

ALUMINUM ELECTROLYTIC CAPACITORS

Suntan®

CHIP TYPE SERIES

TS13C8

FEATURES

- 125°C 1,000 to 2,000 hours
- Designed for reflow soldering
- Designed for surface mounting on high-density PCB



Fig 1



Fig 2



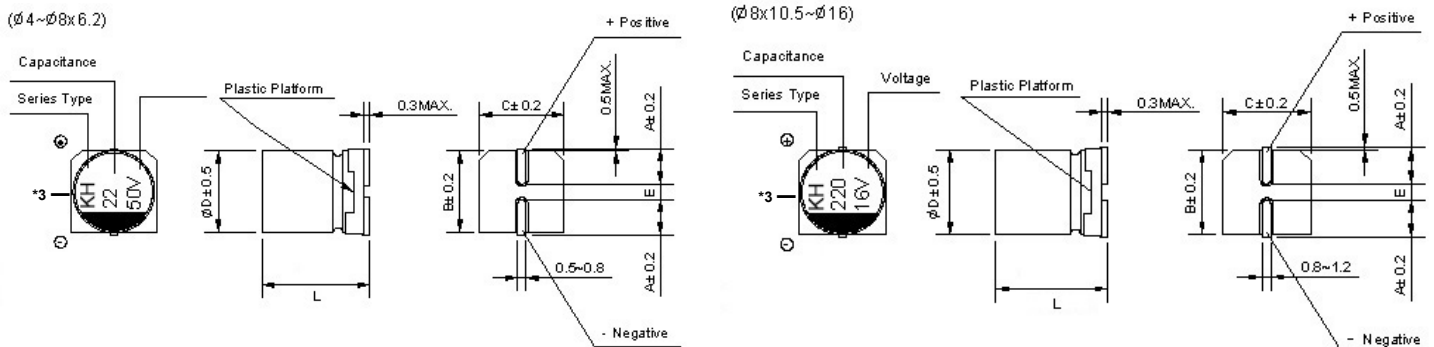
Fig 3

Note: Fig 1 & 2: Diameter 4~10mm Fig 3: Diameter: ≥12.5mm

◆ Specifications

I T E M S	C o n d i t i o n	S p e c i f i c a t i o n s						
		10	16	25	35	50	63	
Rated voltage (V)	-	10	16	25	35	50	63	
Surge voltage (V)	Room temperature	11.5	18.4	28.8	40.3	57.5	72.5	
Category temperature range (°C)	-	-40°C ~ +125°C						
Capacitance tolerance (%)	120Hz/20°C	M: ±20						
Dissipation Factor (Tan δ)	tanδ (max) 120Hz/20°C	0.32	0.24	0.21	0.18	0.15	0.15	
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	6	5	4	3	3
		-40°C	Z/Z20°C	12	8	6	4	4
Endurance	After applying rated working voltage for 1000/2000 hours at +125°C ± 2°C, and then being stabilized at +20°C capacitors shall meet the following limits.	Test	φD ≤ 8x6.5mm: 1000H, φD ≥ 8mm: 2000H					
		ΔC/C	Within ±30% of the initial value					
		tanδ	Less than 300% of the specified value					
		LC	Within the initial limit					
Shelf life	-	After storage for 1000 h at +125°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.	ΔC/C	Within ±10% of the initial value					
		tanδ	Within the initial limit					
		LC	Within the initial limit					

◆ Chip type



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

*3 Markings: Su8, KH, VH

	(mm)					
D×L	Φ6.3×5.8	Φ6.3×7.7	Φ8×6.5	Φ8×10.5	Φ10×10.5	Φ12.5×13.5
A	2.4	3.3	3.1	2.9	3.2	4.7
B	6.6	6.6	8.3	8.3	10.3	13.0
C	6.6	6.6	8.3	8.3	10.3	13.0
E±0.2	2.2	2.2	2.2 / 3.1	3.1	4.4	4.4
L	5.8±0.6	7.7±0.6	6.5±0.6	10.5±0.6	10.5±0.6	13.5±1.0

TS13C8

◆Ripple Current Frequency Coefficient

Frequency :F(Hz)		50Hz	120Hz	1kHz	10kHz \leq
Capacitance: C(μ F)	$C \leq 330\mu$ F	0.70	1.00	1.20	1.30
	$C > 330\mu$ F	0.80	1.00	1.10	1.20

◆ Standard size & Maximum permissible ripple current

WV Cap. (μ F)		10		16		25	
		1A		1C		1E	
33	330			6.3x5.8	50	6.3x5.8	50
47	470	6.3x5.8	50	6.3x7.7	70	6.3x7.7	70
100	101	8x6.5	75	8x6.5	75	8x10.5	130
220	221	8x10.5	130	10x10.5	180	10x10.5	180
330	331	8x10.5	130	12.5x13.5	480	12.5x13.5	480
470	471	12.5x13.5	480	12.5x13.5	480	12.5x13.5	480
680	681	12.5x13.5	480	12.5x13.5	480	Case Size	Ripple Current

Rated ripple current mArms (120Hz, 125°C)

◆ Standard size & Maximum permissible ripple current

WV Cap. (μ F)		35		50		63	
		1V		1H		1J	
10	100					8x6.5	60
22	220	6.3x5.8	50	8x6.5	75	8x10.5	100
33	330	6.3x7.7	70	8x10.5	130	10x10.5	150
47	470	8x6.5	75	8x10.5	130	10x10.5	150
100	101	10x10.5	180	12.5x13.5	357	12.5x13.5	300
220	221	12.5x13.5	357			Case Size	Ripple Current

Rated ripple current mArms (120Hz, 125°C)