

## RLC Series

• 85°C 5,000Hrs assured.

- Non-solvent proof
- Long Life.
- For SMPS, Inverter.
- RoHS compliant.
- Halogen-free capacitors are also available.



## SPECIFICATIONS

Item	Characteristics						
Rated Voltage Range	160 ~ 500 V <sub>dc</sub>						
Operating Temperature Range	-25 ~ +85°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>160~400</td> <td>450~500</td> </tr> <tr> <td>Tanδ(Max.)</td> <td>0.15</td> <td>0.20</td> </tr> </table> (at 20°C, 120Hz)	Rated Voltage(V <sub>dc</sub> )	160~400	450~500	Tanδ(Max.)	0.15	0.20
Rated Voltage(V <sub>dc</sub> )	160~400	450~500					
Tanδ(Max.)	0.15	0.20					
Temperature Characteristics (Max.Impedance ratio)	<table border="1"> <tr> <td>Rated Voltage(V<sub>dc</sub>)</td> <td>160~400</td> <td>450~500</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>4</td> <td>8</td> </tr> </table> (at 120Hz)	Rated Voltage(V <sub>dc</sub> )	160~400	450~500	Z(-25°C)/Z(20°C)	4	8
Rated Voltage(V <sub>dc</sub> )	160~400	450~500					
Z(-25°C)/Z(20°C)	4	8					
Load Life	<p>The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 5,000 hours at 85°C.</p> <p>Capacitance change ≤ ±20% of the initial value            Tanδ ≤ 200% of the initial specified value            Leakage current ≤ The initial specified value</p>						
Shelf Life	<p>The following specifications shall be satisfied when the capacitors are restored to 20°C after the exposing them at 85°C for 1,000hours 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.</p> <p>Capacitance change ≤ ±15% of the initial value            Tanδ ≤ 150% of the initial specified value            Leakage Current ≤ The initial specified value</p>						
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

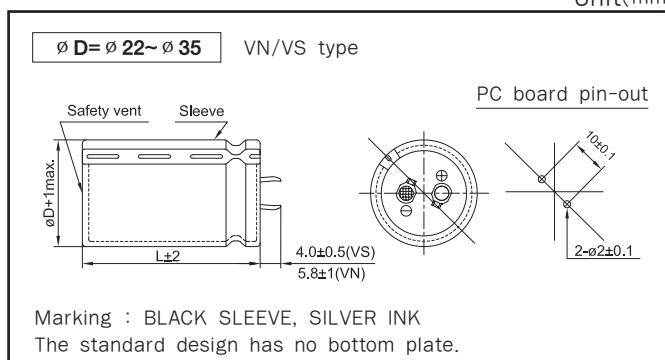
When capacitors are operated in any other condition at 120Hz, the maximum ripple current must be multiplied by the figure shown in the table.

Frequency multiplying factor

V <sub>dc</sub>	Freq.(Hz)	60	120	300	1k	10k~
160~250		0.81	1.00	1.17	1.32	1.45
350~500		0.77	1.00	1.16	1.30	1.41

## DIMENSIONS OF RLC Series

Unit(mm)



