

RVE- LZ Series

LOW IMPEDANCE 低阻抗品

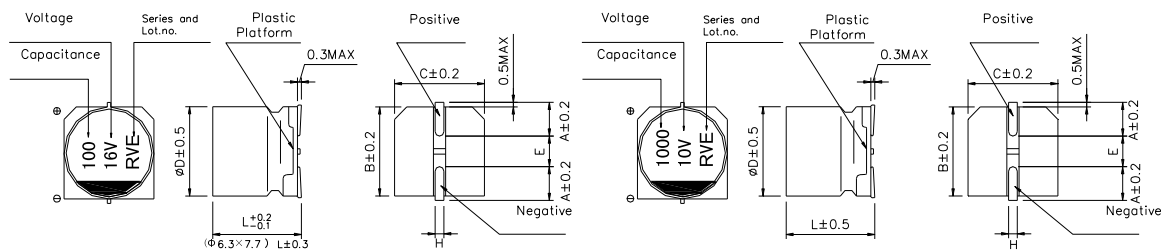
- Low impedance with temperature range -55 ~ +105 °C
低阻抗和适用于-55~+105℃的温度范围
- Load life of 1000 ~ 2000 hours
负荷寿命1000~2000小时
- Comply with the RoHS directive
符合RoHS指令



主要技术性能 Specification

项目 Item	特性 Performance Characteristics																																												
使用温度范围 Operating temperature range	-40 ~ +105°C																																												
额定电压范围 Rated voltage range	4 ~ 100V																																												
标称电容量范围 Nominal capacitance range	0.1 ~ 6800μF																																												
标称电容量允许偏差 Capacitance tolerance	± 20% (120Hz, +20°C)																																												
漏电流 Leakage current	$I \leq 0.01CV$ 或 $3(\mu A)$ 2分钟 取较大者 (at 20°C, after 2 minutes) (whichever is greater)	$I \leq 0.02CV + 15(\mu A)$ 1分钟 (1 minute)																																											
损耗角正切值 (tg δ) Dissipation factor (+20°C, 120Hz)	<table border="1"> <thead> <tr> <th colspan="2">U_R (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td rowspan="2">tg δ</td> <td>∅4~∅10</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.12</td> </tr> <tr> <td>∅12.5~∅16</td> <td>0.26</td> <td>0.22</td> <td>0.18</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> </tr> </tbody> </table>							U _R (V)		6.3	10	16	25	35	50	tg δ	∅4~∅10	0.22	0.19	0.16	0.14	0.12	0.12	∅12.5~∅16	0.26	0.22	0.18	0.16	0.14	0.12															
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温度特性 Temperature characteristics (Impedance ratio at 120Hz)	<table border="1"> <thead> <tr> <th colspan="2">U_R (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td rowspan="2">∅4~∅10</td> <td>Z(-25°C) / Z(20°C)</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-55°C) / Z(20°C)</td> <td>5</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> </tr> <tr> <td rowspan="2">∅12.5~∅16</td> <td>Z(-25°C) / Z(20°C)</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-55°C) / Z(20°C)</td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> </tr> </tbody> </table>							U _R (V)		6.3	10	16	25	35	50	∅4~∅10	Z(-25°C) / Z(20°C)	2	2	2	2	2	2	Z(-55°C) / Z(20°C)	5	4	4	3	3	3	∅12.5~∅16	Z(-25°C) / Z(20°C)	3	3	2	2	2	2	Z(-55°C) / Z(20°C)	10	8	6	4	3	3
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耐久性 Load life	After 2000 hrs. (1000 hrs. for ∅4~∅6.3×5.4) application of the rated voltage at 105°C, they meet the characteristics listed below. 在105℃环境中施加额定工作电压2000小时(∅4~∅6.3×5.4为1000小时)后,电容器的特性符合下表的要求。 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																																												
高温贮存 Shelf life	+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 for 16 hours: 电容量变化率 Capacitance change : ±10%初始测量值以内 10% 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																																												

外形图及尺寸图 Case size table



*1. Voltage mark for 6.3V is [6V] 6.3V的产品标识为 [6V]
 *2. Applicable to ∅6.3×7.7 适用于∅6.3×7.7
 *3. Applicable to ∅8×10.5~∅10 适用于∅8×10.5~∅10

