

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 1000~5000 hours.
- RoHS compliance.



◆SPECIFICATIONS

Items	Characteristics																		
Category Temperature Range	-40~+105℃																		
Rated Voltage Range	6.3~35V.DC																		
Capacitance Tolerance	±20% (20℃,120Hz)																		
Leakage Current(MAX)	I=0.03CV or 3μA whichever is greater.(After 2 minutes) I=Leakage Current(μA) C=Capacitance(μF) V=Rated Voltage(V)																		
Dissipation Factor(MAX) (tanδ)	<table><tr><td>Rated Voltage (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td></tr><tr><td>tanδ</td><td>0.22</td><td>0.19</td><td>0.16</td><td>0.14</td><td>0.12</td></tr></table> (20℃,120Hz) When capacitance is over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.	Rated Voltage (V)	6.3	10	16	25	35	tanδ	0.22	0.19	0.16	0.14	0.12						
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tanδ	0.22	0.19	0.16	0.14	0.12														
Endurance	After life test with rated ripple current at conditions stated in the table below at 105℃, the capacitors shall meet the following requirements. <table><tr><td>Capacitance Change</td><td>Within ±25% of the initial value.</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> <table><tr><td>Case Size</td><td>Life Time (hrs)</td></tr><tr><td>L=7</td><td>1000</td></tr><tr><td rowspan="4">L≥11</td><td>φD≤6.3 2000</td></tr><tr><td>φD= 8 3000</td></tr><tr><td>φD= 10 4000</td></tr><tr><td>φD≥12.5 5000</td></tr></table>	Capacitance Change	Within ±25% of the initial value.	Dissipation Factor	Not more than 200% of the specified value.	Leakage Current	Not more than the specified value.	Case Size	Life Time (hrs)	L=7	1000	L≥11	φD≤6.3 2000	φD= 8 3000	φD= 10 4000	φD≥12.5 5000			
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Low Temperature Stability Impedance Ratio(MAX)	<table><tr><td>Rated Voltage (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td></tr><tr><td>Z(-25℃)/Z(20℃)</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Z(-40℃)/Z(20℃)</td><td>12</td><td>12</td><td>10</td><td>8</td><td>6</td></tr></table> (120Hz)	Rated Voltage (V)	6.3	10	16	25	35	Z(-25℃)/Z(20℃)	2	2	2	2	2	Z(-40℃)/Z(20℃)	12	12	10	8	6
Rated Voltage (V)	6.3	10	16	25	35														
Z(-25℃)/Z(20℃)	2	2	2	2	2														
Z(-40℃)/Z(20℃)	12	12	10	8	6														

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency (Hz)		120	1k	10k	100k≤
Coefficient	4.7~10µF	0.24	0.53	0.80	1.00
	22~33µF	0.42	0.70	0.90	1.00
	47~270µF	0.50	0.73	0.92	1.00
	330~680µF	0.55	0.77	0.94	1.00
	820~1500µF	0.60	0.80	0.96	1.00
	2200~3900µF	0.70	0.85	0.98	1.00

◆DIMENSIONS

(mm)

Technical drawing of a capacitor showing side and top views with dimensions.

Side View Dimensions:

- SLEEVE(PET):** Label for the sleeve component.
- $L+a$ MAX:** Maximum length of the sleeve.
- 15MIN:** Minimum length of the sleeve.
- 4MIN:** Minimum length of the terminal.
- ϕd :** Diameter of the terminal.

Top View Dimensions:

- $\phi D+0.5$ MAX:** Maximum diameter of the terminal.
- ϕD :** Diameter of the terminal.
- ϕd :** Diameter of the terminal.
- $L+0.5$:** Length of the terminal.

Notes:

- $(L=7)$
- $(L \geq 11)$

ϕD	4	5	6.3
ϕd	0.45		
F	1.5	2.0	2.5
a	1.0		

ϕD	5	6.3	8	10	12.5
ϕd	0.5		0.6		
F	2.0	2.5	3.5	5.0	
a	$L \leq 16 : a = 1.5$		$L \geq 20 : a = 2.0$		

◆OPTION

	Code
PET Sleeve	EFC

◆PART NUMBER

□□□	ZLG	□□□□□	M	□□□	□□	DXL
Rated Voltage	Series	Capacitance	Capacitance Tolerance	Option	Lead Forming	Case Size

◆STANDARD SIZE

Rated Voltage (V·DC)	capacitance (μ F)	Size ϕ D×L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)	
				20°C, 100kHz	-10°C, 100kHz
6.3 (0J)	33	4×7	230	0.48	1.6
	47	5×7	350	0.26	0.86
	100	6.3×7	480	0.15	0.50
	150	5×11	405	0.15	0.50
	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
10 (1A)	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	0.50
	100	5×11	405	0.15	0.50
	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
16 (1C)	22	5×7	350	0.27	0.89
	33	5×7	350	0.26	0.86
	47	6.3×7	480	0.15	0.50
	56	5×11	405	0.15	0.50
	120	6.3×11	760	0.065	0.19
	330	8×11.5	1000	0.036	0.11
	470	8×16	1250	0.028	0.083
	470	10×12.5	1430	0.027	0.070
	680	8×20	1600	0.020	0.056
	680	10×16	1820	0.020	0.056
	1000	10×20	2180	0.014	0.033
	1000	12.5×16	2200	0.018	0.033
	1200	10×23	2360	0.013	0.030
	1500	12.5×20	2480	0.013	0.030
	2200	12.5×25	2900	0.012	0.024
25 (1E)	10	4×7	230	0.52	1.7
	22	5×7	350	0.27	0.89
	33	6.3×7	480	0.16	0.53
	47	6.3×7	480	0.15	0.50
	47	5×11	405	0.15	0.50
	100	6.3×11	760	0.065	0.19
	220	8×11.5	1000	0.036	0.11
	330	8×16	1250	0.028	0.083
	330	10×12.5	1430	0.027	0.070
	470	8×20	1600	0.020	0.056
	470	10×16	1820	0.020	0.056
	680	10×20	2180	0.014	0.033
	680	12.5×16	2200	0.018	0.033
	820	10×23	2360	0.013	0.030
35 (1V)	1000	12.5×20	2480	0.013	0.030
	1500	12.5×25	2900	0.012	0.024
	4.7	4×7	230	0.64	2.1
	10	5×7	350	0.33	1.1
	22	6.3×7	480	0.17	0.56
	33	6.3×7	480	0.16	0.53
	33	5×11	405	0.15	0.50
	56	6.3×11	760	0.065	0.19
	150	8×11.5	1000	0.036	0.11
	220	8×16	1250	0.028	0.083
	220	10×12.5	1430	0.027	0.070
	270	8×20	1600	0.020	0.056
	330	10×16	1820	0.020	0.056
	470	10×20	2180	0.014	0.033
	470	12.5×16	2200	0.018	0.033
	560	10×23	2360	0.013	0.030
	680	12.5×20	2480	0.013	0.030
	1000	12.5×25	2900	0.012	0.024