

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 _{DC}						
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 _{DC}) (at 20°C, 5 minutes)						
※ Dissipation Factor(Tanδ)	<table border="1"> <tr> <td>Rated Voltage(V_{DC})</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 _{DC})	160~400	450~500	Tanδ(Max.)	0.15	0.20
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Temperature Characteristics (Max.Impedance ratio)	<table border="1"> <tr> <td>Rated Voltage(V_{DC})</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 _{DC})	160~400	450~500	Z(-25°C)/Z(20°C)	4	8
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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

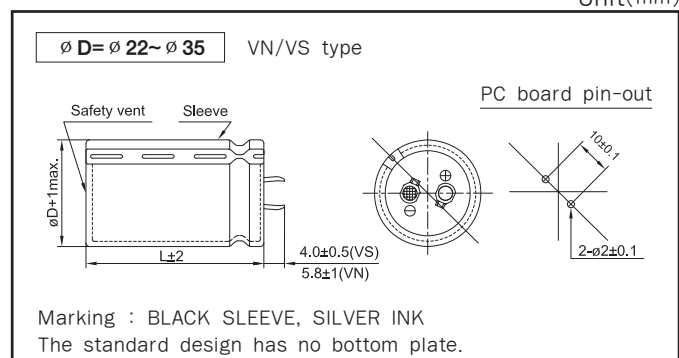
When capacitors are operated in any other condition at 120Hz, the maximum ripple current must be multiplied by the figure shown in the table.

Frequency multiplying factor

V _{DC}	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

VDC	Capacitance (μF)	∅D×L(mm)	Rated Ripple Current (Arms/85°C, 120Hz)
160	270	22 × 25	1.46
	390	22 × 30	1.69
		25.4 × 25	1.69
	470	22 × 35	1.95
	560	22 × 40	2.21
		25.4 × 30	2.11
		30 × 25	2.11
	680	22 × 45	2.49
		25.4 × 35	2.47
	820	22 × 50	2.86
		25.4 × 40	2.83
		30 × 30	2.68
		35 × 25	2.99
	1,000	25.4 × 45	3.13
		30 × 35	2.96
	1,200	25.4 × 50	3.43
		30 × 40	3.24
		35 × 30	3.62
1,500	30 × 45	3.62	
	35 × 35	4.05	
1,800	30 × 50	3.97	
	35 × 40	4.44	
2,200	35 × 45	4.75	
200	220	22 × 25	1.23
	330	22 × 30	1.59
		25.4 × 25	1.57
	390	22 × 35	1.84
	470	22 × 40	1.99
		25.4 × 30	1.97
	560	30 × 25	1.97
		22 × 45	2.32
	680	25.4 × 35	2.30
		25.4 × 40	2.54
		30 × 30	2.55
	820	35 × 25	2.57
		25.4 × 45	2.98
	1,000	30 × 35	2.85
		30 × 40	3.15
	1,200	35 × 30	3.15
		30 × 45	3.45
	1,500	35 × 35	3.45
35 × 40		3.86	
1,800	35 × 50	4.23	
250	150	22 × 25	1.07
	220	22 × 30	1.46
		25.4 × 25	1.38
	270	22 × 35	1.64
	330	22 × 40	1.81
		25.4 × 30	1.81
	390	30 × 25	1.86
		22 × 45	1.92
	470	25.4 × 35	2.05
		22 × 50	2.11
	560	25.4 × 40	2.27
		30 × 30	2.27
		35 × 25	2.18
	680	25.4 × 45	2.42
		30 × 35	2.58
	820	25.4 × 50	2.66

VDC	Capacitance (μF)	∅D×L(mm)	Rated Ripple Current (Arms/85°C, 120Hz)
250	680	30 × 40	3.08
		35 × 30	2.66
	820	30 × 45	3.37
		35 × 35	3.20
	1,000	30 × 50	3.51
		35 × 40	3.54
	1,200	35 × 45	3.78
1,500	35 × 50	4.08	
350	82	22 × 25	0.76
	120	22 × 30	1.12
		25.4 × 25	1.14
	150	22 × 35	1.27
	180	22 × 40	1.40
		25.4 × 30	1.45
	220	30 × 25	1.45
		22 × 45	1.51
	270	25.4 × 35	1.64
		22 × 50	1.68
		25.4 × 40	1.83
		30 × 30	1.91
		35 × 25	1.70
	330	25.4 × 45	1.97
		30 × 35	2.15
	390	25.4 × 50	2.15
		30 × 40	2.35
		35 × 30	2.42
30 × 45		2.52	
35 × 35		2.64	
560	30 × 50	2.74	
	35 × 40	2.99	
680	35 × 45	3.29	
820	35 × 50	3.40	
400	82	22 × 25	0.68
	120	22 × 30	0.89
		25.4 × 25	0.89
	150	22 × 35	1.07
	180	22 × 40	1.24
		25.4 × 30	1.18
	220	30 × 25	1.22
		22 × 45	1.44
	270	25.4 × 35	1.39
		22 × 50	1.68
		25.4 × 40	1.63
		30 × 30	1.61
		35 × 25	1.65
	330	25.4 × 45	1.90
		30 × 35	1.89
	390	30 × 40	2.18
		35 × 30	2.12
	470	30 × 45	2.51
35 × 35		2.48	
560	30 × 50	3.00	
	35 × 40	2.86	
680	30 × 60	3.50	
	35 × 45	3.31	
820	30 × 70	4.00	
	35 × 50	3.80	
1,000	35 × 60	4.54	
1,200	35 × 70	5.32	

RATINGS OF RLC Series

VDC	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
	150	22 × 40	0.94
		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	

VDC	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
	82	22 × 40	0.53
		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	