

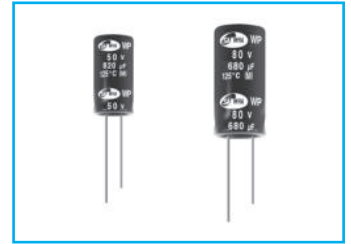
MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS



NEW

WP 125°C, Long ESR, Long Life Series

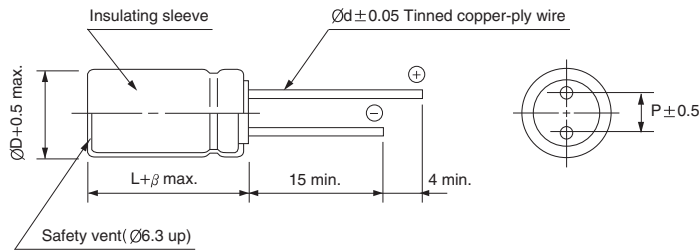
- Downsize and long life
- Low ESR at -40°C
- Endurance with ripple current : 5000 hours at 125°C
- Complied to the RoHS directive



Item	Characteristics															
Operating temperature range	-40 ~ +125°C															
Leakage current max.	$I = 0.01CV$ or $3\mu A$ whichever is greater (after 2 minute)															
Capacitance tolerance	$\pm 20\%$ at 120Hz, 20°C															
Dissipation factor max. (at 120Hz, 20°C)	Capacitance > 1000 μF : $\tan\delta$ increases by 0.02 for each 1000 μF from below value.															
	<table border="1"> <thead> <tr> <th>Rated Voltage(V)</th> <th>35</th> <th>50</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>$\tan\delta$</td> <td>0.12</td> <td>0.10</td> <td>0.10</td> <td>0.10</td> </tr> </tbody> </table>	Rated Voltage(V)	35	50	80	100	$\tan\delta$	0.12	0.10	0.10	0.10					
Rated Voltage(V)	35	50	80	100												
$\tan\delta$	0.12	0.10	0.10	0.10												
Low temperature characteristics (Impedance ratio at 120Hz)	<table border="1"> <thead> <tr> <th>WV</th> <th>35</th> <th>50</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>Z-25°C/Z+20°C</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C/Z+20°C</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> </tr> </tbody> </table>	WV	35	50	80	100	Z-25°C/Z+20°C	2	2	2	2	Z-40°C/Z+20°C	4	4	4	4
	WV	35	50	80	100											
	Z-25°C/Z+20°C	2	2	2	2											
Z-40°C/Z+20°C	4	4	4	4												
Load life (after application of the rated voltage for 5000 hours at 125°C)	<table border="1"> <tbody> <tr> <td>Leakage current</td> <td>Less than specified value</td> </tr> <tr> <td>Capacitance change</td> <td>Within $\pm 30\%$ of initial value</td> </tr> <tr> <td>$\tan\delta$</td> <td>Less than 300% of specified value</td> </tr> </tbody> </table>	Leakage current	Less than specified value	Capacitance change	Within $\pm 30\%$ of initial value	$\tan\delta$	Less than 300% of specified value									
Leakage current	Less than specified value															
Capacitance change	Within $\pm 30\%$ of initial value															
$\tan\delta$	Less than 300% of specified value															
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



ØD	12.5	16	18
P	5.0	7.5	7.5
Ød	0.6	0.8	0.8
β	1.5	2.0	

FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

µF \ Frequency	120Hz	1kHz	10kHz	50kHz	100kHz ≤
270 ~ 560	0.50	0.85	0.95	0.99	1.00
620 ~ 1800	0.06	0.09	0.10	0.99	1.00
2200 ~ 3900	0.75	0.90	0.95	0.99	1.00
4700 ~	0.85	0.95	0.98	0.99	1.00

MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

WP series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV Item μF	35			50		
	$\varnothing\text{D} \times \text{L}$ (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 125°C 100kHz	$\varnothing\text{D} \times \text{L}$ (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 125°C 100kHz
470				12.5 × 20	0.065	1500
680	12.5 × 20	0.044	1820	12.5 × 25	0.048	1900
				16 × 20	0.043	2040
820	12.5 × 25	0.042	2100	12.5 × 25	0.043	2150
				12.5 × 30	0.041	2150
1000	12.5 × 25	0.033	2400	16 × 25	0.031	2620
				18 × 20	0.039	2240
1200	12.5 × 30	0.029	2560	16 × 31.5	0.027	2940
	16 × 20	0.034	2280	18 × 25	0.029	2750
1500	18 × 20	0.032	2490	16 × 35.5	0.023	3300
1800	16 × 25	0.026	3100	18 × 31.5	0.026	3140
2200	16 × 31.5	0.023	3160	16 × 40	0.020	3720
	18 × 25	0.024	3200	18 × 35.5	0.022	3510
2700	16 × 35.5	0.020	3590	18 × 40	0.018	3940
	18 × 31.5	0.022	3390			
3300	16 × 40	0.017	4300			
	18 × 35.5	0.019	4200			
4700	18 × 40	0.016	4600			

WV Item μF	80			100		
	$\varnothing\text{D} \times \text{L}$ (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 125°C 100kHz	$\varnothing\text{D} \times \text{L}$ (mm)	Impedance (Ω)max. 20°C 100kHz	Ripple current (mA rms) 125°C 100kHz
270				18 × 20	0.091	1690
300				16 × 25	0.079	1990
330	16 × 20	0.085	1790	16 × 31.5	0.065	2200
470	16 × 25	0.061	2030	16 × 35.5	0.056	2500
	18 × 20	0.07	1910			
560	16 × 31.5	0.053	2330	16 × 40	0.046	2700
	18 × 25	0.049	2280			
680	16 × 25	0.045	2300	18 × 40	0.039	2880
	16 × 35.5	0.044	2580			
820	16 × 40	0.036	2900			
	18 × 35.5	0.035	2890			
1200	18 × 40	0.030	3210			