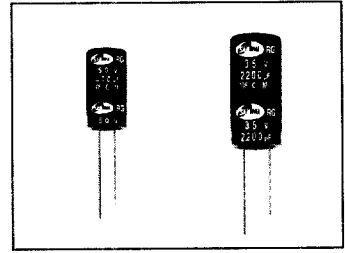
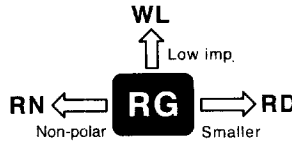


# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

## RG Wide Temperature Range Series

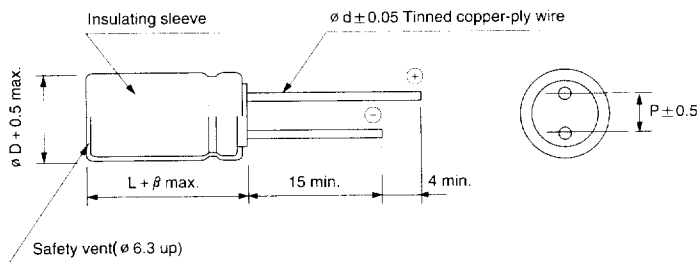
- Wide operating temperature range of -55 ~ +105°C
- Standard series for general purposes
- Voltage range of 6.3~450V
- Load life of 2000 hours at 105°C



Item	Characteristics																					
Operating temperature range	WV                    6.3 ~ 100                    160 ~ 350                    400, 450																					
	Temperature range    -55 ~ +105°C                    -40 ~ +105°C                    -25 ~ +105°C																					
Leakage current max.	WV ≤ 100                    WV > 100																					
	I = 0.01CV or 3μA whichever is greater (after 2 min) I = 0.03CV or 4μA whichever is greater (after 1 min)                    I = 0.02CV+15μA (after 5 min)																					
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"> <thead> <tr> <th>WV</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>160~250</th> <th>350~450</th> </tr> </thead> <tbody> <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>0.09</td> <td>0.08</td> <td>0.15</td> <td>0.20</td> </tr> </tbody> </table>	WV	6.3	10	16	25	35	50	63	100	160~250	350~450	tanδ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.15
WV	6.3	10	16	25	35	50	63	100	160~250	350~450												
tanδ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.15	0.20												
Low temperature characteristics (Impedance ratio at 120Hz)	WV                    6.3                    10                    16                    25~100                    160~350                    400,450																					
	Z-25°C/Z+20°C                    4                    3                    2                    2                    3                    8																					
	Z-40°C/Z+20°C                    8                    6                    4                    3                    4                    —																					
Load life (after application of the rated voltage for 2000 hours at 105°C)	Leakage current                    Less than specified value																					
	Capacitance change                    Within ±20% of initial value																					
	tanδ                    Less than 200% of specified value																					
Shelf life (at 105°C)	ø 5, 6.3 and ø 8 products are for 1000 hours																					
	After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value.																					

### ● DRAWING

Unit : mm



ø 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
ø d	0.5	0.5	0.6	0.6	0.6	0.8	0.8
β	1.0			2.0			

### ● PERMISSIBLE RIPPLE CURRENT MULTIPLIERS

μF \ Frequency	50Hz	120Hz	300Hz	1kHz	10kHz~
~ 47	0.75	1	1.35	1.55	2.0
68 ~ 680	0.80	1	1.25	1.34	1.5
1000 ~	0.85	1	1.10	1.13	1.15

# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS



## RG series

### ● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μF \ WV	WV													
	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
0.47						5 × 11	5 × 11	5 × 11	6.3 × 11	6.3 × 11	6.3 × 11			
						11	12	12	11	11	11			
0.68						5 × 11	5 × 11	5 × 11	6.3 × 11	6.3 × 11	6.3 × 11			
						13	15	15	13	13	13			
1.0						5 × 11	5 × 11	5 × 11	6.3 × 11	6.3 × 11	6.3 × 11	8 × 11.5	8 × 11.5	8 × 11.5
						16	18	18	16	16	16	19	19	16
1.5						5 × 11	5 × 11	5 × 11	6.3 × 11	6.3 × 11	8 × 11.5	10 × 12.5	10 × 12.5	10 × 12.5
						20	22	22	19	19	23	27	27	22
2.2						5 × 11	5 × 11	5 × 11	6.3 × 11	6.3 × 11	8 × 11.5	10 × 12.5	10 × 12.5	10 × 12.5
						24	26	26	23	23	28	32	32	27
3.3						5 × 11	5 × 11	5 × 11	8 × 11.5	8 × 11.5	10 × 12.5	10 × 16	10 × 16	10 × 16
						29	32	32	34	34	39	43	43	36
4.7						5 × 11	5 × 11	5 × 11	8 × 11.5	10 × 12.5	10 × 12.5	10 × 16	10 × 16	10 × 20
						35	38	38	40	47	47	51	51	47
6.8						5 × 11	5 × 11	6.3 × 11	10 × 12.5	10 × 16	10 × 16	10 × 20	10 × 20	12.5 × 20
						42	46	53	56	62	62	67	67	66
10						5 × 11	5 × 11	6.3 × 11	10 × 16	10 × 16	10 × 16	10 × 20	12.5 × 20	12.5 × 20
						51	56	64	75	75	75	82	96	80
15						5 × 11	6.3 × 11	8 × 11.5	10 × 16	10 × 20	10 × 20	12.5 × 20	12.5 × 25	12.5 × 25
						62	78	93	92	100	100	118	128	107
22					5 × 11	5 × 11	6.3 × 11	8 × 11.5	10 × 20	10 × 20	12.5 × 20	12.5 × 25	12.5 × 25	16 × 25
					65	75	95	112	121	121	143	155	155	144
33				5 × 11	5 × 11	6.3 × 11	6.3 × 11	10 × 12.5	12.5 × 20	12.5 × 20	12.5 × 20	16 × 25	16 × 25	16 × 31.5
				75	80	106	116	159	175	175	175	211	211	193
47			5 × 11	5 × 11	6.3 × 11	6.3 × 11	8 × 11.5	10 × 16	12.5 × 20	12.5 × 25	12.5 × 25	16 × 31.5	16 × 35.5	18 × 40
			81	90	110	127	164	208	208	227	227	276	289	272
68		5 × 11	5 × 11	6.3 × 11	6.3 × 11	8 × 11.5	10 × 12.5	10 × 20	12.5 × 25	16 × 25	16 × 25	16 × 35.5	18 × 40	
		90	98	125	132	180	229	274	273	303	303	348	392	
100	5 × 11	5 × 11	6.3 × 11	6.3 × 11	8 × 11.5	8 × 11.5	10 × 12.5	12.5 × 20	16 × 25	16 × 31.5	16 × 35.5	18 × 40		
	99	109	137	151	189	218	278	369	368	402	422	475		
150	6.3 × 11	6.3 × 11	6.3 × 11	8 × 11.5	10 × 12.5	10 × 16	10 × 20	12.5 × 25	16 × 31.5	16 × 40	18 × 40			
	139	154	167	218	269	340	406	520	492	543	582			
220	6.3 × 11	6.3 × 11	8 × 11.5	8 × 11.5	10 × 12.5	10 × 16	12.5 × 16	16 × 25	16 × 40	18 × 40				
	168	186	239	264	326	412	532	699	657	705				
330	6.3 × 11	8 × 11.5	8 × 11.5	10 × 12.5	10 × 16	12.5 × 16	12.5 × 20	16 × 25	18 × 40					
	206	269	293	376	437	595	708	856	863					
470	8 × 11.5	8 × 11.5	10 × 12.5	10 × 16	10 × 20	12.5 × 20	12.5 × 25	16 × 31.5						
	290	321	406	491	569	771	921	1117						
680	10 × 12.5	10 × 16	10 × 16	12.5 × 16	12.5 × 20	12.5 × 25	16 × 25	18 × 40						
	405	492	535	698	803	1011	1228	1588						
1000	10 × 12.5	10 × 16	10 × 20	12.5 × 20	12.5 × 25	16 × 25	16 × 31.5							
	491	596	707	918	1062	1360	1630							
1500	10 × 20	10 × 20	12.5 × 20	12.5 × 25	16 × 25	16 × 31.5	18 × 40							
	677	742	936	1109	1290	1578	1993							
2200	12.5 × 20	12.5 × 20	12.5 × 25	16 × 25	16 × 31.5	18 × 35.5								
	913	991	1150	1370	1560	1924								
3300	12.5 × 20	12.5 × 25	16 × 25	16 × 31.5	18 × 35.5									
	1067	1251	1468	1709	1992									
4700	16 × 25	16 × 25	16 × 31.5	18 × 35.5										
	1474	1576	1813	2157										
6800	16 × 25	16 × 31.5	16 × 40											
	1642	1901	2184											
10000	16 × 31.5	18 × 35.5												
	1977	2330												
15000	18 × 35.5													
	2396													

Case size  $\phi$  D × L (mm)

Ripple current (mA rms) at 105°C, 120Hz