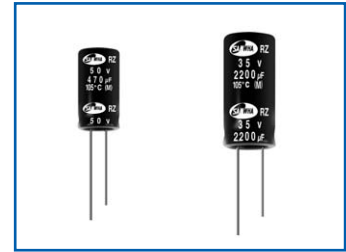


# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

## RZ Extremely Low Impedance Series

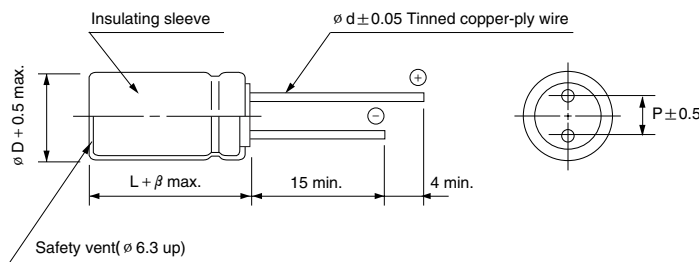
- Extremely low impedance at high frequency
- High reliability withstanding 5000 hours load life at 105°C (2000/3000 hours for smaller case sizes as specified below)
- Ideally suited for use in switching power supplies
- Complied to the RoHS directive



Item	Characteristics															
Operating temperature range	-55 ~ +105°C															
Leakage current max.	I = 0.01CV or 3μA whichever is greater (after 2 minutes) I = 0.03CV or 4μA whichever is greater (after 1 minute)															
Capacitance tolerance	±20% at 120Hz, 20°C															
Dissipation factor max. (at 120Hz, 20°C)	Capacitance > 1000μF : tanδ increases by 0.02 for each 1000μF from below value															
	<table border="1"> <tr> <td>WV</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> </tr> <tr> <td>tanδ</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> </tr> </table>	WV	6.3	10	16	25	35	50	63	tanδ	0.22	0.19	0.16	0.14	0.12	0.10
WV	6.3	10	16	25	35	50	63									
tanδ	0.22	0.19	0.16	0.14	0.12	0.10	0.08									
Low temperature characteristics (Impedance ratio at 120Hz)	<table border="1"> <tr> <td>WV</td> <td>6.3, 10</td> <td>16~35</td> <td>50, 63</td> </tr> <tr> <td>Z-55°C/Z+20°C</td> <td>4</td> <td>3</td> <td>2</td> </tr> </table>	WV	6.3, 10	16~35	50, 63	Z-55°C/Z+20°C	4	3	2							
	WV	6.3, 10	16~35	50, 63												
Z-55°C/Z+20°C	4	3	2													
Load life (after application of the rated voltage for 5000 hours at 105°C)	Leakage current	Less than specified value														
	Capacitance change	Within ±20% of initial value														
	tanδ	Less than 200% of specified value														
	∅ 5, 6.3 products are for 2000 hours, ∅ 8 products are for 3000 hours															
Shelf life (after leaving capacitors under no load at 105°C for 1000 hours)	Leakage current	Less than specified value														
	Capacitance change	Within ±20% of initial value														
	tanδ	Less than 150% of specified value														

### ● DRAWING

Unit : mm



∅ D	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
∅ d	0.5	0.5	0.6	0.6	0.6	0.8	0.8
β	1.5			2.0			