## RATINGS OF RLC Series

V <sub>DC</sub>	Capacitance (μF)	∅D×L(mm)	Rated Ripple Current (Arms/85°C, 120Hz)	V <sub>DC</sub>	Capacitance (μF)	∅D×L(mm)	Rated Ripple Current (Arms/85°C, 120Hz)	
160	270	22 × 25	1.46	250	680	30 × 40	3.08	
	390	22 × 30	1.69			35 × 30	2.66	
		25.4 × 25	1.69		820	30 × 45	3.37	
	470	22 × 35	1.95			35 × 35	3.20	
	560	22 × 40	2.21		1,000	30 × 50	3.51	
		25.4 × 30	2.11			35 × 40	3.54	
	680	30 × 25	2.11	1,200	35 × 45	3.78		
		22 × 45	2.49		35 × 50	4.08		
	820	25.4 × 35	2.47	350	82	22 × 25	0.76	
		22 × 50	2.86		120	22 × 30	1.12	
		25.4 × 40	2.83		150	25.4 × 25	1.14	
		30 × 30	2.68			22 × 35	1.27	
		35 × 25	2.99		180	22 × 40	1.40	
		25.4 × 45	3.13			25.4 × 30	1.45	
	1,000	30 × 35	2.96		220	30 × 25	1.45	
		25.4 × 50	3.43			22 × 45	1.51	
	1,200	30 × 40	3.24		270	25.4 × 35	1.64	
		35 × 30	3.62			22 × 50	1.68	
1,500	30 × 45	3.62	330		25.4 × 40	1.83		
	35 × 35	4.05			30 × 30	1.91		
1,800	30 × 50	3.97	390		35 × 25	1.70		
	35 × 40	4.44			25.4 × 45	1.97		
2,200	35 × 45	4.75	30 × 35		2.15			
200	220	22 × 25	1.23		400	82	22 × 25	0.68
	330	22 × 30	1.59			120	22 × 30	0.89
		25.4 × 25	1.57				25.4 × 25	0.89
	390	22 × 35	1.84	150		22 × 35	1.07	
	470	22 × 40	1.99			22 × 40	1.24	
		25.4 × 30	1.97	180		25.4 × 30	1.18	
	30 × 25	1.97	30 × 25			1.22		
	560	22 × 45	2.32	220		22 × 45	1.44	
		25.4 × 35	2.30			25.4 × 35	1.39	
	680	25.4 × 40	2.54	270		22 × 50	1.68	
		30 × 30	2.55			25.4 × 40	1.63	
	35 × 25	2.57	30 × 30	1.61				
	820	25.4 × 45	2.98	330		35 × 25	1.65	
		30 × 35	2.85			25.4 × 45	1.90	
	1,000	30 × 40	3.15	390		30 × 35	1.89	
		35 × 30	3.15			30 × 40	2.18	
	1,200	30 × 45	3.45	470		35 × 30	2.12	
		35 × 35	3.45			30 × 45	2.51	
1,500	35 × 40	3.86	560	35 × 35	2.48			
1,800	35 × 50	4.23		30 × 50	3.00			
250	150	22 × 25	1.07	680	35 × 40	2.86		
	220	22 × 30	1.46		30 × 60	3.50		
		25.4 × 25	1.38	820	35 × 45	3.31		
	270	22 × 35	1.64		30 × 70	4.00		
	330	22 × 40	1.81	1,000	35 × 50	3.80		
		25.4 × 30	1.81		35 × 60	4.54		
	30 × 25	1.86	1,200	35 × 70	5.32			
	22 × 45	1.92		25.4 × 45	2.42			
	390	25.4 × 35	2.05	30 × 35	2.58			
		22 × 50	2.11	25.4 × 50	2.66			
	470	25.4 × 40	2.27					
		30 × 30	2.27					
		35 × 25	2.18					
	560	25.4 × 45	2.42					
		30 × 35	2.58					
	680	25.4 × 50	2.66					

## RATINGS OF RLC Series

V <sub>DC</sub>	Capacitance (μF)	∅D×L(mm)	Rated Ripple Current (Arms/85°C, 120Hz)
450	68	22 × 25	0.52
	100	22 × 30	0.68
		25.4 × 25	0.69
	120	22 × 35	0.80
		22 × 40	0.94
	150	25.4 × 30	0.91
		30 × 25	0.94
	180	22 × 45	1.09
		25.4 × 35	1.06
	220	22 × 50	1.26
		25.4 × 40	1.24
		30 × 30	1.22
		35 × 25	1.24
	270	25.4 × 45	1.45
		30 × 35	1.44
	330	30 × 40	1.69
		35 × 30	1.63
	390	30 × 45	1.93
		35 × 35	1.89
	470	30 × 50	2.22
35 × 40		2.19	
560	30 × 60	2.60	
	35 × 45	2.51	
680	30 × 70	3.10	
	35 × 50	2.89	
820	35 × 60	3.43	
1,000	35 × 70	4.06	

V <sub>DC</sub>	Capacitance (μF)	∅D×L(mm)	Rated Ripple Current (Arms/85°C, 120Hz)
500	39	22 × 25	0.30
	56	22 × 30	0.39
		25.4 × 25	0.39
	68	22 × 35	0.46
		22 × 40	0.53
	82	25.4 × 30	0.51
		30 × 25	0.53
	100	22 × 45	0.62
		25.4 × 35	0.60
	120	22 × 50	0.71
		25.4 × 40	0.70
		30 × 30	0.69
		35 × 25	0.70
	150	25.4 × 45	0.83
		30 × 35	0.82
	180	30 × 40	0.95
		35 × 30	0.92
	220	30 × 45	1.10
		35 × 35	1.08
	270	30 × 60	1.31
35 × 40		1.27	
330	30 × 70	1.64	
	35 × 50	1.54	
390	35 × 60	1.81	
470	35 × 70	2.13	