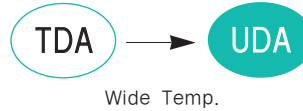


## UDA Series

• 125°C 1,000Hrs assured.

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



### SPECIFICATIONS

Item	Characteristics																			
Rated Voltage Range	16 ~ 80 V <sub>dc</sub>	160 ~ 250 V <sub>dc</sub>																		
Operating Temperature Range	-40 ~ +125°C	-25 ~ +125°C																		
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)																			
Leakage Current	I = 0.02CV or 3mA, whichever is smaller. Where, I: Leakage current(µA) C: Nominal capacitance(µF) V: Rated voltage(V <sub>dc</sub> ) (at 20°C, 5 minutes)																			
※ Dissipation Factor(Tanδ)	<table border="1"> <tr> <td>Rated Voltage(V<sub>dc</sub>)</td> <td>16</td> <td>25</td> <td>35</td> <td>50~80</td> <td>160~250</td> </tr> <tr> <td>Tanδ(Max.)</td> <td>0.45</td> <td>0.40</td> <td>0.35</td> <td>0.30</td> <td>0.20</td> </tr> </table> (at 20°C, 120Hz)		Rated Voltage(V <sub>dc</sub> )	16	25	35	50~80	160~250	Tanδ(Max.)	0.45	0.40	0.35	0.30	0.20						
Rated Voltage(V <sub>dc</sub> )	16	25	35	50~80	160~250															
Tanδ(Max.)	0.45	0.40	0.35	0.30	0.20															
Temperature Characteristics (Max.Impedance ratio)	<table border="1"> <tr> <td>Rated Voltage(V<sub>dc</sub>)</td> <td>16</td> <td>25</td> <td>35</td> <td>50~80</td> <td>160~250</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>4</td> <td>3</td> <td>3</td> <td>2</td> <td>4</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>15</td> <td>10</td> <td>8</td> <td>6</td> <td>-</td> </tr> </table> (120Hz)		Rated Voltage(V <sub>dc</sub> )	16	25	35	50~80	160~250	Z(-25°C)/Z(20°C)	4	3	3	2	4	Z(-40°C)/Z(20°C)	15	10	8	6	-
Rated Voltage(V <sub>dc</sub> )	16	25	35	50~80	160~250															
Z(-25°C)/Z(20°C)	4	3	3	2	4															
Z(-40°C)/Z(20°C)	15	10	8	6	-															
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 1,000 hours at 125°C.  Capacitance change ≤ ±20% of the initial value Tanδ ≤ 200% of the initial specified value Leakage Current ≤ The initial specified value																			
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the exposing them at 125°C for 500 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 measurement.  Capacitance change ≤ ±20% of the initial value Tanδ ≤ 200% of the initial specified value Leakage Current ≤ The initial specified value																			
Others	Satisfied characteristics KS C IEC 60384-4																			

※ For capacitors with CV products > 100,000 Higher Tanδ value may apply.  
When the capacitance exceeds 1,000µF, 0.01 shall be added every 1,000µF increase.

### RATED RIPPLE CURRENT

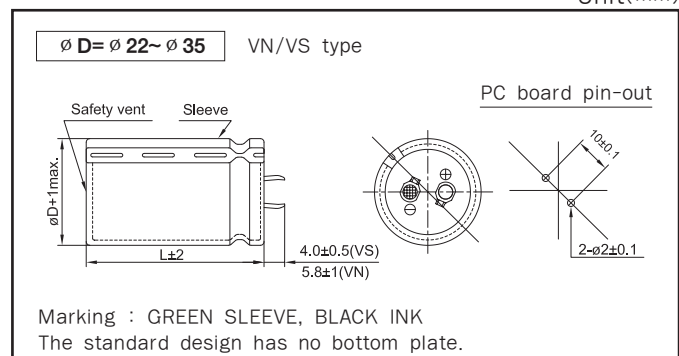
When capacitors are operated in any other condition at 120Hz, the maximum ripple current must be multiplied by the figure shown in the table.

Frequency multiplying factor

V <sub>dc</sub>	Freq.(Hz)	60	120	300	1k	10k~
16~50V <sub>dc</sub>		0.95	1.00	1.03	1.05	1.08
63~100V <sub>dc</sub>		0.92	1.00	1.07	1.13	1.19
160~250V <sub>dc</sub>		0.81	1.00	1.17	1.32	1.45

### DIMENSIONS OF UDA Series

Unit(mm)



## RATINGS OF UDA Series

$\mu F$ \ V <sub>DC</sub> / $\phi$ D	16				25				35			
	22	25.4	30	35	22	25.4	30	35	22	25.4	30	35
1,000									22 × 30 0.85			
1,500					22 × 30 0.95				22 × 40 1.16	25.4 × 30 1.14		
2,200	22 × 30 1.00				22 × 40 1.28	25.4 × 30 1.41			22 × 50 1.54	25.4 × 40 1.54	30 × 30 1.50	
3,300	22 × 40 1.36	25.4 × 35 1.41			22 × 50 1.72	25.4 × 40 1.72	30 × 30 1.68				30 × 40 2.04	35 × 30 2.09
4,700	22 × 50 1.78	25.4 × 40 1.77	30 × 30 1.74			25.4 × 50 2.23	30 × 40 2.22	35 × 30 2.17				35 × 40 2.61
6,800			30 × 40 2.31	35 × 30 2.26			30 × 50 2.90	35 × 40 2.87				
10,000				35 × 45 3.14								

$\mu F$ \ V <sub>DC</sub> / $\phi$ D	50				63				80			
	22	25.4	30	35	22	25.4	30	35	22	25.4	30	35
330					22 × 35 0.69	25.4 × 30 0.71			22 × 30 0.59			
470					22 × 40 0.87	25.4 × 35 0.91	30 × 30 0.93		22 × 40 0.79	25.4 × 35 0.82		
680	22 × 30 0.78					25.4 × 45 1.21	30 × 35 1.19	35 × 30 1.22		25.4 × 40 1.04	30 × 35 1.07	
1,000	22 × 40 1.06	25.4 × 30 1.04					30 × 45 1.60	35 × 40 1.65			30 × 45 1.42	35 × 35 1.40
1,500	22 × 50 1.42	25.4 × 40 1.42	30 × 30 1.39					35 × 50 2.16				35 × 45 1.86
2,200			30 × 40 1.86	35 × 35 1.91								
3,300				35 × 40 2.45								

$\mu F$ \ V <sub>DC</sub> / $\phi$ D	160				200				250			
	22	25.4	30	35	22	25.4	30	35	22	25.4	30	35
100									22 × 30 0.32			
150	22 × 30 0.37				22 × 35 0.42				22 × 40 0.44	25.4 × 30 0.43		
220	22 × 40 0.50	25.4 × 30 0.49			22 × 45 0.56	25.4 × 40 0.58	30 × 30 0.57		22 × 50 0.58	25.4 × 40 0.58	30 × 35 0.60	35 × 30 0.61
330	22 × 50 0.67	25.4 × 40 0.67	30 × 30 0.65			25.4 × 50 0.77	30 × 40 0.77	35 × 30 0.75			30 × 45 0.80	35 × 35 0.79
470		25.4 × 50 0.87	30 × 40 0.86	35 × 30 0.84				35 × 40 0.98				35 × 45 1.03
680			30 × 50 1.12	35 × 40 1.11				35 × 50 1.28				35 × 50 1.28
1,000				35 × 50 1.46	← Case Size $\phi$ D × L (mm) ← Rated Ripple Current (Arms/125°C, 120Hz)							