

ALUMINUM ELECTROLYTIC CAPACITORS

Suntan®

CHIP TYPE SERIES

TS13CZ



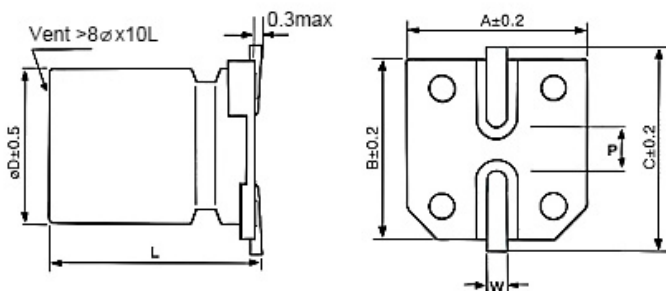
FEATURES

- $\phi 5 \sim \phi 10$, 105°C, 7000 hours assured
- Low impedance capacitors, Long life assured
- Designed for reflow soldering
- Designed for surface mounting on high-density PCB

◆ Specifications

I T E M S		P E R F O R M A N C E						C H A R A C T E R I S T I C S	
Category Temp. Range	-25°C ~ +105°C								
Capacitance Tolerance	±20% (120Hz/+20°C)								
Leakage Current	I ≤ 0.01 CV or 3μA whichever is greater (after 2 minutes)								
Tan δ	Please see the attached characteristics list								
Characteristics at Low Temperature	Rated Voltage (V)	6.3	10	16	25	35	50	Impedance ratio at 120 Hz	
	Z (-25°C) / Z (+20°C)	4	3	2	2	2	2		
Endurance	After applying rated working voltage for 7000 hours at +105 °C ± 2 °C, and then being stabilized at +20 °C, capacitors shall meet the following limits.								
	Capacitance change	Within ±30% of the initial value							
	Dissipation factor (tan δ)	Less than 300% of the initial value							
	Leakage current	Within the initial limit							
Shelf Life	After storage for 1000h at +105°C ± 2 °C with no voltage applied and then being stabilized at +20°C, capacitors shall meet the limits specified in endurance.								
Resistance to Soldering Heat	After reflow soldering and then being stabilized at +20°C, capacitors shall meet the following limits.								
	Capacitance change	Within ±10% of the initial value							
	Dissipation factor (tan δ)	Within the initial limit							
	Leakage current	Within the initial limit							
Frequency Correction Factor for Ripple Current	Frequency	50Hz	120Hz	1kHz	10kHz ≤				
	Correction Factor	0.35	0.5	0.8	1.0				

◆ Drawings (Unit: mm)



φD	L	A	B	C	W	P±0.2
5	7±0.3	5.3	5.3	6.1	0.5~0.8	1.3
6.3	7±0.3	6.6	6.6	7.3	0.5~0.8	2.2
6.3	8.7±0.3	6.6	6.6	7.3	0.5~0.8	2.2
8	10.5±0.5	8.3	8.3	9.2	0.7~1.2	3.2
10	10.5±0.5	10.3	10.3	11.2	0.7~1.2	4.4

Markings: SuZ, SZ, JZ

TS13CZ

◆ Standard size & Maximum permissible ripple current

Rated Voltage (V)	Capacitance (±20%) (μF)	Case size		Specification		
		øD (mm)	L (mm)	Rated ripple current ^① (mA rms)	Imp. ^② (Ω)	tan δ ^③
6.3	47	5	7	95	2.2	0.32
	100	6.3	7	140	1.1	0.32
	220	6.3	8.7	230	1.0	0.32
	330	6.3	8.7	230	1.0	0.32
	470	8	10.5	600	0.22	0.32
10	33	5	7	95	2.2	0.28
	150	6.3	7	140	1.1	0.28
16	22	5	7	95	2.2	0.26
	47	6.3	7	140	1.1	0.26
	100	6.3	7	140	1.1	0.26
	150	6.3	8.7	230	1.0	0.26
	220	6.3	8.7	230	1.0	0.26
	330	8	10.5	600	0.22	0.26
	470	8	10.5	600	0.22	0.26
25	22	5	7	95	2.2	0.16
	33	6.3	7	140	1.1	0.16
	47	6.3	7	140	1.1	0.16
	100	6.3	8.7	230	1.0	0.16
	220	8	10.5	600	0.22	0.16
	330	8	10.5	600	0.22	0.16
	470	10	10.5	850	0.16	0.16
35	10	5	7	95	2.2	0.14
	22	5	7	95	2.2	0.14
	33	6.3	8.7	230	1.0	0.14
	47	6.3	8.7	230	1.0	0.14
	220	8	10.5	600	0.22	0.14
	330	10	10.5	850	0.16	0.14
50	47	8	10.5	350	0.53	0.14
	100	8	10.5	350	0.53	0.14
	220	10	10.5	670	0.35	0.14

1. Rated ripple current (100kHz / +105°C)

2. Impedance (100kHz / +20°C)

3. tan δ (120Hz / +20°C)

Note: Specifications are subject to change without notice. For more detail and update, please visit our website.