



LARGE SIZED ALUMINUM ELECTROLYTIC CAPACITORS

AHS Series

• 85°C 2,000Hrs assured.

- Non-solvent proof.
- Hi-Fi Audio grade.
- For Audio, AMP, AVR.
- RoHS compliant.
- Halogen-free capacitors are also available.

DL

AHS

High Reliability



SPECIFICATIONS

Item	Characteristics	
Rated Voltage Range	50 ~ 100 V _{DC}	
Operating Temperature Range	-40 ~ +85°C	
Capacitance Tolerance	$\pm 20\%$ (M) (at 20°C, 120Hz)	
Leakage Current	I = 0.01CV or 2mA, whichever is smaller. Where, I: Leakage current (μ A) C: Nominal capacitance (μ F) V: Rated voltage (V _{DC}) (at 20°C, 5 minutes)	
Dissipation Factor($\tan\delta$)	$\tan\delta$ shall not exceed the value shown in the table of RATINGS. (at 20°C, 120Hz)	
Temperature Characteristics (Max.Impedance ratio)	Z(-25°C)/Z(20°C) Z(-40°C)/Z(20°C)	4 15 (at 120Hz)
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied for 2,000 hours at 85°C. Capacitance change $\leq \pm 20\%$ of the initial value. $\tan\delta$ $\leq 200\%$ of the initial specified value. Leakage current \leq The initial specified value	
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them at 85°C for 1,000 hours without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements. Capacitance change $\leq \pm 20\%$ of the initial value. $\tan\delta$ $\leq 200\%$ of the initial specified value. Leakage current \leq The initial specified value	
Charge & Discharge	5,000 times (at 70°C) After this test is completed, the capacitors shall be satisfied the following specifications. Capacitance change $\leq \pm 20\%$ of the initial value. $\tan\delta \leq 150\%$ of the initial specified value. Leakage current \leq The initial specified value No visible damage and no leakage electrolyte where, Charge resistance: 2.2Ω Charge conditions: rated volt. 1(A) Discharge resistance: 100Ω Charge and discharge time: 30 sec(each)	
Others	Satisfied characteristics KS C IEC 60384-4	

DIMENSIONS OF AHS/DL Series

Unit(mm)

$\phi D = \phi 22 \sim \phi 35$	VN/VS type	$\phi D = \phi 35 \sim \phi 40$	VR type (4 terminals)
<p>$\phi D+1_{max}$</p> <p>Safety vent</p> <p>Sleeve</p> <p>$L \pm 2$</p> <p>$4.0 \pm 0.5(VS)$</p> <p>$5.8 \pm 1(VN)$</p>	<p>PC board pin-out</p> <p>10 ± 0.1</p> <p>$2 \cdot 0.2 \pm 0.1$</p>	<p>$\phi D+1_{max}$</p> <p>Safety vent</p> <p>Sleeve</p> <p>$L \pm 2$</p> <p>5.5 ± 1</p>	<p>PC board pin-out</p> <p>60°</p> <p>60°</p> <p>$4 \cdot 0.2 \pm 0.1$</p> <p>B: Positive terminal. A, C: Terminals not connected electrically but used for mechanical support only. (Blank Terminals)</p>
<p>Marking : AHS-DARK BROWN SLEEVE, GOLD INK DL-BLACK SLEEVE, SILVER INK</p> <p>The standard design has no bottom plate.</p>			<p>Note: Sleeve has an insulating role.</p>