**RZ** series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV Item μF	6.3				10				16				25			
	ø D × L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms)		ø D × L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms)		ø D × L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms)		ø D × L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms)	
			105°C 120Hz	105°C 100kHz			105°C 120Hz	105°C 100kHz			105°C 120Hz	105°C 100kHz			105°C 120Hz	105°C 100kHz
22												5 × 11	0.80	88	155	
47								5 × 11	0.80	92	155	5 × 11	0.55	125	210	
68					5 × 11	0.80	97	155	6.3 × 11	0.50	135	220	6.3 × 11	0.36	160	260
100	5 × 11	0.85	99	150	6.3 × 11	0.55	135	210	6.3 × 11	0.35	175	265	6.3 × 11	0.24	254	383
150	6.3 × 11	0.49	155	225	6.3 × 11	0.35	185	265	8 × 11.5	0.23	270	388	8 × 11.5	0.16	320	460
220	6.3 × 11	0.30	205	285	8 × 11.5	0.24	283	387	8 × 11.5	0.16	335	460	10 × 12.5	0.13	435	600
330	8 × 11.5	0.20	223	292	8 × 11.5	0.16	350	460	10 × 12.5	0.12	480	625	10 × 16	0.095	575	750
470	10 × 12.5	0.14	455	575	10 × 12.5	0.13	475	600	10 × 12.5	0.09	615	770	10 × 16	0.065	810	1020
680	10 × 16	0.11	580	700	10 × 16	0.09	635	770	10 × 20	0.065	845	1020	12.5 × 20	0.046	1160	1392
1000	10 × 20	0.075	820	950	10 × 20	0.060	915	1060	10 × 20	0.047	1206	1411	12.5 × 25	0.036	1430	1660
1500	10 × 25	0.055	1090	1220	12.5 × 20	0.045	1266	1417	12.5 × 25	0.036	1490	1660	16 × 20	0.034	1590	1770
2200	12.5 × 20	0.043	1296	1438	12.5 × 25	0.034	1530	1710	10 × 25	0.033	1620	1800	16 × 25	0.028	1848	2051
3300	12.5 × 25	0.034	1530	1710	16 × 20	0.031	1660	1850	16 × 25	0.027	1888	2095	16 × 31.5	0.020	2410	2680
4700	16 × 25	0.032	1728	1935	16 × 31.5	0.023	2170	2420	16 × 31.5	0.020	2410	2680	18 × 40	0.018	2660	2960
6800	16 × 31.5	0.024	2130	2370	16 × 35.5	0.020	2410	2680	18 × 35.5	0.018	2610	2900				
10000	16 × 40	0.020	2470	2750	18 × 40	0.017	2730	3040								
15000	18 × 40	0.018	2660	2960												

WV Item μF	35				50				63			
	ø D × L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms)		ø D × L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms)		ø D × L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms)	
			105°C 120Hz	105°C 100kHz			105°C 120Hz	105°C 100kHz			105°C 120Hz	105°C 100kHz
1.0					5 × 11	4.0	18	36				
1.5					5 × 11	3.8	22	45				
2.2					5 × 11	3.5	27	54				
3.3					5 × 11	3.0	33	66				
4.7					5 × 11	2.2	40	81				
6.8					5 × 11	1.8	45	91				
10					5 × 11	1.4	57	115	5 × 11	1.06	67	135
15					5 × 11	0.93	72	145	6.3 × 11	0.73	92	185
22	5 × 11	0.75	85	160	5 × 11	0.65	100	195	6.3 × 11	0.52	110	215
33	6.3 × 11	0.49	125	225	6.3 × 11	0.43	135	240	8 × 11.5	0.35	179	320
47	6.3 × 11	0.34	160	270	8 × 11.5	0.30	204	344	8 × 11.5	0.25	215	365
68	8 × 11.5	0.24	239	384	8 × 11.5	0.20	255	410	10 × 12.5	0.19	310	495
100	8 × 11.5	0.16	305	460	10 × 16	0.16	385	581	10 × 11.5	0.12	495	750
150	10 × 12.5	0.12	435	625	10 × 20	0.10	570	820	10 × 25	0.09	665	950
220	10 × 12.5	0.09	560	770	10 × 20	0.075	760	1040	12.5 × 20	0.065	835	1140
330	10 × 20	0.060	810	1060	12.5 × 20	0.055	978	1281	12.5 × 25	0.049	1090	1420
470	10 × 16	0.046	1112	1401	12.5 × 25	0.044	1190	1500	12 × 25	0.042	1350	1700
680	12.5 × 25	0.036	1370	1660	16 × 20	0.040	1350	1630	16 × 31.5	0.032	1700	2050
1000	16 × 20	0.034	1330	1770	16 × 25	0.030	1830	2120	16 × 31.5	0.029	1970	2280
1500	16 × 31.5	0.028	2149	2385	16 × 40	0.026	2170	2410				
2200	16 × 31.5	0.020	2410	2680	18 × 40	0.024	2300	2560				
3300	18 × 40	0.017	2730	3040								

MINIATURE TYPES