RVE- LZ Series

∅D x L	4 x 5.4	5 x 5.4	6.3 x 5.4	6.3 x 7.7	8 x 6.2	8 x 10.5	10 x 10.5	10 x 13.5	12.5 x 13.5	12.5 x 16	16 x 16.5
A	1.8	2.1	2.4	2.4	3.3	2.9	3.2	3.2	4.7	4.7	5.5
B	4.3	5.3	6.6	6.6	8.3	8.3	10.3	10.3	13.0	13.0	17.0
C	4.3	5.3	6.6	6.6	8.3	8.3	10.3	10.3	13.0	13.0	17.0
E ± 0.2	1.0	1.3	2.2	2.2	2.2	3.1	4.4	4.4	4.4	4.4	6.7
L	5.4	5.4	5.4	7.7	6.2	10.5	10.5	13.5	13.5	16.0	16.5

尺寸 Dimensions

μF	WV Code 代码	6.3			10			16		
		0J			1A			1C		
10	100							4 x 5.4	3.0	60
15	150							5 x 5.4 (4 x 5.4)	1.8 (3.0)	95 (60)
22	220	4 x 5.4	3.0	60	5 x 5.4 (4 x 5.4)	1.8 (3.0)	95 (60)	5 x 5.4 (4 x 5.4)	1.8 (3.0)	95 (60)
33	330	5 x 5.4 (4 x 5.4)	1.8 (3.0)	95 (60)	5 x 5.4 (4 x 5.4)	1.8 (3.0)	95 (60)	6.3 x 5.4 (5 x 5.4)	1.0 (1.8)	140 (95)
47	470	5 x 5.4 (4 x 5.4)	1.8 (3.0)	95 (60)	6.3 x 5.4 (5 x 5.4)	1.0 (1.8)	140 (95)	6.3 x 5.4 (5 x 5.4)	1.0 (1.8)	140 (95)
68	680	6.3 x 5.4 (5 x 5.4)	1.0 (1.8)	140 (95)	6.3 x 5.4	1.0	140	6.3 x 7.7 (6.3 x 5.4)	0.6 (1.0)	230 (140)
100	101	6.3 x 5.4 (5 x 5.4)	1.0 (1.8)	140 (95)	6.3 x 7.7 (6.3 x 5.4)	0.6 (1.0)	230 (140)	6.3 x 7.7 (6.3 x 5.4)	0.6 (1.0)	230 (140)
150	151	6.3 x 7.7 (6.3 x 5.4)	0.6 (1.0)	230 (140)	6.3 x 7.7 (6.3 x 5.4)	0.6 (1.0)	230 (140)	6.3 x 7.7	0.6	230
220	221	6.3 x 7.7 (6.3 x 5.4)	0.6 (1.0)	230 (140)	6.3 x 7.7	0.6	230	8 x 10.5 (6.3 x 7.7)	0.30 (0.6)	450 (230)
330	331	6.3 x 7.7	0.6	230	8 x 10.5	0.30	450	10 x 10.5 (8 x 10.5)	0.15 (0.30)	670 (450)
470	471	8 x 10.5	0.30	450	8 x 10.5	0.30	450	10 x 10.5 (8 x 10.5)	0.15 (0.30)	670 (450)
680	681	8 x 10.5	0.30	450	10 x 10.5	0.15	670	10 x 10.5	0.15	670
1000	102	10 x 10.5 (8 x 10.5)	0.15 (0.30)	670 (450)	10 x 10.5	0.15	670	10 x 10.5	0.15	670
1500	152	10 x 13.5 (10 x 10.5)	0.13 (0.15)	750 (670)	12.5 x 13.5 (10 x 13.5)	0.11 (0.13)	820 (750)	12.5 x 13.5	0.11	820
2200	222	12.5 x 13.5 (10 x 13.5)	0.11 (0.13)	820 (750)	12.5 x 16	0.09	950	16 x 16.5 (12.5 x 16)	0.08 (0.09)	1260 (950)
3300	332	12.5 x 16 (12.5 x 13.5)	0.09 (0.11)	950 (820)	16 x 16.5	0.08	1260	16 x 16.5	0.08	1260
4700	472	16 x 16.5	0.08	1260	16 x 16.5	0.08	1260			

