

# CE-ZC Series

Super Low ESR

Small, High Capacitance

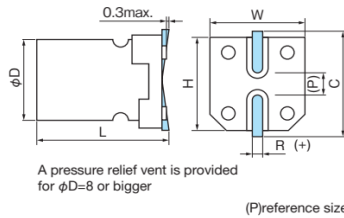
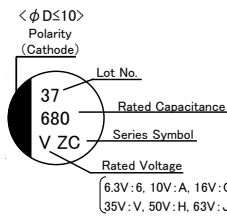
- 105°C 2,000 to 5,000hours
- Solvent proof (within 2 minutes)
- AEC-Q200



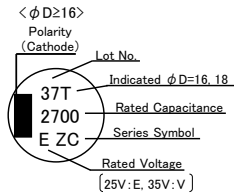
## Specifications

Items	Condition	Specifications								
Rated voltage (V)	—	6.3	10	16	25	35	50	63		
Surge voltage (V)	Room temperature	8.0	13	20	32	44	63	79		
Category temperature range (°C)	—	-55 to +105								
Capacitance tolerance (%)	120Hz/20°C	M: ±20								
Dissipation Factor (tan δ)	tan δ (max.) 120Hz/20°C	0.26	0.19	0.16	0.14	0.12	0.10	0.08		
Leakage current (LC)	μA/after 2 minutes (max.), 20°C	Exceeding 1,000 μF, +0.02 every 1,000 μF 0.01CV								
Impedance ratio at low temperature	Based the value at 120Hz, +20°C	-40°C Z/Z <sub>20°C</sub>	3	3	3	3	3	3	3	
		-55°C Z/Z <sub>20°C</sub>	4	4	4	3	3	3	3	
Endurance	105°C rated voltage applied (with the rated ripple current)	Test	φ 6.3 × 6.0 to φ 10 × 10.5: 2,000hours, φ 10 × 13.5: 3,000hours, φ 16 to φ 18: 5,000hours							
		Δ C/C	Within ±30% of the initial value							
		tan δ	Less than 200% of the specified value							
		LC	Less than the specified value							

## Marking, Dimensions



D ±0.5	L ±0.3	W ±0.2	H ±0.2	C ±0.2	R	P	(Unit: mm)
6.3	6.0	6.6	6.6	7.3	0.5 to 0.8	2.2	
6.3	7.7	6.6	6.6	7.3	0.5 to 0.8	2.2	
8	10.5	8.3	8.3	9.0	0.7 to 1.0	3.2	
10	10.5	10.3	10.3	11.0	1.0 to 1.4	4.6	
10	13.5 <sup>±0.3</sup>	10.3	10.3	11.0	1.0 to 1.4	4.6	
16	16.5 <sup>±0.3</sup>	16.3	16.3	17.3	1.7 to 2.1	7.0	
16	21.5 <sup>±1.0</sup>	16.3	16.3	17.3	1.7 to 2.1	7.0	
18	16.5 <sup>±1.0</sup>	19.0	19.0	20.0	1.7 to 2.1	7.0	
18	21.5 <sup>±1.0</sup>	19.0	19.0	20.0	1.7 to 2.1	7.0	



## Size, ESR, Rated Ripple Current

μF \ V	6.3	10	16	25	35
68					6.3x6.0 0.28 300
100				6.3x6.0 0.28 300	6.3x6.0 0.28 300
150				6.3x7.7 0.16 600	6.3x7.7 0.16 600
220		6.3x6.0 0.28 300	6.3x7.7 0.16 600	6.3x7.7 0.16 600	
330	6.3x6.0 0.28 300	6.3x7.7 0.16 600	6.3x7.7 0.16 600		8x10.5 0.08 850
390					8x10.5 0.08 850
470	6.3x7.7 0.16 600	6.3x7.7 0.16 600		8x10.5 0.08 850	10x10.5 0.06 1190
560				8x10.5 0.08 850	10x10.5 0.06 1190
680	6.3x7.7 0.16 600			8x10.5 0.08 850	10x10.5 0.06 1190
820				10x10.5 0.06 1190	10x13.5* 0.06 1500
1000		8x10.5 0.08 850	10x10.5 0.06 1190	10x10.5 0.06 1190	
1200				10x13.5* 0.06 1500	
1500	8x10.5 0.08 850	10x10.5 0.06 1190			
1800					16 × 16.5 0.035 1800
2200	10x10.5 0.06 1190				
2400					18 × 16.5 0.033 2060
2700				16 × 16.5 0.035 1800	16 × 21.5 0.034 2540
3000					18 × 21.5 0.025 2640
3600				18 × 16.5 0.033 2060	
3900				16 × 21.5 0.034 2540	
4700				18 × 21.5 0.025 2640	

μF \ V	50	63
47	6.3x6.0 0.68 195	
220		10x13.5* 0.14 600
330	10x10.5 0.12 900	
470	10x13.5* 0.12 750	

 Case size: φ D × L (mm)  
φ 16, φ 18: CE-ZCT

 ESR (Ω)  
max. at 100kHz, 20°C

 Rated ripple current  
mA rms (100kHz, 105°C)

★ ZCC

## Part number

