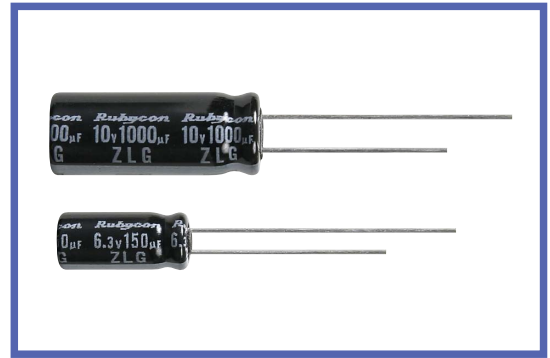


ZLG SERIES
Load Life: 105°C 1000~5000hours. Ultra Low impedance.
◆ FEATURES

- Extremely reduced impedance at high frequency range than ZL series.
- Load Life : 105°C 1000~5000hours.
- RoHS compliance.


◆ SPECIFICATIONS

Items	Characteristics																					
Category Temperature Range	- 40 ~ +105°C																					
Rated Voltage Range	6.3~35V.DC																					
Capacitance Tolerance	±20%(20°C, 120Hz)																					
Leakage Current(MAX)	I=0.03CV or 3 µ A whichever is greater. (After 2 minutes) I=Leakage Current(µ A) C=Rated Capacitance(µ F) V=Rated Voltage(V)																					
Dissipation Factor(MAX) (tan δ)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>(20°C, 120Hz)</td> </tr> <tr> <td>tan δ</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td></td> </tr> </table> <p>When nominal capacitance is over 1000 µF, tan δ shall be added 0.02 to the listed value with increase of every 1000 µF.</p>	Rated Voltage (V)	6.3	10	16	25	35	(20°C, 120Hz)	tan δ	0.22	0.19	0.16	0.14	0.12								
Rated Voltage (V)	6.3	10	16	25	35	(20°C, 120Hz)																
tan δ	0.22	0.19	0.16	0.14	0.12																	
Endurance	<p>After life test with rated ripple current at conditions stated in the table below, the capacitors shall meet the following requirements.</p> <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±25% of the initial value.</td> <td rowspan="3"> <table border="1"> <tr> <th>Case size</th> <th>Life Time (hrs)</th> </tr> <tr> <td>L=7</td> <td>1000</td> </tr> <tr> <td rowspan="3">L ≥ 11</td> <td>φ D ≤ 6.3</td> <td>2000</td> </tr> <tr> <td>φ D = 8</td> <td>3000</td> </tr> <tr> <td>φ D = 10</td> <td>4000</td> </tr> <tr> <td>φ D ≥ 12.5</td> <td>5000</td> </tr> </table> </td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </table>	Capacitance Change	Within ±25% of the initial value.	<table border="1"> <tr> <th>Case size</th> <th>Life Time (hrs)</th> </tr> <tr> <td>L=7</td> <td>1000</td> </tr> <tr> <td rowspan="3">L ≥ 11</td> <td>φ D ≤ 6.3</td> <td>2000</td> </tr> <tr> <td>φ D = 8</td> <td>3000</td> </tr> <tr> <td>φ D = 10</td> <td>4000</td> </tr> <tr> <td>φ D ≥ 12.5</td> <td>5000</td> </tr> </table>	Case size	Life Time (hrs)	L=7	1000	L ≥ 11	φ D ≤ 6.3	2000	φ D = 8	3000	φ D = 10	4000	φ D ≥ 12.5	5000	Dissipation Factor	Not more than 200% of the specified value.	Leakage Current	Not more than the specified value.	
Capacitance Change	Within ±25% of the initial value.	<table border="1"> <tr> <th>Case size</th> <th>Life Time (hrs)</th> </tr> <tr> <td>L=7</td> <td>1000</td> </tr> <tr> <td rowspan="3">L ≥ 11</td> <td>φ D ≤ 6.3</td> <td>2000</td> </tr> <tr> <td>φ D = 8</td> <td>3000</td> </tr> <tr> <td>φ D = 10</td> <td>4000</td> </tr> <tr> <td>φ D ≥ 12.5</td> <td>5000</td> </tr> </table>	Case size		Life Time (hrs)	L=7	1000	L ≥ 11		φ D ≤ 6.3	2000	φ D = 8	3000	φ D = 10	4000	φ D ≥ 12.5	5000					
Case size	Life Time (hrs)																					
L=7	1000																					
L ≥ 11	φ D ≤ 6.3	2000																				
	φ D = 8	3000																				
	φ D = 10	4000																				
φ D ≥ 12.5	5000																					
Dissipation Factor	Not more than 200% of the specified value.																					
Leakage Current	Not more than the specified value.																					
Low Temperature Stability Impedance Ratio(MAX)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>(120Hz)</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td></td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>12</td> <td>12</td> <td>10</td> <td>8</td> <td>6</td> <td></td> </tr> </table>	Rated Voltage (V)	6.3	10	16	25	35	(120Hz)	Z(-25°C)/Z(20°C)	2	2	2	2	2		Z(-40°C)/Z(20°C)	12	12	10	8	6	
Rated Voltage (V)	6.3	10	16	25	35	(120Hz)																
Z(-25°C)/Z(20°C)	2	2	2	2	2																	
Z(-40°C)/Z(20°C)	12	12	10	8	6																	