μF	WV Code 代码	25			35			50		
		1E			1V			1H		
1	010				4 x 5.4	3.0	60	4 x 5.4	5.0	30
1.5	1R5				4 x 5.4	3.0	60	4 x 5.4	5.0	30
2.2	2R2				4 x 5.4	3.0	60	4 x 5.4	5.0	30
3.3	3R3				4 x 5.4	3.0	60	4 x 5.4	5.0	30
4.7	4R7	4 x 5.4	3.0	60	4 x 5.4	3.0	60	5 x 5.4	3.0	50
6.8	6R8	4 x 5.4	3.0	60	5 x 5.4	1.8	95	6.3 x 5.4	2.0	70
10	100	5 x 5.4 (4 x 5.4)	1.8 (3.0)	95 (60)	5 x 5.4 (4 x 5.4)	1.8 (3.0)	95 (60)	6.3 x 5.4	2.0	70
15	150	6.3 x 5.4	1.8	95	5 x 5.4	1.8	95	6.3 x 5.4	2.0	70
22	220	6.3 x 5.4 (5 x 5.4)	1.0 (1.8)	140 (95)	6.3 x 5.4 (5 x 5.4)	1.0 (1.8)	140 (95)	6.3 x 7.7 (6.3 x 5.4)	1.0 (2.0)	120 (70)
33	330	6.3 x 5.4 (5 x 5.4)	1.0 (1.8)	140 (95)	6.3 x 5.4	1.0	140	6.3 x 7.7	1.0	120
47	470	6.3 x 7.7 (6.3 x 5.4)	0.6 (1.0)	230 (140)	6.3 x 7.7 (6.3 x 5.4)	0.60 (1.0)	230 (140)	6.3 x 7.7	1.0	120
68	680	6.3 x 7.7	0.6	230	6.3 x 7.7	0.60	230	8 x 10.5	0.60	300
100	101	6.3 x 7.7	0.6	230	8 x 10.5	0.30	450	8 x 10.5	0.60	300
150	151	8 x 10.5 (6.3 x 7.7)	0.30 (0.6)	450 (230)	8 x 10.5	0.30	450	10 x 10.5	0.30	500
								Case size ∅D x L (mm) 尺寸	Impedance (Ω) at 20°C 100KHz 阻抗值	Ripple current (mA rms) at 105°C 100KHz 纹波电流

V-Chip

RVE- LZ Series

■ 尺寸 Dimensions

μF	Code 代码	25			35			50		
		1E			1V			1H		
220	221	8 × 10.5	0.30	450	10 × 10.5 (8 × 10.5)	0.15 (0.30)	670 (450)	10 × 10.5	0.30	500
330	331	10 × 10.5 (8 × 10.5)	0.15 (0.30)	670 (450)	10 × 10.5	0.15	670	16 × 16.5 (12.5 × 13.5) (10 × 13.5)	0.12 (0.20) (0.25)	1060 (650) (580)
470	471	10 × 10.5	0.15	670	10 × 10.5	0.15	670	16 × 16.5 (12.5 × 16)	0.12 (0.15)	1060 (700)
680	681	10 × 13.5	0.13	750	12.5 × 13.5 (10 × 13.5)	0.11 (0.13)	820 (750)	16 × 16.5	0.12	1060
1000	102	16 × 16.5 (12.5 × 13.5)	0.08 (0.11)	1260 (820)	16 × 16.5 (12.5 × 16)	0.08 (0.09)	1260 (950)			
1500	152	12.5 × 16	0.09	950	16 × 16.5	0.08	1260	Case size ∅D×L(mm) 尺寸	Impedance (Ω) at 20°C 100KHz 阻抗值	Ripple current (mA rms) at 105°C 100KHz 纹波电流
2200	222	16 × 16.5	0.08	1260						

■ 纹波电流的相关参数 Multiplier For Ripple Current

Frequency 频率		50Hz	120Hz	300Hz	1KHz	10KHz-	
Coefficient 系数	Φ4-Φ10	1-68uF	0.35	0.50	0.64	0.83	1.00
		100-2200uF	0.40	0.55	0.70	0.85	1.00
	Φ12.5-Φ16	-680uF	0.45	0.65	0.80	0.90	1.00
		1000-4700uF	0.65	0.85	0.95	1.00	1.00