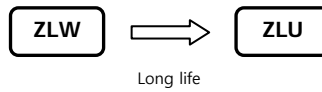


ZLU series

- Low impedance
- High-Ripple current
- RoHS compliant
- Solvent proof

- 105°C 10,000Hrs assured.
- Low impedance, Long life
- For SMPS, IP-Board, Adaptor
- RoHS compliant
- Halogen-free capacitors are also available.

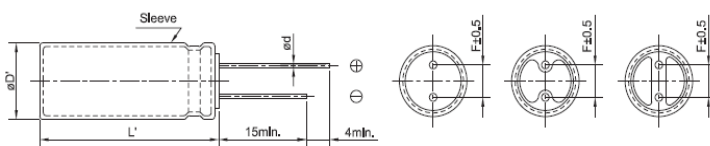


Specifications

Item	Characteristics																					
Rated Voltage Range	6.3 ~ 50Vdc																					
Operating Temperature Range	-55 ~ +105°C																					
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)																					
Leakage Current	I=0.01CV(μA) or 3μA, whichever is greater. Where, I:Max. Leakage current(μA), C:Nominal capacitance(μF), V: Rated voltage(Vdc)(at 20°C, 2 minutes)																					
Dissipation Factor(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> <td>50</td> </tr> <tr> <td>Tanδ(Max.)</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> </tr> </table> <p>If the capacitance exceeds 1,000uF, then Tanδ will be added 0.02 every 1000uF increase.(at 20°C, 120Hz)</p>	Rated Voltage(Vdc)	6.3	10	16	25	35	50	Tanδ(Max.)	0.22	0.19	0.16	0.14	0.12	0.10							
Rated Voltage(Vdc)	6.3	10	16	25	35	50																
Tanδ(Max.)	0.22	0.19	0.16	0.14	0.12	0.10																
Temperature characteristics (Max,impedance ratio)	<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> <td>50</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> <td>4</td> </tr> </table> <p>(at 120Hz)</p>	Rated Voltage(Vdc)	6.3	10	16	25	35	50	Z(-25°C)/Z(20°C)	4	3	2	2	2	2	Z(-40°C)/Z(20°C)	8	6	4	3	3	4
Rated Voltage(Vdc)	6.3	10	16	25	35	50																
Z(-25°C)/Z(20°C)	4	3	2	2	2	2																
Z(-40°C)/Z(20°C)	8	6	4	3	3	4																
Load life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 10,000hrs at 105°C. Capacitance change ≤±25% of the initial value Tan δ ≤200% of the initial specified value Leakage current ≤The initial specified value																					
Shelf life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C 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. Capacitance change ≤±25% of the initial value Tanδ ≤200% of the initial specified value Leakage current ≤200%The initial specified value																					

Dimensions

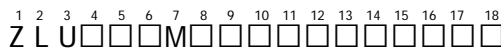
Unit(mm)



	5	6.3	8	
ØD	5	6.3	8	8
Ød	0.5	0.5	0.5	0.6
F	2.0	2.5	3.5	
ØD'	ØD+0.5max.			
L'	L+1.5max.			

- Printed black color letter on PET yellow sleeve

Code numbering system



- Taping, Cutting
- Terminal type
- Size (8X11.5: F11)
- Capacitance
- Capacitance tolerance(M: ±20%, K: ±10%, V : -10~20%)
- Working voltage(ex. 6.3V→6R3, 10V→010,63V→063)
- Series name

Ø5	D
Ø6.3	E
Ø8	F
Ø10	G
Ø12.5	X
Ø16	J
Ø18	K



ZLU series

Standard Ratings

Note 1) Imp. =  $\Omega_{max} / 20^\circ C, 100kHz$  2) Ripple current =  $mA_{rms} / 105^\circ C, 100kHz$

WV (Vdc)	Cap (uF)	Size ØxL (mm)	Imp. <sup>1)</sup>	Ripple <sup>2)</sup>	Code No
6.3	150	5 x 11	0.70	178	ZLU6R3□151D11CS□□□
	330	6.3 x 11	0.50	220	ZLU6R3□331E11CS□□□
	680	8 x 11.5	0.24	410	ZLU6R3□681F12CS□□□
	1,000	8 x 16	0.18	540	ZLU6R3□102F16CS□□□
	1,200	8 x 20	0.14	620	ZLU6R3□122F20CS□□□
10	100	5 x 11	0.70	178	ZLU010□101D11CS□□□
	220	6.3 x 11	0.50	220	ZLU010□221E11CS□□□
	470	8 x 11.5	0.24	410	ZLU010□471F12CS□□□
	680	8 x 16	0.18	540	ZLU010□681F16CS□□□
	1,000	8 x 20	0.14	620	ZLU010□102F20CS□□□
16	47	5 x 11	0.70	178	ZLU016□470D11CS□□□
	100	6.3 x 11	0.50	220	ZLU016□101E11CS□□□
	330	8 x 11.5	0.24	410	ZLU016□331F12CS□□□
	470	8 x 16	0.18	540	ZLU016□471F16CS□□□
	560	8 x 20	0.14	620	ZLU016□561F20CS□□□
25	47	5 x 11	0.70	178	ZLU025□470D11CS□□□
	100	6.3 x 11	0.50	220	ZLU025□101E11CS□□□
	220	8 x 11.5	0.24	410	ZLU025□221F12CS□□□
	330	8 x 16	0.18	540	ZLU025□331F16CS□□□
	390	8 x 20	0.14	620	ZLU025□391F20CS□□□
35	33	5 x 11	0.70	178	ZLU035□330D11CS□□□
	47	6.3 x 11	0.50	220	ZLU035□470E11CS□□□
	56	6.3 x 11	0.50	410	ZLU035□560E11CS□□□
	150	8 x 11.5	0.24	410	ZLU035□151F12CS□□□
	220	8 x 16	0.18	540	ZLU035□221F16CS□□□
	270	8 x 20	0.14	620	ZLU035□271F20CS□□□
50	1.0	5 x 11	4.0	32	ZLU050□1R0D11CS□□□
	2.2	5 x 11	3.0	40	ZLU050□2R2D11CS□□□
	3.3	5 x 11	2.5	46	ZLU050□3R3D11CS□□□
	10	5 x 11	2.0	100	ZLU050□100D11CS□□□
	22	6.3 x 11	1.6	150	ZLU050□220E11CS□□□
	33	6.3 x 11	1.6	150	ZLU050□330E11CS□□□
	47	8 x 11.5	0.8	180	ZLU050□470F12CS□□□
	100	8 x 16	0.5	230	ZLU050□101F16CS□□□
120	8 x 20	0.4	260	ZLU050□121F20CS□□□	

Rated ripple current multipliers

Capacitance (uF)	Frequency (Hz)				
	120	1K	10K	50K	100K
~ 180	0.40	0.75	0.90	0.93	1.00
220 ~ 560	0.50	0.85	0.94	0.96	1.00
680 ~ 1,200	0.60	0.87	0.95	0.97	1.00