

ZLG SERIES

105°C Ultra Low Impedance

*Load Life : 105°C 1000~5000 hours.

RoHS
compliance



SPECIFICATIONS

Items	Characteristics																									
Category Temperature Range	-40~+105℃																									
Rated Voltage Range	6.3~35Vdc																									
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(Vdc)																									
Dissipation Factor(MAX) (tanδ)	<table border="1"><tr><td>Rated Voltage (Vdc)</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 (Vdc)	6.3	10	16	25	35	tanδ	0.22	0.19	0.16	0.14	0.12								
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Endurance	After applying rated voltage with rated ripple current for specified time at 105℃, the capacitors shall meet the following requirements. <table border="1"><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 border="1"><tr><td colspan="2">Case Size</td><td>Life Time (hrs)</td></tr><tr><td rowspan="5">L≥11</td><td>L=7</td><td>1000</td></tr><tr><td>φD≤6.3</td><td>2000</td></tr><tr><td>φD= 8</td><td>3000</td></tr><tr><td>φD= 10</td><td>4000</td></tr><tr><td>φD≥12.5</td><td>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≥11	L=7	1000	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 border="1"><tr><td>Rated Voltage (Vdc)</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 (Vdc)	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 (Vdc)	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	4.7~10uF	0.15	0.53	0.80	1.00
	22~47uF	0.18	0.70	0.90	1.00
	56~100uF	0.27	0.73	0.92	1.00
	120~270uF	0.49	0.73	0.92	1.00
	330~680uF	0.55	0.77	0.94	1.00
	820~1500uF	0.60	0.80	0.96	1.00
	2200~3900uF	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.
- ϕd :** Lead diameter.
- $L+a$ MAX:** Maximum total length.
- 15MIN:** Minimum length of the sleeve.
- 4MIN:** Minimum length of the lead.

Top View Dimensions:

- $\phi D \pm 0.5$ MAX:** Maximum diameter tolerance.
- ϕD :** Nominal diameter.
- $\pm$ and $-$ symbols:** Indicate diameter tolerance.

($L=7$)

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

($L \geq 11$)

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

PART NUMBER

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

OPTION

	Code
PET Sleeve	EFC

◆STANDARD SIZE

Rated Voltage (Vdc)	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	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
	3900	12.5×25	2900	0.012	0.024
10	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
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16	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
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25	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
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	1000	12.5×20	2480	0.013	0.030
	1500	12.5×25	2900	0.012	0.024
35	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	10×12.5	1330	0.039	0.014
	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
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