

## LZ Series Ultra Low Impedance

### Features

- ◆ Ultra low impedance in 100KHz.
- ◆ Allow higher ripple current applied due to ultra low impedance.
- ◆ Load life 2000hrs at 105°C
- ◆ Suitable for application of mother board, computer peripheral etc.
- ◆ For more details, please refer to CapXon Engineering Bulletin No. 133
- ◆ RoHS Compliant



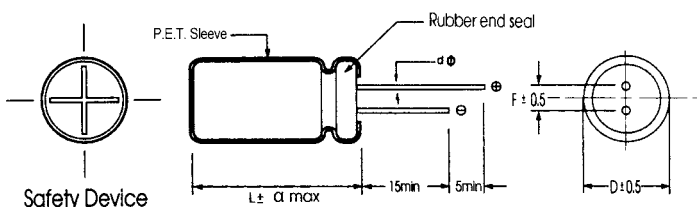
### Specifications

Item	Performance Characteristics								
Operating Temperature Range	-40 ~ +105°C								
Rated Voltage Range	6.3 ~ 25V with rate working voltage applied								
Capacitance Range	220 to 3300 $\mu$ F								
Capacitance Tolerance	$\pm 20\%$ (20°C, 120Hz)								
Leakage Current (+20°C, max.)	$I \leq 0.01CV$ or $3 \mu A$ After 2 minutes whichever is greater measured								
Dissipation Factor ( $\tan \delta$ , at 20°C, 120Hz)	Rated Voltage(V)	6.3	10	16	25				
	D.F. (%) max	14	12	10	9				
For capacitance > 1000 $\mu$ F, add 2% per another 1000 $\mu$ F									
Low Temperature Characteristics (at 120Hz)	Impedance ratio max								
	Rated Voltage(V)	6.3	10	16	25				
	Z-25°C / Z+20°C	4	3	2	2				
Z-40°C / Z+20°C						6	4	3	3
For Capacitance Value > 1000 $\mu$ F, add 0.5 per another 1000 $\mu$ F for -25°C / +20°C add 1 per another 1000 $\mu$ F for -40°C / +20°C									
Load Life	Test Conditions Duration : 2000 hrs Ambient temperature : +105°C Applied voltage : Rated DC working voltage After test requirement at +20°C Capacitance change : Within $\pm 25\%$ of the initial measured value Dissipation factor : Not exceed 200% of the initial specified value Leakage current : Not exceed the specified value								
Shelf Life	Test Conditions Duration : 1000 hrs Ambient temperature : +105°C After test requirement at +20°C Capacitance change : Within $\pm 25\%$ of the initial measured value Dissipation factor : Not exceed 200% of the initial specified value Leakage current : Not exceed the specified value								

### Multiplier for Ripple Current vs. Frequency

CAP( $\mu$ F ) \ Frequency(Hz)	120Hz	1KHz	10KHz	100KHz
100 ~ 330 $\mu$ F	0.40	0.75	0.93	1.00
390 ~ 1000 $\mu$ F	0.50	0.85	0.95	1.00
1200 ~ 3300 $\mu$ F	0.55	0.90	0.98	1.00

### Diagram of Dimensions:(unit:mm)



D $\phi$	8	10
F	3.5	5.0
d $\phi$	L < 20 0.5	L $\geq$ 20 0.6
	0.6	

$\alpha$	D < 18	D = 18		D > 18
		L < 35.5	L $\geq$ 35.5	
	1.5	1.5	2.0	2.0

## Case Size

		$\phi$ DxL(mm)								
WV	Cap( $\mu$ F)	6.3			10			16		
		Size	Ripple	Impedance	Size	Ripple	Impedance	Size	Ripple	Impedance
	330							8X11.5	1080	0.038
	470				8X11.5	1080	0.038	8X11.5	1080	0.038
	560	8x11.5	1080	0.038	8X11.5	1080	0.038	10X12.5	1500	0.027
	680	8x11.5	1080	0.038	8X11.5	1080	0.038	8X16	1450	0.029
	820	8x11.5	1080	0.038	10X12.5	1500	0.027	10X12.5	1500	0.027
	1000	8x16	1100	0.036	8X16	1450	0.029	8X20	1850	0.020
	1200	10x12.5	1500	0.027	10X12.5	1500	0.027	10X16	1910	0.018
	1500	8x16	1450	0.029	8X20	1850	0.020	10X20	2540	0.017
	1800	8x20	1850	0.020	8X20	1850	0.020	10X20	2540	0.015
	2200	10x12.5	1500	0.027	10X16	1910	0.018			
	2700	10x16	1910	0.018	10X20	2540	0.016	10X25	2800	0.013
	3300	8x20	1850	0.020	10X20	2540	0.015			
		10x16	1910	0.018	10X25	2800	0.014			
		10x20	2540	0.013						
		10x30	2800	0.012						

WV	Cap( $\mu$ F)	25		
		Size	Ripple	Impedance
	220	8X11.5	1080	0.032
	270	8X11.5	1150	0.031
	330	8X11.5	1450	0.029
		10X12.5	1850	0.027
	470	8X20	1720	0.020
		10X12.5	1440	0.025
		10X16	1830	0.022
	560	10X16	1850	0.021
	680	8X20	1820	0.018
		10X16	1920	0.020
		10X20	2060	0.018
	1000	10X20	2180	0.016

Ripple Current ( mA, rms ) at 105°C 100KHz  
 Max ESR (  $\Omega$  ) at 20°C 100KHz