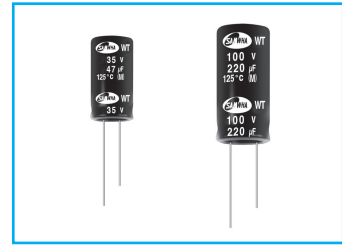


# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

**WT** High Temperature, For 125°C Use  
Long Life Series

**IZI** Low Impedance **S** Solvent Proof



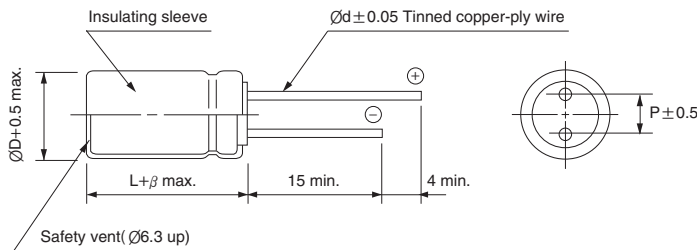
- Load life of 5000 hours at 125°C
- Low impedance at high frequency
- For electronic control unit and other high temperature applications
- Complied to the RoHS directive

**RB** → **WT**  
Long life  
Low Imp.

Item	Characteristics																											
Operating temperature range	-40 ~ +125°C																											
Leakage Current max.	$I = 0.03CV$ or $3\mu A$ whichever is greater (after 2 minutes)																											
Capacitance Tolerance	$\pm 20\%$ at 120Hz, 20°C																											
Dissipation Factor max. (at 120Hz, 20°C)	Capacitance > 1000 $\mu F$ : $\tan\delta$ increases by 0.02 for each 1000 $\mu F$ 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> <td>100</td> </tr> <tr> <td><math>\tan\delta</math></td> <td>0.22</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.10</td> <td>0.08</td> </tr> </table>	WV	6.3	10	16	25	35	50	63	100	$\tan\delta$	0.22	0.20	0.16	0.14	0.12	0.10	0.10	0.08									
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$\tan\delta$	0.22	0.20	0.16	0.14	0.12	0.10	0.10	0.08																				
Low temperature characteristics (Impedance ratio at 120Hz)	<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> <td>100</td> </tr> <tr> <td>Z-25°C/Z+20°C</td> <td>3</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C/Z+20°C</td> <td>6</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>	WV	6.3	10	16	25	35	50	63	100	Z-25°C/Z+20°C	3	3	3	2	2	2	2	2	Z-40°C/Z+20°C	6	6	4	3	3	3	3	3
	WV	6.3	10	16	25	35	50	63	100																			
	Z-25°C/Z+20°C	3	3	3	2	2	2	2	2																			
Z-40°C/Z+20°C	6	6	4	3	3	3	3	3																				
Load life (after application of the rated voltage for 5000 hours at 125°C)	<table border="1"> <tr> <td>Capacitance change</td> <td colspan="4">Within <math>\pm 30\%</math> of initial value</td> </tr> <tr> <td><math>\tan\delta</math></td> <td colspan="4">Less than 300% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td colspan="4">Less than specified value</td> </tr> <tr> <td><math>\varnothing D</math></td> <td><math>\varnothing D = 6.3</math></td> <td><math>\varnothing D = 8</math></td> <td><math>\varnothing D = 10</math></td> <td><math>\varnothing D \geq 12.5</math></td> </tr> <tr> <td>Life time</td> <td>1000 hours</td> <td>2000 hours</td> <td>3000 hours</td> <td>5000 hours</td> </tr> </table>	Capacitance change	Within $\pm 30\%$ of initial value				$\tan\delta$	Less than 300% of the specified value				Leakage current	Less than specified value				$\varnothing D$	$\varnothing D = 6.3$	$\varnothing D = 8$	$\varnothing D = 10$	$\varnothing D \geq 12.5$	Life time	1000 hours	2000 hours	3000 hours	5000 hours		
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Life time	1000 hours	2000 hours	3000 hours	5000 hours																								
Shelf life (at 125°C)	After 1000 hours no load test, leakage current, capacitance and $\tan\delta$ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4																											

## DRAWING

Unit : mm



$\varnothing D$	5	6.3	8	10	12.5	16
P	2.0	2.5	3.5	5.0	5.0	7.5
$\varnothing d$	0.5	0.5	0.6	0.6	0.6	0.8
$\beta$	1.5		2.0			

## FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

$\mu F$ \ Frequency	120Hz	1kHz	10kHz	50kHz	100kHz $\leq$
~ 33	0.20	0.50	0.80	0.90	1.00
47 ~ 100	0.25	0.60	0.90	0.95	1.00
150 ~ 220	0.35	0.70	0.92	0.96	1.00
330 ~ 680	0.45	0.75	0.95	0.97	1.00
1000 ~ 1500	0.50	0.80	0.96	0.98	1.00
2200 ~	0.55	0.85	0.98	0.99	1.00

**WT** series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV Item μF	6.3			10			16			25		
	∅D×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 125°C 100kHz	∅D×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 125°C 100kHz	∅D×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 125°C 100kHz	∅D×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 125°C 100kHz
47										5×11	0.80	250
68				5×11	0.80	250	5×11	0.80	250	6.3×11	0.34	405
100	5×11	0.80	250	6.3×11	0.34	405	6.3×11	0.34	405	6.3×11	0.34	405
150	6.3×11	0.34	405	6.3×11	0.34	405	6.3×11	0.34	405	8×11.5	0.28	760
220	6.3×11	0.34	405	8×11.5	0.30	760	8×11.5	0.28	760	10×12.5	0.14	1030
330	8×11.5	0.28	760	8×11.5	0.28	760	10×12.5	0.14	1030	10×16	0.10	1430
470	10×12.5	0.14	1030	10×12.5	0.14	1030	10×16	0.10	1430	10×20	0.08	1500
680	10×16	0.10	1430	10×16	0.10	1430	10×20	0.06	1500	12.5×20	0.06	1720
1000	10×20	0.06	1500	10×20	0.06	1500	12.5×20	0.06	1720	12.5×25	0.05	1900
1500	10×25	0.06	1620	12.5×20	0.06	1720	12.5×25	0.05	1900			
2200	12.5×20	0.06	1720	12.5×25	0.05	1900						
3300	12.5×25	0.05	1900									

WV Item μF	35			50			63			100		
	∅D×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 125°C 100kHz	∅D×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 125°C 100kHz	∅D×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 125°C 100kHz	∅D×L (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 125°C 100kHz
10												
22	5×11	0.80	250							10×12.5	0.80	480
33	6.3×11	0.34	405	8×11.5	0.65	300	8×11.5	1.50	150	10×12.5	0.80	480
47	6.3×11	0.34	405	8×11.5	0.50	440	10×12.5	0.59	530	10×16	0.55	630
68	8×11.5	0.19	760									
100	8×11.5	0.28	760	10×12.5	0.30	555	10×16	0.41	690	12.5×20	0.25	990
150	10×12.5	0.14	1030									
220	10×16	0.10	1430	10×20	0.15	930	12.5×20	0.16	1050	16×25	0.11	1500
330	10×25	0.06	1620	12.5×20	0.13	1330	12.5×25	0.12	1290	16×31.5	0.08	1790
470	12.5×20	0.06	1720	12.5×25	0.10	1650	12.5×34.5	0.10	1460			
680	12.5×25	0.05	1900	16×31.5	0.05	2430						