700								
220	221	18x40	820								

Size  $\phi D \times L$ (mm)

Maximum Allowable Ripple Current (mA rms) at 105°C 120Hz

