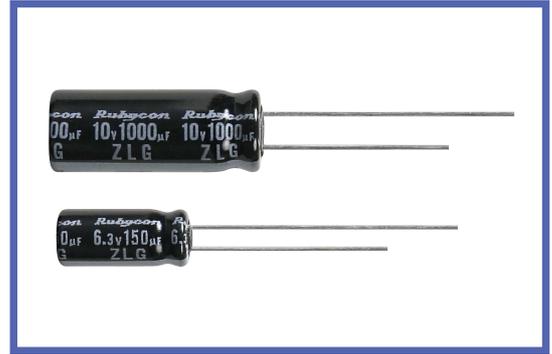


**ZLG SERIES**
**Load Life: 105°C 1000~5000hours. Ultra Low impedance.**
**◆ FEATURES**

- 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								
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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.	
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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

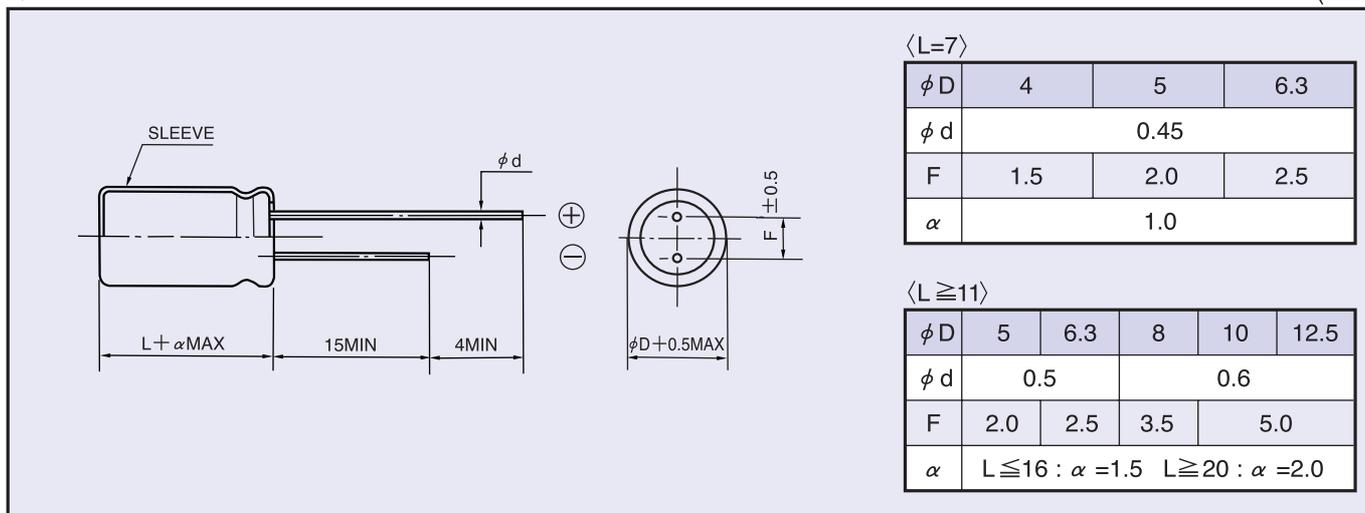
Frequency (Hz)		120	1k	10k	100k ≤
Coefficient	4.7~10 µF	0.24	0.53	0.80	1.00
	22~33 µF	0.42	0.70	0.90	1.00
	39~270 µF	0.50	0.73	0.92	1.00
	330~680 µF	0.55	0.77	0.94	1.00
	820~1800 µF	0.60	0.80	0.96	1.00
	2200~3900 µF	0.70	0.85	0.98	1.00

**◆ 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 ( $\mu F$ )	Size $\phi D \times L$ (mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance ( $\Omega$ 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 ( $\mu F$ )	Size $\phi D \times L$ (mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance ( $\Omega$ 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 ( $\mu$ F)	Size $\phi$ D $\times$ L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance ( $\Omega$ 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 ( $\mu$ F)	Size $\phi$ D $\times$ L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance ( $\Omega$ 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 ( $\mu$ F)	Size $\phi$ D $\times$ L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance ( $\Omega$ 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