

Kingtronics®

GKT-VH

Aluminum Electrolytic Capacitor – SMD

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

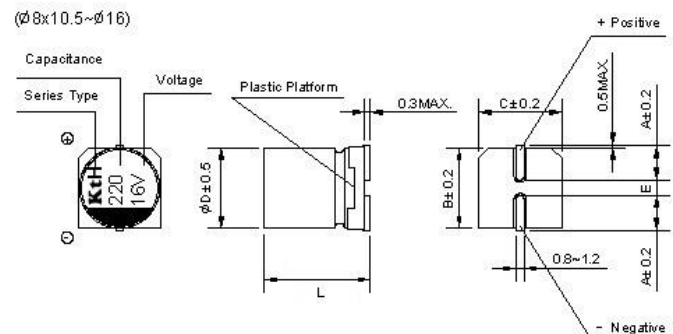
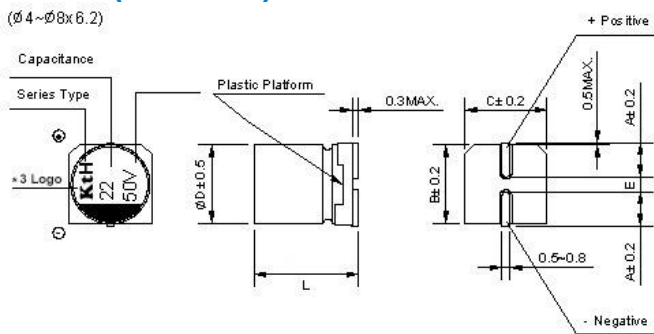
Note: Fig 1 & 2: Diameter 4 ~10mm

Fig 3 : Diameter: ≥12.5mm

SPECIFICATIONS

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	Test	φD ≅ 8x6.5mm: 1000H, φD ≅ 8mm: 2000H					
		Δ C/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 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.	Δ C/C	Within ±10% of the initial value					
		tanδ	Within the initial limit					
		LC	Within the initial limit					

DRAWING (Unit: mm)



*3 KtH logo mark for D:4mm & 5mm is [K] Product Markings: KtH, KH, VH
 *4 Voltage mark for 6.3V is [6V] or [6.3V]

DIMENSIONS(Unit: mm)

DxL	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

Kingtronics® International Company

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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

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

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)

Ripple Current Frequency Coefficient

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

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HOW TO ORDER

<u>GKT</u>	<u>VH</u>	<u>0J</u>	<u>M</u>	<u>220</u>	<u>040054</u>	<u>T</u>	<u>R</u>
Series	Sub Series	Voltage	Capacitance Tolerance	Capacitance	Case Size	Packing	Pb
		1.	2.	3.	4.	5.	6.

NOTE:**1. Rated Voltage**

Code	0G	0J	1A	1C	1E	1V	1H	1J	2A
Voltage	4	6.3	10	16	25	35	50	63	100

2. Capacitance Tolerance

Code	K	M	Q	T
Tolerance	±10%	±20%	+30-10%	+50-10%

3. Capacitance

Code	0R1	R47	010	4R7	100	470	101	471	102	472	103
Capacitance (µF)	0.1	0.47	1	4.7	10	47	100	470	1000	4700	10000

4. Case Size

Code	040054	050054	063054	080105	100105	125135	160215
Case Size (mm)	4x5.4	5x5.4	6.3x5.4	8x10.5	10x10.5	12.5x13.5	16x21.5

5. Packing

Code	T
Packing	Tape & Reel

6. Pb

Code	R
Pb	RoHS

Note: Specifications are subject to change without notice.

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