

SMD Aluminum Electrolytic Capacitor – JCH

FEATURES

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

SPECIFICATIONS

Operating Temperature -40°C ~ +125°C
 Voltage Range 10V~63V.DC
 Capacitance Tolerance ±20% at 120Hz, 20°C
 Leakage Current The greater value of either 0.01CV or 3μA
 Condition: μA/after 2minutes (max)



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

Dissipation Factor (Tan δ)

Measurement Frequency: 120Hz, Temperature: 20°C, Exceeding 1,000μF, +0.02 every 1,000μF

Rated Voltage (V)	10	16	25	35	50	63
Surge voltage (V)	11.5	18.4	28.8	40.3	57.5	72.5
Tan δ (Max.)	0.32	0.24	0.21	0.18	0.15	0.15

Impedance Ratio at Low Temperature

Based on the value at 120Hz, +20°C

Rated Voltage (V)	10	16	25	35	50	63
Z(-25°C)/ Z(20°C)	6	5	4	3	3	3
Z(-40°C)/ Z(20°C)	12	8	6	4	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
Capacitance Change	Within ±30% of the initial value
Dissipation Factor	Less than 300% of the specified value
Leakage Current	Within the initial limit

Shelf Life

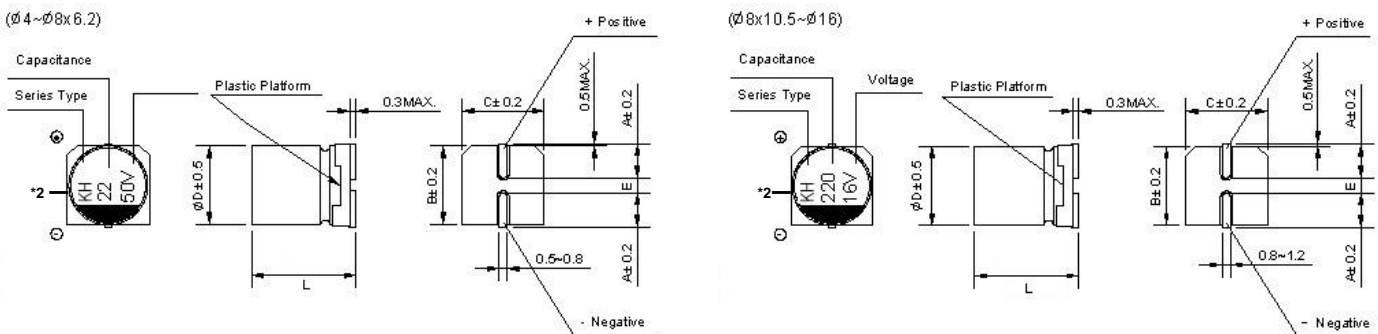
After storage for 1000h at +125°C ± 2°C with no voltage applied and then being stabilized at +20°C, capacitors shall meet the limits specified in endurance.

Resistance to Soldering Heat

After reflow soldering and then being stabilized at +20°C, capacitors shall meet the following limits.

Capacitance Change	Within ±10% of the initial value
Dissipation Factor	Within the initial limit
Leakage Current	Within the initial limit

DRAWING (Unit: mm)



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

*2 Surface Marking Types: jbH, KH, VH

DIMENSIONS(Unit: 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	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

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DIMENSIONS&MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV Cap. (μF)		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

WV Cap. (μF)		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)

Frequency coefficient of allowable ripple current

Frequency: F(Hz)		50Hz	120Hz	1kHz	10kHz≅
Capacitance: C (μF)	C≅330μF	0.70	1.00	1.20	1.30
	C>330μF	0.80	1.00	1.10	1.20