

CapXon LZ Series

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



Specifications

Item	Performance Characteristics					
Operating Temperature Range	-40 ~ +105°C					
Rated Voltage Range	6.3 ~ 25V with rate working voltage applied					
Capacitance Range	100 ~ 3300 μ 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($\tan \delta$)	(+20°C, 120Hz)	Rated Voltage(V)	6.3	10	16	25
		D.F. (%) max	14	12	10	9
Low Temperature Characteristics (120Hz)	Impedance Ratio max	For capacitance > 1000 μ F, add 2% per another 1000 μ F				
		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
Load Life	Test Conditions					
	Duration	: 2000 hrs				
	Ambient temperature	: +105°C				
	Test Load	: Rated DC voltage with ripple current applied				
	After test requirements 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				
	Test Load	: DC rated voltage with ripple current applied				
	After test requirements 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					

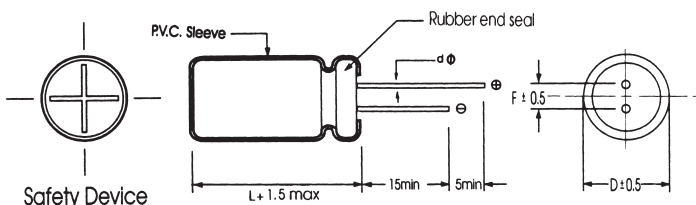
Multiplier for Ripple Current vs. Frequency

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

Multiplier for Ripple Current vs. Temperature

Temperature(°C)	45	60	70	85	95	105
Multiplier	1.80	1.50	1.45	1.30	1.20	1.00

Diagram of Dimensions:(unit:mm)



D ψ	8	10
F	3.5	5.0
d ψ	0.5	0.6

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Case Size

φ DxL(mm)

WV(SV) Spec	6.3 (8)			10 (13)			16 (20)		
	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
							10X12.5	1500	0.027
560	8x11.5	1080	0.038	8X11.5	1080	0.038	8X16	1450	0.029
680	8x11.5	1080	0.038	8X11.5	1080	0.038	8X16	1450	0.029
				10X12.5	1500	0.027	10X12.5	1500	0.027
820	8x11.5	1080	0.038	10X12.5	1450	0.029	8X20	1850	0.020
1000	8x16	1100	0.036	8X16	1450	0.029	8X20	1850	0.020
	10x12.5	1500	0.027	10X12.5	1500	0.027	10X16	1910	0.018
1200	8x16	1450	0.029	8X20	1850	0.020	10X20	2540	0.017
1500	8x20	1850	0.020	8X20	1850	0.020	10X20	2540	0.015
	10x12.5	1500	0.027	10X16	1910	0.018			
1800	10x16	1910	0.018	10X20	2540	0.016	10X25	2800	0.013
2200	8x20	1850	0.020	10X20	2540	0.015			
	10x16	1910	0.018	10X25	2800	0.014			
2700	10x20	2540	0.013						
3300	10x30	2800	0.012						

WV(SV) Spec	25 (32)		
	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
560	10X16	1830	0.022
	10X16	1850	0.021
680	8X20	1820	0.018
	10X16	1920	0.020
1000	10X20	2060	0.018
	10X20	2180	0.016

Ripple Current (mA, rms) at 105°C 100KHz

Max ESR (Ω) at 20°C 100KHz