

# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS



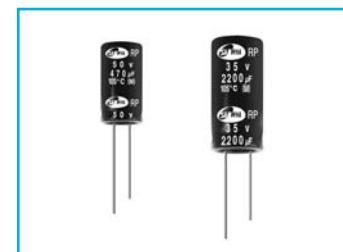
**NEW**  
**RP**

## Extremely Low Impedance Series

- High reliability long life(10,000 hours)
- Operating temperature  $-55 \sim +105^{\circ}\text{C}$
- Enabled high ripple current by a reduction of impedance at high frequency
- Ideally suited for use in switching power supply, mother board



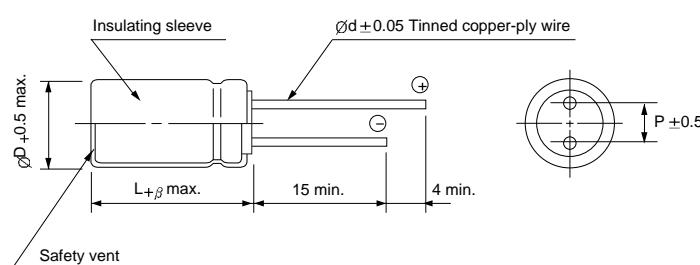
WD → **RP**  
Long life



Item	Characteristics										
<b>Operating temperature range</b>	$-55 \sim +105^{\circ}\text{C}$										
<b>Leakage current max.</b>	$I = 0.01\text{CV}$ or $3\text{ }\mu\text{A}$ whichever is greater (after 2 minutes)										
<b>Capacitance tolerance</b>	$\pm 20\%$ at 120Hz, $20^{\circ}\text{C}$										
<b>Dissipation factor max. (at 120Hz, <math>20^{\circ}\text{C}</math>)</b>	WV	6.3	10	16	25	35	50				
	$\tan\delta$	0.22	0.19	0.16	0.14	0.12	0.10				
<b>Low temperature characteristics (Impedance ratio at 120Hz)</b>	WV	6.3	10	$16 \sim 25$		$35 \sim 50$					
	$Z(-55^{\circ}\text{C})/Z(+20^{\circ}\text{C})$	3	3	3		3					
<b>Load life (after application of the rated voltage for 10,000 hours at <math>105^{\circ}\text{C}</math>)</b>	Leakage current	Less than specified value									
	Capacitance change	Within $\pm 20\%$ of initial value									
	$\tan\delta$	Less than 200% of specified value ( $\varnothing 5, 6.3: 4000$ hours, $\varnothing 8: 6000$ hours, $\varnothing 10: 7000$ hours, $\varnothing D \geq 12.5: 10000$ hours)									
<b>Shelf life (at <math>105^{\circ}\text{C}</math>)</b>	After 1000 hours no load test, leakage current, capacitance and $\tan\delta$ are same as load life value.										

### ● DRAWING

Unit : mm



$\varnothing D$	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
$\varnothing d$	0.5	0.5	0.6	0.6	0.6	0.8	0.8
$\beta$	1		2				

# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

## RP series

### ● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV $\mu\text{F}$	6.3			10			16			
	Item	$\varnothing D \times L$ (mm)	Impedance ( $\Omega$ )max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	$\varnothing D \times L$ (mm)	Impedance ( $\Omega$ )max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	$\varnothing D \times L$ (mm)	Impedance ( $\Omega$ )max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz
47								5 × 11	0.65	180
68				5 × 11	0.65	180	6.3 × 11	0.30	280	
100	5 × 11	0.65	180	5 × 11	0.65	180	6.3 × 11	0.30	280	
150	5 × 11	0.65	280	6.3 × 11	0.30	280	6.3 × 11	0.30	280	
220	6.3 × 11	0.30	280	6.3 × 11	0.30	280	8 × 11.5	0.14	450	
330	6.3 × 11	0.30	280	8 × 11.5	0.14	450	8 × 11.5	0.14	450	
470	8 × 11.5	0.14	450	8 × 11.5	0.14	450	10 × 12.5	0.10	660	
680	10 × 12.5	0.10	660	10 × 12.5	0.10	660	10 × 16	0.08	850	
1000	10 × 12.5	0.10	660	10 × 16	0.08	850	10 × 20	0.054	1100	
1500	10 × 20	0.054	1100	10 × 20	0.054	1100	12.5 × 20	0.050	1400	
2200	12.5 × 20	0.050	1400	12.5 × 20	0.050	1400	12.5 × 25	0.038	1700	
3300	12.5 × 20	0.050	1400	12.5 × 25	0.038	1700	16 × 25	0.030	2100	
4700	16 × 25	0.030	2100	16 × 31.5	0.030	2100	16 × 25	0.025	2600	
6800	16 × 25	0.030	2100	16 × 31.5	0.025	2600	16 × 35.5	0.022	3000	
10000	16 × 31.5	0.025	2600	18 × 35.5	0.022	3000				
15000	18 × 35.5	0.022	3000							

WV $\mu\text{F}$	25			35			50			
	Item	$\varnothing D \times L$ (mm)	Impedance ( $\Omega$ )max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	$\varnothing D \times L$ (mm)	Impedance ( $\Omega$ )max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz	$\varnothing D \times L$ (mm)	Impedance ( $\Omega$ )max. 20°C 100kHz	Ripple current (mA rms) 105°C 100kHz
1.0								5 × 11	3.5	40
2.2								5 × 11	3.0	55
3.3								5 × 11	2.6	65
4.7								5 × 11	2.3	90
6.8								5 × 11	1.4	120
10								5 × 11	1.4	120
22				5 × 11	0.70	180	5 × 11	1.2	150	
33	5 × 11	0.70	180	5 × 11	0.65	180	6.3 × 11	0.60	200	
47	5 × 11	0.65	180	6.3 × 11	0.30	280	6.3 × 11	0.43	250	
68	6.3 × 11	0.30	280	8 × 11.5	0.14	450	8 × 11.5	0.24	340	
100	6.3 × 11	0.30	280	8 × 11.5	0.14	450	8 × 11.5	0.24	340	
150	8 × 11.5	0.14	450	8 × 11.5	0.14	450	10 × 12.5	0.17	490	
220	8 × 11.5	0.14	450	10 × 12.5	0.10	660	10 × 16	0.12	650	
330	10 × 12.5	0.10	660	10 × 16	0.080	850	10 × 20	0.10	810	
470	10 × 16	0.080	850	10 × 20	0.054	1100	12.5 × 20	0.085	1100	
680	10 × 20	0.054	1100	12.5 × 20	0.050	1400	12.5 × 25	0.065	1200	
1000	12.5 × 20	0.050	1400	12.5 × 25	0.038	1700	16 × 31.5	0.043	1600	
1500	16 × 25	0.030	1400	16 × 31.5	0.030	2100	16 × 31.5	0.038	2000	
2200	16 × 25	0.030	2100	16 × 31.5	0.025	2600	18 × 35.5	0.034	2300	
3300	16 × 31.5	0.025	2600	18 × 35.5	0.022	3000				
4700	18 × 35.5	0.022	3000							