

# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

## I14055 (SHF)

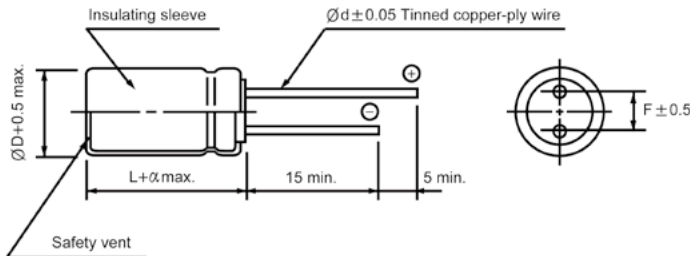
### High Ripple Current, Extremely Low Impedance Series

- Operating temperature range of -40 ~ + 105°C
- Extremely low impedance at high frequency
- High reliability withstanding 10000 hours load life at 105°C
- Complied to the RoHS directive

Items	Performance characteristics																	
Operating temperature range	-40 ~ +105°C																	
Leakage current max.	$I = 0.01CV$ 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>Tan<math>\delta</math></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> </tr> </table>	WV	6.3	10	16	25	35	50	63	100	Tan $\delta$	0.22	0.19	0.16	0.14	0.12	0.10	0.09
WV	6.3	10	16	25	35	50	63	100										
Tan $\delta$	0.22	0.19	0.16	0.14	0.12	0.10	0.09	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 ~ 100</td> </tr> <tr> <td>Z-40°C / Z+20°C</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> </tr> </table>	WV	6.3	10	16	25 ~ 100	Z-40°C / Z+20°C	8	6	4	3							
	WV	6.3	10	16	25 ~ 100													
Z-40°C / Z+20°C	8	6	4	3														
Load life (after application of the rated voltage for 10000 hours at 105°C)	Leakage current	Less than specified value																
	Capacitance change	Within $\pm 25\%$ of initial value																
	Tan $\delta$	Less than 200% of specified value																
	$\Phi 5, \Phi 6.3$ : 5000 hours; $\Phi 8, \Phi 10$ : 7000 hours; $\geq \Phi 12.5$ : 10000 hours.																	
Shelf life (at 105°C)	After 1000 hours no load test, leakage current, capacitance and $\tan\delta$ are same as load life value.																	

#### ● DRAWING

Unit : mm



ΦD	5	6.3	8	10	12.5	16	18
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
Φd	0.5		0.6		0.8		
α	1.5			2.0			

#### ● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

Frequency μF	120Hz	1kHz	10kHz	50kHz	100kHz≤
~ 33	0.40	0.65	0.82	0.91	1.00
39 ~ 270	0.50	0.70	0.84	0.92	1.00
330 ~ 680	0.55	0.75	0.86	0.93	1.00
820 ~ 1800	0.60	0.80	0.88	0.94	1.00
2200 ~	0.70	0.85	0.90	0.95	1.00

# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

## I14055 (SHF) Series

### ● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV μF	6.3			10			16			25		
	33										5×11	0.90
47							5×11	0.90	150	5×11	0.90	150
100	5×11	0.90	150	5×11	0.90	150	6.3×11	0.40	250	6.3×11	0.40	250
220	6.3×11	0.40	250	6.3×11	0.40	250	8×11.5	0.25	400	8×11.5	0.25	400
330	6.3×11	0.40	250	8×11.5	0.25	400	8×11.5	0.25	400	10×12.5	0.16	580
470	8×11.5	0.25	400	8×11.5	0.25	400	10×12.5	0.16	580	10×16	0.12	770
1000	10×12.5	0.16	580	10×16	0.12	770	10×20	0.078	1050	12.5×20	0.062	1300
2200	12.5×20	0.062	1300	12.5×20	0.062	1300	12.5×25	0.048	1650	16×25	0.034	1850
3300	12.5×20	0.062	1300	12.5×25	0.048	1650	16×25	0.034	1850	16×31.5	0.029	2000
4700	16×25	0.034	1850	16×25	0.034	1850	16×31.5	0.029	2000	18×35.5	0.025	2200
6800	16×25	0.034	1850	16×31.5	0.029	2000	18×35.5	0.025	2200			
10000	16×31.5	0.029	2000	18×35.5	0.025	2200						
15000	18×35.5	0.025	2200									

WV μF	35			50			63			100		
	1.0				5×11	4.0	50				5×11	4.50
2.2				5×11	2.5	55				5×11	3.00	30
3.3				5×11	2.2	65				5×11	2.70	40
4.7				5×11	1.9	88				5×11	2.50	65
10				5×11	1.5	100	5×11	2.30	87	6.3×11	1.20	140
22				5×11	0.9	150	6.3×11	1.30	140	8×11.5	0.63	160
33	5×11	0.90	150	6.3×11	0.40	250	6.3×11	1.20	140	10×12.5	0.43	230
47	6.3×11	0.40	250	6.3×11	0.40	400	8×11.5	0.63	210	10×12.5 10×16	0.43 0.31	230 290
100	8×11.5	0.25	400	8×11.5	0.25	500	10×12.5	0.43	300	12.5×16 12.5×20	0.23 0.16	750 750
220	10×12.5	0.16	580	10×16	0.12	770	10×25	0.21	520	16×25	0.073	900
330	10×16	0.12	770	10×20	0.08	1050	12.5×20	0.16	660	16×25	0.073	900
390	10×20	0.095	900	10×20	0.075	1170	12.5×25	0.14	700	12.5×35.5	0.073	1650
470	10×20	0.078	1050	12.5×20	0.062	1300	12.5×25	0.12	750			
1000	12.5×25	0.048	1650	16×25	0.034	1850	16×31.5	0.054	1390			
2200	16×31.5	0.029	2000	18×35.5	0.025	2200						
3300	18×35.5	0.025	2200									

Ripple current (mA rms) at 105°C , 100kHz

Impedance (Ω) max. at 20°C , 100kHz

Case size ΦD×L(mm)