◆ MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

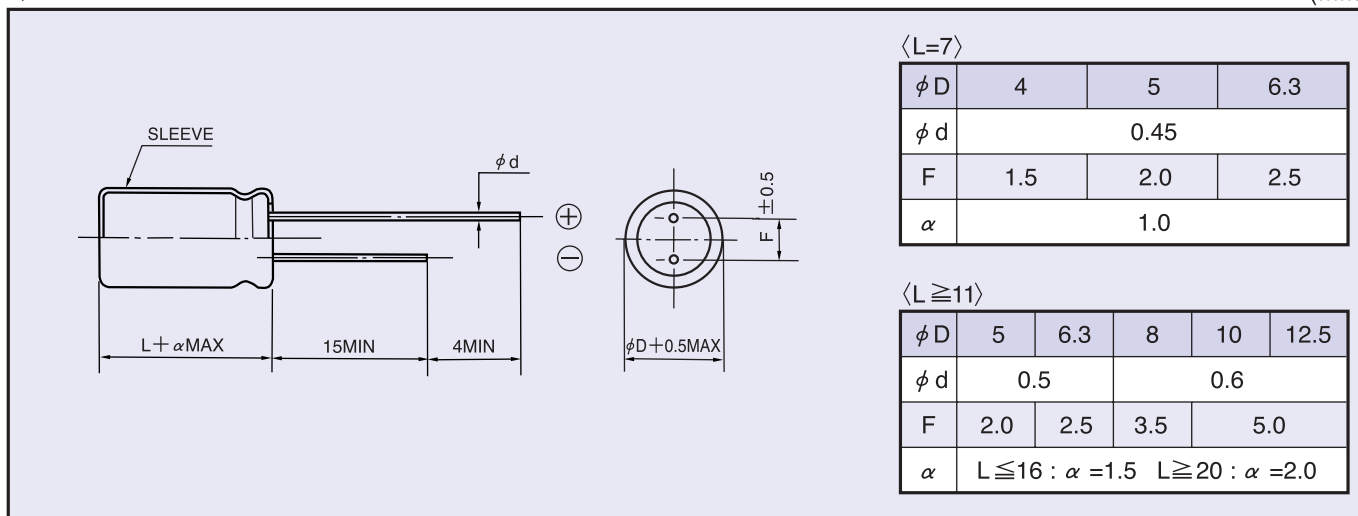
Frequency (Hz)		120	1k	10k	100k ≤
Coefficient	4.7~10 µF	0.24	0.53	0.80	1.00
	22~33 µF	0.42	0.70	0.90	1.00
	39~270 µF	0.50	0.73	0.92	1.00
	330~680 µF	0.55	0.77	0.94	1.00
	820~1800 µF	0.60	0.80	0.96	1.00
	2200~3900 µF	0.70	0.85	0.98	1.00

◆ PART NUMBER

□□□	ZLG	□□□□□	□	□□□	□□	D × L
Rated Voltage	Series	Rated Capacitance	Capacitance Tolerance	Option	Lead Forming	Case Size

◆ DIMENSIONS

(mm)


