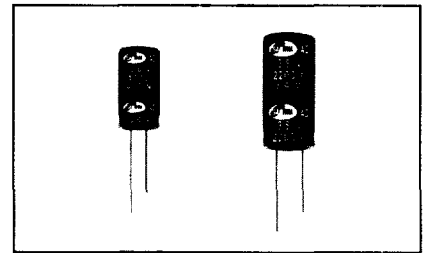


MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

AD For Audio Products, Miniaturized Series

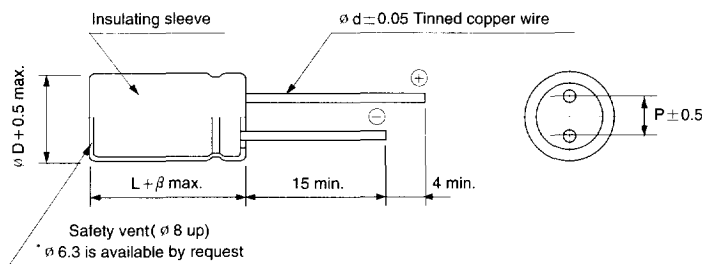
- Smaller case sizes than AU series
- Suited for general audio products
- Low distortion



Item	Characteristics																											
Operating temperature range	-40 ~ +85°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 μF : $\tan\delta$ increases by 0.02 for each 1000 μF 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>$\tan\delta$</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	0.08									
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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</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <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>10</td> <td>10</td> <td>8</td> <td>8</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> </tr> </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	10	10	8	8	4	4	3	3
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<table border="1"> <tr> <td>Leakage current</td> <td>Less than specified value</td> </tr> <tr> <td>Capacitance change</td> <td>Within $\pm 20\%$ of initial value</td> </tr> <tr> <td>$\tan\delta$</td> <td>Less than 200% of specified value</td> </tr> </table>	Leakage current	Less than specified value	Capacitance change	Within $\pm 20\%$ of initial value	$\tan\delta$	Less than 200% of specified value																						
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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



ϕD	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
ϕd	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 ~
μF					
~ 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

AD series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV μF	6.3	10	16	25	35	50	63	100
0.47						5 × 11 13		5 × 11 15
1.0						5 × 11 19		5 × 11 21
2.2						5 × 11 28		5 × 11 32
3.3						5 × 11 35		5 × 11 39
4.7					5 × 11 38	5 × 11 42	5 × 11 44	5 × 11 46
10				5 × 11 51	5 × 11 55	5 × 11 61	5 × 11 64	6.3 × 11 78
22			5 × 11 71	5 × 11 76	5 × 11 82	5 × 11 90	6.3 × 11 109	8 × 11.5 136
33		5 × 11 80	5 × 11 87	5 × 11 93	5 × 11 101	6.3 × 11 127	6.3 × 11 133	10 × 12.5 194
47		5 × 11 95	5 × 11 104	5 × 11 111	6.3 × 11 138	6.3 × 11 151	8 × 11.5 188	10 × 16 254
100	5 × 11 129	5 × 11 139	6.3 × 11 174	6.3 × 11 186	8 × 11.5 237	8 × 11.5 260	10 × 12.5 318	12.5 × 20 474
220	6.3 × 11 220	6.3 × 11 237	8 × 11.5 305	8 × 11.5 326	10 × 12.5 409	10 × 16 491	10 × 20 564	16 × 25 850
330	6.3 × 11 270	8 × 11.5 343	8 × 11.5 373	10 × 12.5 464	10 × 16 549	10 × 20 656	12.5 × 20 811	16 × 25 1041
470	8 × 11.5 380	8 × 11.5 409	10 × 12.5 518	10 × 16 606	10 × 20 714	12.5 × 20 919	12.5 × 25 1056	16 × 31.5 1356
1000	10 × 12.5 644	10 × 16 759	10 × 20 902	12.5 × 20 1132	12.5 × 25 1334	16 × 25 1621	16 × 31.5 1869	
2200	12.5 × 20 1232	12.5 × 20 1310	12.5 × 25 1532	16 × 25 1792	16 × 31.5 2079	18 × 35.5 2502		
3300	12.5 × 20 1455	12.5 × 25 1678	16 × 25 1985	16 × 31.5 2278	18 × 35.5 2703			
4700	16 × 25 2028	16 × 25 2138	16 × 31.5 2481	18 × 35.5 2918				
6800	16 × 25 2292	16 × 31.5 2626	18 × 35.5 3111					
10000	16 × 31.5 2803	18 × 35.5 3282						
15000	18 × 35.5 3457							

← Case size $\varnothing D \times L$ (mm)
 ← Ripple current (mA rms) at 85°C, 120Hz