

### LZ Series

Low impedance and low ESR at high frequency  
 High ripple current at high frequency.  
 Specially designed for output of switching power supplies and other high frequency applications.



Dark Green, Gold

#### Characteristics

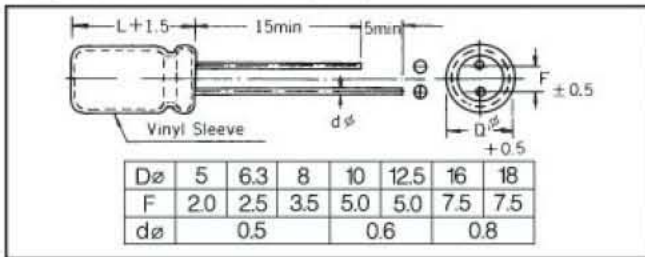
Voltage Range	6.3-100V								
Capacitance Range	1-10000 $\mu$ F								
Temperature Range	-40-+105°C								
Capacitance Tolerance	-20 ~ +20% (at 20°C, 120Hz)								
Leakage Current	I=0.01CV or 3 $\mu$ A Whichever is greater (After 2 minutes)								
Dissipation Factor (tan $\delta$ )	Rated voltage	6.3V	10V	16V	25V	35V	50V	63V	100V
	tan $\delta$ (max.)	0.24	0.20	0.16	0.14	0.12	0.10	0.10	0.08
For capacitance > 1000 $\mu$ F, add 0.02 for every 1000 $\mu$ F. (at 20°C, 120Hz)									
Low Temperature Stability	Impedance ratio at 120Hz								
	Rated voltage	6.3V	10V	16V	25V	35V	50V	63V	100V
	Z-25°C/Z20°C	4	3	2	2	2	2	2	2
Z-40°C/Z20°C	10	8	6	4	3	3	3	3	
Load Life	After 2000 hours application of rated voltage at 105°C the capacitor shall meet the following characteristics								
	Capacitance change	Within $\pm$ 20% of initial value							
	D.F. (tan $\delta$ )	200% or less of initial specified value							
	Leakage current	initial specified value or less							

Maximum Impedance Z ( $\Omega$ 20°C 100KHz)

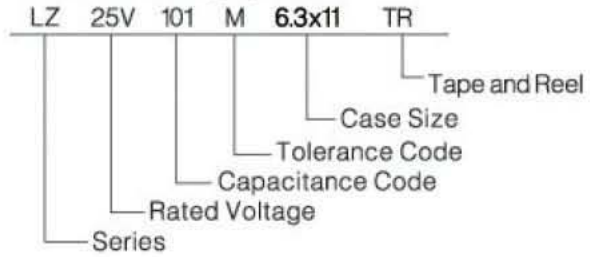
Maximum Ripple Current (mA rms 105°C 100KHz)

WV $\mu$ F	6.3		10		16		25		35		50		63		100	
	Z	I.R.	Z	I.R.	Z	I.R.	Z	I.R.	Z	I.R.	Z	I.R.	Z	I.R.	Z	I.R.
1											16.00	30				
2.2											9.00	40				
3.3											5.10	60				
4.7											2.20	90	2.20	100	2.20	100
10									1.80	100	1.50	130	1.20	140	1.20	140
22									0.90	170	0.80	180	0.80	190	0.70	210
33									0.80	190	0.70	210	0.70	230	0.65	230
47							0.90	190	0.70	210	0.48	290	0.48	320	0.35	420
68					0.90	190	0.40	220	0.48	290	0.38	390	0.32	420	0.22	520
100			0.60	190	0.40	290	0.25	290	0.22	410	0.20	490	0.19	520	0.16	590
150	0.80	190	0.40	270	0.32	320	0.22	480	0.15	530	0.14	570	0.12	590	0.15	980
220	0.50	310	0.35	320	0.23	470	0.11	620	0.11	720	0.10	690	0.10	750	0.080	1200
330	0.35	390	0.20	470	0.11	580	0.090	720	0.090	690	0.090	980	0.080	1050	0.065	1460
470	0.26	450	0.11	520	0.090	620	0.080	690	0.060	1020	0.060	1120	0.055	1200	0.050	1620
680	0.20	560	0.090	620	0.082	750	0.060	1020	0.052	1200	0.042	1320	0.042	1460		
1000	0.16	680	0.082	800	0.068	1010	0.052	1300	0.042	1520	0.038	1580	0.038	1710		
1200	0.12	880	0.070	990	0.060	1280	0.042	1520	0.038	1580	0.032	1710	0.030	1810		
1500	0.090	990	0.060	1320	0.052	1490	0.038	1660	0.032	1710	0.022	1810	0.022	1900		
2200	0.082	1300	0.052	1480	0.038	1680	0.032	1710	0.022	1810						
3300	0.070	1490	0.048	1650	0.032	1710	0.022	1810								
4700	0.060	1530	0.042	1710	0.022	1810										
6800	0.050	1630	0.032	1810												
10000	0.032	1820														

Diagram of Dimensions (mm)



Part Numbering System



Case Size of Standard Products

DxL (mm)

uF \ WV	6.3	10	16	25	35	50	63	100
1						5x11		
2.2						5x11		
3.3						5x11		
4.7						5x11	5x11	6.3x11
10					5x11	5x11	5x11	6.3x11
22					5x11	5x11	6.3x11	8x11.5
33					5x11	6.3x11	6.3x11	8x16
47				5x11	6.3x11	8x11.5	8x14	10x16
68			5x11	6.3x11	6.3x11	8x14	8x14	10x20
100		5x11	6.3x11	6.3x11	8x11.5	8x14	8x16	12.5x20
150	5x11	6.3x11	6.3x11	8x11.5	8x14	8x16	10x20	12.5x25
220	6.3x11	6.3x11	8x11.5	8x14	8x16	10x20	10x24	16x25
330	6.3x11	8x11.5	8x14	8x16	10x20	10x24	12.5x20	16x31.5
470	8x11.5	8x14	8x16	10x20	10x24	12.5x20	12.5x25	18x35.5
680	8x14	8x16	10x16	10x24	12.5x20	12.5x25	16x25	
1000	8x16	10x16	10x24	12.5x20	12.5x25	16x25	16x31.5	
1200	10x16	10x20	12.5x20	12.5x25	12.5x25	16x31.5	16x35.5	
1500	10x20	10x24	12.5x20	12.5x25	16x25	16x35.5	18x35.5	
2200	10x24	12.5x20	12.5x25	16x25	16x35.5			
3300	12.5x20	12.5x25	16x25	16x35.5				
4700	12.5x25	16x25	16x35.5					
6800	16x25	16x35.5						
10000	16x35.5							