◆ STANDARD SIZE

Rated voltage 6.3V(0J)				
Rated capacitance (μF)	Size $\phi D \times L$ (mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)	
			20°C, 100kHz	-10°C, 100kHz
33	4×7	230	0.48	1.6
47	5×7	350	0.26	0.86
100	6.3×7	480	0.15	0.5
150	5×11	405	0.15	0.5
330	6.3×11	760	0.065	0.19
560	8×11.5	1000	0.036	0.11
820	8×16	1250	0.028	0.083
1000	10×12.5	1430	0.027	0.070
1200	8×20	1600	0.020	0.056
1200	10×16	1820	0.020	0.056
1500	10×20	2180	0.014	0.033
1500	12.5×16	2200	0.018	0.033
2200	10×23	2360	0.013	0.030
3300	12.5×20	2480	0.013	0.030
3900	12.5×25	2900	0.012	0.024

Rated voltage 10V(1A)				
Rated capacitance (μF)	Size $\phi D \times L$ (mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)	
			20°C, 100kHz	-10°C, 100kHz
22	4×7	230	0.49	1.6
33	5×7	350	0.26	0.86
47	5×7	350	0.26	0.86
100	6.3×7	480	0.15	0.5
100	5×11	405	0.15	0.5
220	6.3×11	760	0.065	0.19
470	8×11.5	1000	0.036	0.11
680	8×16	1250	0.028	0.083
680	10×12.5	1430	0.027	0.070
1000	8×20	1600	0.020	0.056
1000	10×16	1820	0.020	0.056
1200	10×20	2180	0.014	0.033
1200	12.5×16	2200	0.018	0.033
1500	10×23	2360	0.013	0.030
2200	12.5×20	2480	0.013	0.030
3300	12.5×25	2900	0.012	0.024

Rated voltage 16V(1C)				
Rated capacitance (μ F)	Size ϕ D \times L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)	
			20°C, 100kHz	-10°C, 100kHz
22	5 \times 7	350	0.27	0.89
33	5 \times 7	350	0.26	0.86
47	6.3 \times 7	480	0.15	0.5
56	5 \times 11	405	0.15	0.5
120	6.3 \times 11	760	0.065	0.19
330	8 \times 11.5	1000	0.036	0.11
470	8 \times 16	1250	0.028	0.083
470	10 \times 12.5	1430	0.027	0.070
680	8 \times 20	1600	0.020	0.056
680	10 \times 16	1820	0.020	0.056
1000	10 \times 20	2180	0.014	0.033
1000	12.5 \times 16	2200	0.018	0.033
1200	10 \times 23	2360	0.013	0.030
1500	12.5 \times 20	2480	0.013	0.030
2200	12.5 \times 25	2900	0.012	0.024

Rated voltage 25V(1E)				
Rated capacitance (μ F)	Size ϕ D \times L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)	
			20°C, 100kHz	-10°C, 100kHz
10	4 \times 7	230	0.52	1.7
22	5 \times 7	350	0.27	0.89
33	6.3 \times 7	480	0.16	0.53
47	6.3 \times 7	480	0.15	0.5
47	5 \times 11	405	0.15	0.5
100	6.3 \times 11	760	0.065	0.19
220	8 \times 11.5	1000	0.036	0.11
330	8 \times 16	1250	0.028	0.083
330	10 \times 12.5	1430	0.027	0.070
470	8 \times 20	1600	0.020	0.056
470	10 \times 16	1820	0.020	0.056
680	10 \times 20	2180	0.014	0.033
680	12.5 \times 16	2200	0.018	0.033
820	10 \times 23	2360	0.013	0.030
1000	12.5 \times 20	2480	0.013	0.030
1500	12.5 \times 25	2900	0.012	0.024

Rated voltage 35V(1V)				
Rated capacitance (μ F)	Size ϕ D \times L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)	
			20°C, 100kHz	-10°C, 100kHz
4.7	4 \times 7	230	0.64	2.1
10	5 \times 7	350	0.33	1.1
22	6.3 \times 7	480	0.17	0.56
33	6.3 \times 7	480	0.16	0.53
33	5 \times 11	405	0.15	0.5
56	6.3 \times 11	760	0.065	0.19
150	8 \times 11.5	1000	0.036	0.11
220	8 \times 16	1250	0.028	0.083
220	10 \times 12.5	1430	0.027	0.070
270	8 \times 20	1600	0.020	0.056
330	10 \times 16	1820	0.020	0.056
470	10 \times 20	2180	0.014	0.033
470	12.5 \times 16	2200	0.018	0.033
560	10 \times 23	2360	0.013	0.030
680	12.5 \times 20	2480	0.013	0.030
1000	12.5 \times 25	2900	0.012	0.024