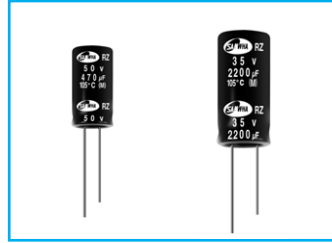


RZ Extremely Low Impedance Series



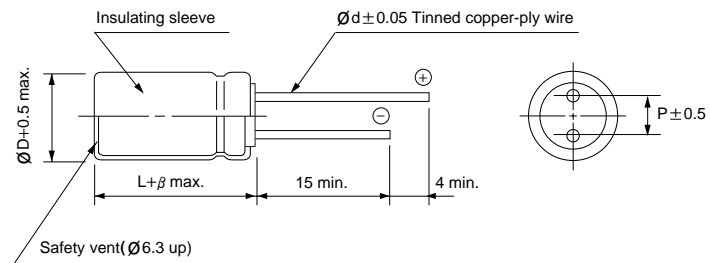
- Extremely low impedance at high frequency
- High reliability withstanding 5000 hours load life at 105°C (2000/3000 hours for smaller case sizes as specified below)
- Ideally suited for use in switching power supplies
- Complied to the RoHS directive



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	0.08
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)	<table border="1"> <tr> <td>Leakage current</td> <td>Less than specified value</td> </tr> <tr> <td>Capacitance change</td> <td>Within ±20% of initial value</td> </tr> <tr> <td>tanδ</td> <td>Less than 200% of specified value</td> </tr> </table> <p>Ø5, 6.3 products are for 2000 hours, Ø8 products are for 3000 hours</p>	Leakage current	Less than specified value	Capacitance change	Within ±20% of initial value	tanδ	Less than 200% of specified value										
Leakage current	Less than specified value																
Capacitance change	Within ±20% of initial value																
tanδ	Less than 200% of specified value																
Shelf life (after leaving capacitors under no load at 105°C for 1000 hours)	<table border="1"> <tr> <td>Leakage current</td> <td>Less than specified value</td> </tr> <tr> <td>Capacitance change</td> <td>Within ±20% of initial value</td> </tr> <tr> <td>tanδ</td> <td>Less than 150% of specified value</td> </tr> </table>	Leakage current	Less than specified value	Capacitance change	Within ±20% of initial value	tanδ	Less than 150% of specified value										
Leakage current	Less than specified value																
Capacitance change	Within ±20% of initial value																
tanδ	Less than 150% of specified value																

● DRAWING

Unit : mm



ØD	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
Ød	0.5	0.5	0.6	0.6	0.6	0.8	0.8
β	1.5			2.0			

● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

μF	Frequency(Hz)	120	1k	10k	100k≤
~ 33		0.40	0.65	0.82	1.00
39 ~ 270		0.50	0.70	0.84	1.00
330 ~ 680		0.55	0.75	0.86	1.00
820 ~ 1800		0.60	0.80	0.88	1.00
2200 ~ 15000		0.70	0.85	0.90	1.00

RZ series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV Item μF	6.3				10				16				25				
	ØD×L (mm)	Impedance (Ω)max.		Ripple current (mA rms)		ØD×L (mm)	Impedance (Ω)max.		Ripple current (mA rms)		ØD×L (mm)	Impedance (Ω)max.		Ripple current (mA rms)			
		20°C 100kHz	105°C 120Hz	105°C 100kHz	20°C 100kHz		105°C 120Hz	105°C 100kHz	20°C 100kHz	105°C 120Hz		105°C 100kHz	20°C 100kHz	105°C 120Hz	105°C 100kHz		
33																	
47																	
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	8×11.5	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	10×16	0.09	615	770	10×20	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	12.5×20	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	16×20	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	16×35.5	0.020	2410	2680	
4700	16×25	0.032	1728	1935	16×31.5	0.023	2170	2420	16×35.5	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						
	ØD×L (mm)	Impedance (Ω)max.		Ripple current (mA rms)		ØD×L (mm)	Impedance (Ω)max.		Ripple current (mA rms)		ØD×L (mm)	Impedance (Ω)max.		Ripple current (mA rms)	
		20°C 100kHz	105°C 120Hz	105°C 100kHz	20°C 100kHz		105°C 120Hz	105°C 100kHz	20°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	6.3 × 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 × 20	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 × 16	0.09	560	770	10 × 25	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	12.5 × 20	0.046	1112	1401	12.5 × 25	0.044	1190	1500	16 × 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 × 31.5	0.030	1830	2120	18 × 35.5	0.029	1970	2280			
1500	16 × 31.5	0.028	2149	2385	16 × 40	0.026	2170	2410							
2200	16 × 35.5	0.020	2410	2680	18 × 40	0.024	2300	2560							
3300	18 × 40	0.017	2730	3040											