

# ALUMINUM ELECTROLYTIC CAPACITORS

Suntan®

CHIP TYPE SERIES

# TS13CX

## FEATURES

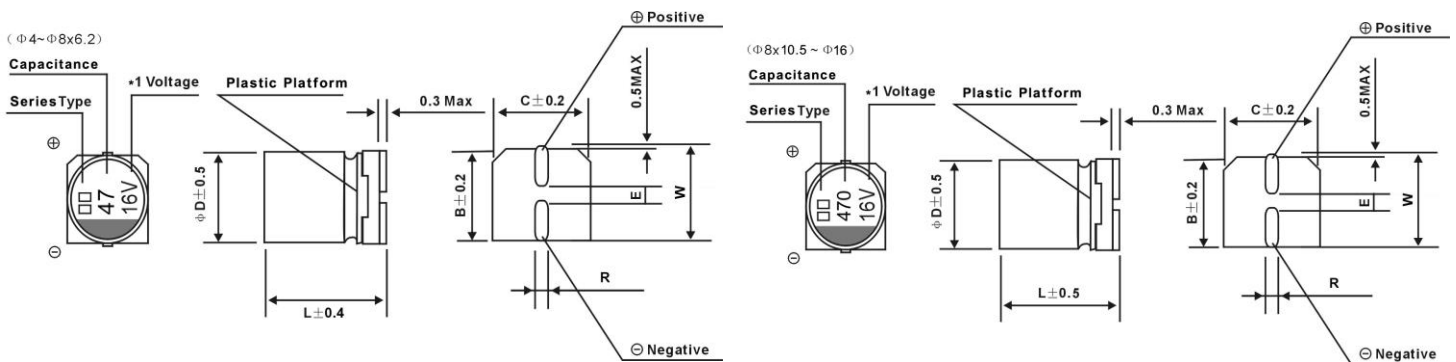
- 105°C 2,000 to 5,000hours
- Solvent proof (within 2 minutes)



## ◆ Specifications

ITEMS PERFORMANCE CHARACTERISTICS								
Rated Voltage (V)	-		6.3	10	18	25	35	50
Surge Voltage (V)	Room temperature		8.0	13	20	32	44	63
Category Temperature Range (°C)	-		-55 to +105					
Capacitance Tolerance (%)	120Hz/20°C		M : ±20					
Dissipation Factor (Tan δ)	tanδ (max) 120Hz/20°C	Φ4 to Φ6.3	0.24	0.20	0.18	0.16	0.14	0.12
		Φ8 to Φ10	0.26	0.24	0.20	0.18	0.16	0.14
			Exceeding 1,000μF, +0.02 every 1,000μF					
Leakage Current (LC)	μA/after 2minutes (max)		The greater value of either 0.01CV or 3μA					
Impedance Ratio at Low Temperature	Based on the value at 120Hz, +20°C	-25°C	Z/Z20°C	3	2	2	2	2
		-55°C	Z/Z20°C	5	4	4	3	3
Endurance	105°C 2,000hours rated voltage applied (With the rated ripple current)	Test	6.3V.DC : 3,000hours, Φ8×10.5 and Φ10×10.5 : 5,000hours					
		ΔC/C	Within ±30% of the initial value					
		tanδ	Less than 300% of the specified value					
		LC	Less than the specified value					

## ◆ Chip type



\*3 [L±0.5] is applicable to Φ8×10.5~Φ10 ; \*4 [L±1.0] is applicable to Φ12.5~Φ16.

\*1 Voltage mark for 6.3V is [6V] or [6.3V]

\*2 Markings: SuX, SX, RX, VD

ΦDxL	4x5.4	5x5.4	6.3x5.4	6.3x7.7	8x6.5	8x10.5	10x10.5
B	4.3	5.3	6.6	6.6	8.3	8.3	10.3
C	4.3	5.3	6.6	6.6	8.3	8.3	10.3
E±0.2	1.	.3	2.2	2.2	3.1	3.1	4.4
L	5.4	5.4	5.4	7.7	6.5	10.5	10.5
R	0.5 to 0.8	0.5 to 0.8	0.5 to 0.8	0.5 to 0.8	0.7 to 1.0	0.7 to 1.0	0.1 to 1.4
W	5.1	6.1	7.3	7.3	9.2	9.2	11.2

# TS13CX

◆ Standard size & Maximum permissible ripple current & Impedance

WV Cap/uF		6.3			10			16		
		0J			1A			1C		
47	470							4x5.8	0.85	160
68	680				4x5.8	0.85	160	5x5.8	0.36	240
100	101	4x5.8	0.85	160				5x5.8	0.36	240
150	151				5x5.8	0.36	240	6.3x5.8	0.26	300
220	221	5x5.8	0.36	240	6.3x5.8	0.26	300	6.3x5.8	0.26	300
330	331	6.3x5.8	0.26	300	6.3x7.7	0.16	600	6.3x7.7	0.16	600
390	391									
470	471	6.3x7.7	0.16	600	6.3x7.7	0.16	600	8x6.5	0.16	600
560	561									
680	681	6.3x7.7	0.16	600				8x10.5	0.08	850
820	821							8x10.5	0.08	850
1000	102				8x10.5	0.08	850	10x10.5	0.06	1190
1200	122							10x10.5	0.06	1190
1500	152	8x10.5	0.08	850	10x10.5	0.06	1190	Case size	Impedance(Ω)	Rated ripple current
2200	222	10x10.5	0.06	1190						

WV Cap/uF		25			35			50		
		1E			1V			1H		
10	100							4x5.8 (5x5.8)	2.30 (0.88)	85 (165)
22	220				4x5.8	0.85	160	5x5.8	0.88	165
33	330	4x5.8	0.85	160	5x5.8	0.36	240			
47	470	5x5.8	0.36	240	5x5.8	0.36	240	6.3x5.8	0.68	195
68	680	5x5.8	0.36	240	6.3x5.8	0.26	300			
100	101	6.3x5.8	0.26	300	6.3x5.8	0.26	300	6.3x7.7	0.34	350
150	151	6.3x7.7	0.16	600	6.3x7.7	0.16	600			
220	221	6.3x7.7	0.16	600				8x10.5	0.18	670
330	331				8x10.5	0.08	850	10x10.5	0.12	450
390	391	8x10.5	0.08	850	8x10.5	0.08	850			
470	471	8x10.5	0.08	850						
560	561	8x10.5	0.08	850	10x10.5	0.06	1100			
680	681				10x10.5	0.06	1190			
820	821	10x10.5	0.06	1190				Case size	Impedance(Ω)	Rated ripple current
1000	102	10x10.5	0.06	1190						

Case size: ΦDxL(mm)

Impedance(Ω)max at 100kHz, 20°C

Rated ripple current mArms(100kHz, 105°C)

◆ Frequency coefficient Factor of Rated Ripple current

Frequency:F(Hz)		100≤F<1k	1k≤F<10k	10k≤F<100k	100k≤F
Capacitance: C(μF)	C≤33	0.35	0.70	0.90	1.00
	33<C≤150	0.40	0.85	0.92	1.00
	150<C	0.60	0.85	0.96	1.00

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