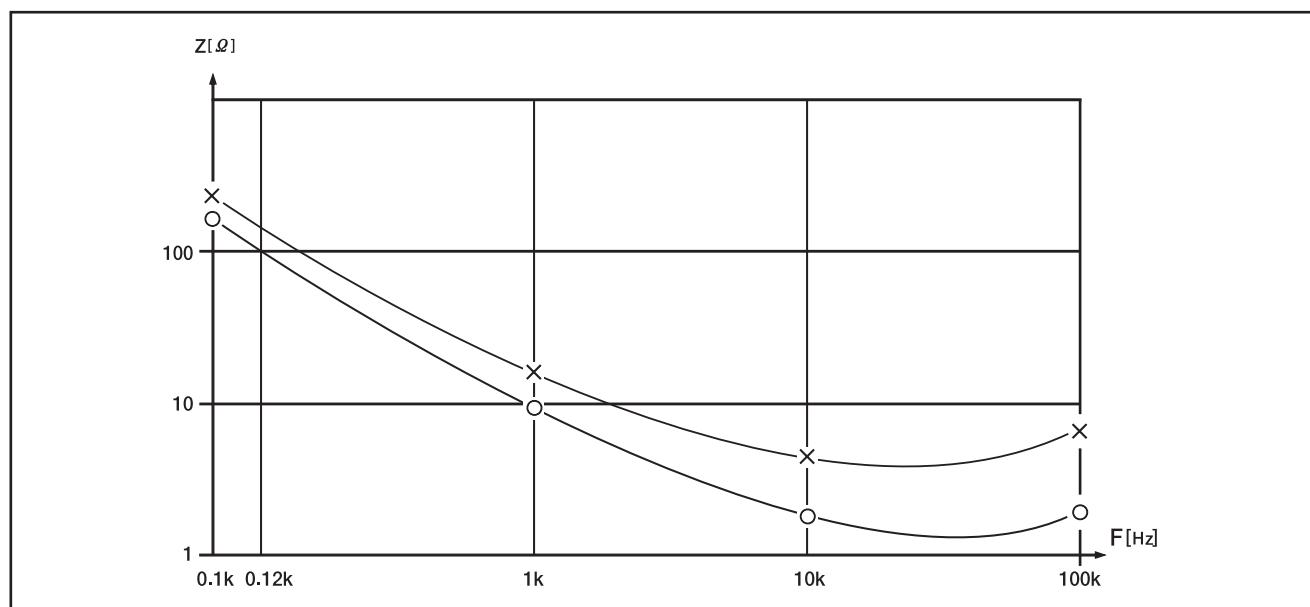
CAUTION: Please use the blank terminals for mechanical support only. The blank terminals must not be connected to a solder trace on the PC board, but be electrically isolated from negative or positive terminal.

RATINGS OF AHS Series

μF	V _{DC}	50			63			80			100		
3,300	25.4 × 30	0.20	1.84	25.4 × 40	0.20	1.96	25.4 × 50	0.15	2.39	30 × 60	0.15	2.68	
	30 × 25	0.20	1.86	30 × 30	0.20	1.96	30 × 40	0.15	2.40	35 × 50	0.15	2.69	
							35 × 35	0.15	2.40	40 × 40	0.15	2.68	
4,700	25.4 × 40	0.20	2.34	25.4 × 50	0.20	2.47	25.4 × 60	0.15	3.01	35 × 60	0.15	2.98	
	30 × 30	0.20	2.36	30 × 40	0.20	2.48	30 × 50	0.15	3.04	40 × 50	0.20	2.92	
				35 × 30	0.20	2.48	35 × 40	0.15	3.02				
6,800	25.4 × 50	0.22	2.83	30 × 50	0.22	3.02	30 × 60	0.15	3.35	40 × 60	0.20	3.68	
	30 × 40	0.22	2.85	35 × 40	0.22	3.00	35 × 50	0.15	3.35				
	35 × 35	0.25	2.67				40 × 40	0.20	3.34				
8,200	30 × 50	0.25	3.11	30 × 60	0.25	3.27	35 × 60	0.20	3.87				
	35 × 40	0.25	3.09	35 × 50	0.25	3.28	40 × 50	0.20	3.86				
				40 × 40	0.25	3.28							
10,000	30 × 50	0.25	3.43	35 × 60	0.25	3.82	40 × 60	0.20	4.46				
	35 × 40	0.25	3.41	40 × 50	0.25	3.81							
12,000	30 × 60	0.25	3.66	35 × 60	0.25	4.19							
	35 × 50	0.30	3.62	40 × 50	0.25	4.18							
	40 × 40	0.30	3.62										
15,000	35 × 60	0.30	4.27	40 × 60	0.30	4.46							
	40 × 50	0.30	4.26										
22,000	40 × 60	0.30	5.40										

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 Rated Ripple Current (Arms/85°C, 120Hz)
 Tanδ(Max.)
 Case Size ØD × L(mm)

Frequency vs. Impedance Graph



O - O AHS 80 VR 8200
 X - X DL 80 VR 8200