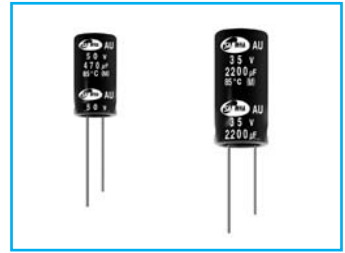


# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS



## AU For Audio Products Series

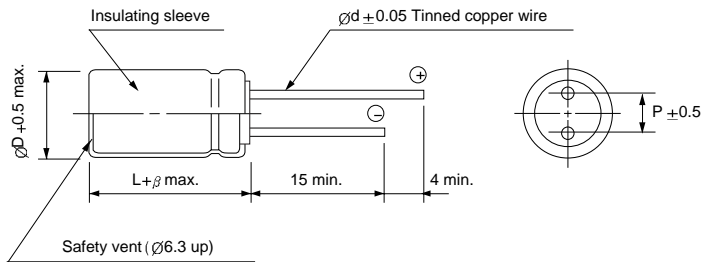


- Low distortion
- Very low leakage current
- Suited for general audio products
- Load life of 2000 hours at 85°C

Item	Characteristics																											
Operating temperature range	-40 ~ +85°C																											
Leakage current max.	$I = 0.002CV$ or $0.4 \mu A$ 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"> <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> </tr> </thead> <tbody> <tr> <td><math>\tan \delta</math></td> <td>0.18</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> <td>0.08</td> <td>0.07</td> </tr> </tbody> </table>	WV	6.3	10	16	25	35	50	63	100	$\tan \delta$	0.18	0.16	0.14	0.12	0.10	0.08	0.08	0.07									
WV	6.3	10	16	25	35	50	63	100																				
$\tan \delta$	0.18	0.16	0.14	0.12	0.10	0.08	0.08	0.07																				
Low temperature characteristics (Impedance ratio at 120Hz)	<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> </tr> </thead> <tbody> <tr> <td>Z-25°C/Z+20°C</td> <td>3</td> <td>2</td> <td>2</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>4</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	WV	6.3	10	16	25	35	50	63	100	Z-25°C/Z+20°C	3	2	2	2	2	2	2	2	Z-40°C/Z+20°C	6	4	4	4	3	3	3	3
	WV	6.3	10	16	25	35	50	63	100																			
	Z-25°C/Z+20°C	3	2	2	2	2	2	2	2																			
Z-40°C/Z+20°C	6	4	4	4	3	3	3	3																				
Load life (after application of the rated voltage for 2000 hours at 85°C)	<table border="1"> <tbody> <tr> <td>Leakage current</td> <td>Less than specified value</td> </tr> <tr> <td>Capacitance change</td> <td>Within <math>\pm 15\%</math> of initial value</td> </tr> <tr> <td><math>\tan \delta</math></td> <td>Less than 150% of specified value</td> </tr> </tbody> </table>	Leakage current	Less than specified value	Capacitance change	Within $\pm 15\%$ of initial value	$\tan \delta$	Less than 150% of specified value																					
Leakage current	Less than specified value																											
Capacitance change	Within $\pm 15\%$ of initial value																											
$\tan \delta$	Less than 150% of specified value																											
Shelf life (at 85°C)	After 1000 hours no load test, leakage current, capacitance and $\tan \delta$ are same as load life value.																											

### DRAWING

Unit : mm



øD	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
ød	0.6	0.6	0.6	0.8	0.8	0.8	0.8
β	1.0			2.0			

### PERMISSIBLE RIPPLE CURRENT MULTIPLIERS

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

# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

**AU** series

## ● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

$\mu\text{F}$ \diagdown WV	6.3	10	16	25	35	50	63	100
0.1						5 × 11 6.8	5 × 11 6.8	5 × 11 7.2
0.15						5 × 11 8.3	5 × 11 8.3	5 × 11 8.9
0.22						5 × 11 10	5 × 11 10	5 × 11 11
0.33						5 × 11 12	5 × 11 12	5 × 11 13
0.47						5 × 11 15	5 × 11 15	5 × 11 16
0.68						5 × 11 18	5 × 11 18	5 × 11 19
1.0						5 × 11 21	5 × 11 21	5 × 11 23
1.5						5 × 11 26	5 × 11 26	5 × 11 28
2.2						5 × 11 32	5 × 11 32	6.3 × 11 39
3.3						5 × 11 39	5 × 11 39	6.3 × 11 48
4.7					5 × 11 42	6.3 × 11 53	6.3 × 11 53	8 × 11.5 67
6.8					5 × 11 50	6.3 × 11 64	6.3 × 11 64	8 × 11.5 81
10			5 × 11 51	6.3 × 11 64	6.3 × 11 70	8 × 11.5 92	8 × 11.5 92	10 × 12.5 114
15			5 × 11 63	6.3 × 11 78	8 × 11.5 101	8 × 11.5 113	10 × 12.5 131	10 × 16 153
22		5 × 11 71	6.3 × 11 87	8 × 11.5 111	8 × 11.5 122	10 × 12.5 158	10 × 16 173	10 × 20 202
33	5 × 11 82	6.3 × 11 100	6.3 × 11 107	8 × 11.5 136	10 × 12.5 173	10 × 16 212	10 × 16 212	12.5 × 20 291
47	6.3 × 11 113	6.3 × 11 119	8 × 11.5 151	10 × 12.5 189	10 × 12.5 207	10 × 16 254	10 × 20 277	12.5 × 25 379
68	6.3 × 11 135	6.3 × 11 144	8 × 11.5 181	10 × 12.5 227	10 × 16 273	10 × 20 333	10 × 20 333	12.5 × 25 455
100	8 × 11.5 194	8 × 11.5 205	10 × 12.5 255	10 × 16 302	10 × 20 361	12.5 × 20 474	12.5 × 25 516	16 × 25 613
150	8 × 11.5 237	10 × 12.5 292	10 × 16 342	10 × 20 404	12.5 × 20 519	12.5 × 25 633	12.5 × 25 633	16 × 31.5 821
220	10 × 12.5 334	10 × 16 388	10 × 20 452	12.5 × 20 574	12.5 × 25 685	16 × 25 850	16 × 31.5 930	16 × 35.5 1043
330	10 × 16 448	10 × 20 518	12.5 × 20 651	12.5 × 25 766	16 × 25 931	16 × 31.5 1139	16 × 35.5 1195	18 × 40 1438
470	10 × 20 583	12.5 × 20 726	12.5 × 20 776	16 × 25 1014	16 × 25 1111	16 × 35.5 1426	18 × 35.5 1530	
680	12.5 × 20 824	12.5 × 20 873	12.5 × 25 1018	16 × 31.5 1335	16 × 31.5 1462	16 × 35.5 1715	18 × 35.5 1840	
1000	12.5 × 25 1089	12.5 × 25 1155	16 × 25 1370	16 × 35.5 1699	16 × 35.5 1861	18 × 40 2342		
1500	12.5 × 25 1265	16 × 25 1479	16 × 31.5 1717	16 × 35.5 1926	18 × 40 2342			
2200	16 × 25 1621	16 × 31.5 1860	18 × 35.5 2207	18 × 40 2456	← Case size $\varnothing D \times L$ (mm) ← Ripple current (mA rms) at 85°C, 120Hz			
3300	16 × 35.5 2182	16 × 35.5 2279	18 × 40 2691					
4700	18 × 35.5 2684	18 × 40 2931						