



## LARGE SIZED ALUMINUM ELECTROLYTIC CAPACITORS

### UDB Series

- 125°C 3,000Hrs assured.

- Non-solvent proof.
- Wide Temperature range.
- Long Life
- For automotive and industrial machine.
- RoHS compliant.
- Halogen-free capacitors are also available.

UDA → UDB

Wide Voltage. Long Life.



### SPECIFICATIONS

Item	Characteristics					
Rated Voltage Range	450 ~ 500V <sub>DC</sub>					
Operating Temperature Range	-25 ~ +125°C					
Capacitance Tolerance	$\pm 20\%$ (M) (at 20°C, 120Hz)					
Leakage Current	$I = 3\sqrt{CV} (\mu A)$ Where, I : Leakeage current( $\mu A$ ), C : Nominal capacitance( $\mu F$ ), V : Rated voltage( $V_{DC}$ ) (at 20°C, 5 minutes)					
Dissipation Factor(Tanδ)	<table border="1"> <tr> <td>Rated Voltage(<math>V_{DC}</math>)</td><td>450~500</td></tr> <tr> <td>Tanδ(Max.)</td><td>0.20</td></tr> </table> (at 20°C, 120Hz)		Rated Voltage( $V_{DC}$ )	450~500	Tanδ(Max.)	0.20
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Temperature Characteristics (Max.Impedance ratio)	<table border="1"> <tr> <td>Rated Voltage(<math>V_{DC}</math>)</td><td>450~500</td></tr> <tr> <td><math>Z(-25^{\circ}C)/Z(+20^{\circ}C)</math></td><td>8</td></tr> </table> (at 120Hz)		Rated Voltage( $V_{DC}$ )	450~500	$Z(-25^{\circ}C)/Z(+20^{\circ}C)$	8
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$Z(-25^{\circ}C)/Z(+20^{\circ}C)$	8					
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 3,000hours at 125°C.  Capacitance change $\leq \pm 20\%$ of the initial value Tanδ $\leq 200\%$ 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 for 1,000 hours at 125°C without voltage applied. The rated volage 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 Tanδ $\leq 200\%$ of the initial specified value Leakage current $\leq$ The initial specified value					
Others	Satisfied characteristics KS C IEC 60384-4					

### RATED RIPPLE CURRENT

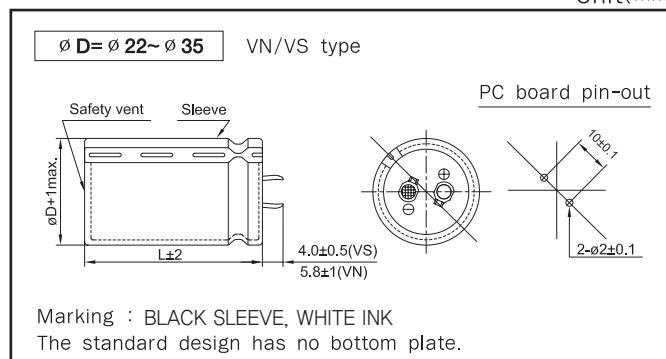
When capacitors are operated in any other condition at 120Hz, the maximum ripple current must be multiplied by the figure shown in the table.

Frequency multiplying factor

$V_{DC}$	Freq.(Hz)	60	120	300	1k	10k
450~500V <sub>DC</sub>		0.77	1.00	1.16	1.30	1.41

### DIMENSIONS OF UDB Series

Unit(mm)



# LARGE SIZED ALUMINUM ELECTROLYTIC CAPACITORS



## RATINGS OF UDB Series

μF	V <sub>DC</sub>	450				500			
		22	25	30	35	22	25	30	35
56						22×30 0.47			
82						22×45 0.59	25.4×35 0.61		
100	22×30 0.58					22×50 0.66	25.4×40 0.73	30×30 0.76	
120								30×35 0.78	
150	22×45 0.74						25.4×50 0.89		
180	22×50 0.75	25.4×35 0.84						30×45 0.89	35×30 0.88
220		25.4×40 0.89	30×30 0.95					30×50 1.16	35×35 1.01
270		25.4×50 0.96	30×35 1.09	35×30 1.03					35×45 1.14
330			30×45 1.18	35×35 1.22					35×50 1.31
390			30×50 1.34	35×40 1.44					
470				35×45 1.56					
560				35×50 1.83					

◀ Case Size ΦD×L(mm)

◀ Rated Ripple Current(Arms/125°C,120Hz)