DISCONTINUED PRODUCTS

Kingtronics® GKT-VW

Aluminum Electrolytic Capacitor – SMD

FEATURES

- Life time 105℃ 10000hrs standard product
- Reflow soldering is available
- Available for high densify surface mounting
- High stability and reliability

SPECIFICATIONS

Category Temperature Range	-40℃ ~ +105℃								
Rated Voltage Range	6.3V ~ 450V.DC								
Capacitance Range	1 ~ 1000μF								
Capacitance Tolerance	± 20% (120Hz, +20℃)								
Leakage Current (MAX)	6.3V ~ 50V.DC				160V ~ 450V.DC				20℃
	I≦ 0.03CV (μA) or 4 (μA) whichever is greater (after 2 minutes)				I≦ 0.04CV + 100 (μA) (after 2 minutes)				
	I = Leakage Current (μA)	C = Nominal Capacitance (μF)			V = Rated Voltage (V)				
Dissipation Factor (MAX) Tan δ (20℃, 120Hz)	Rated Voltage (V)	6.3	10	16	25	35	50	160~250	400~450
	Tanδ	0.32	0.28	0.26	0.16	0.14	0.14	0.20	0.24
Load Life	In 105℃ degrees Celsius environment, continuous application of rated voltage for 10000 hours, after 16 hours was measured at room temperature, the capacitors shall meet the following requirements :								
	Rated Voltage (V)	6.3V ~ 50V				160V ~ 450V			
	Capacitance Change	Within ± 30% of the initial value				Within ± 20% of the initial value			
	Dissipation Factor	Not more than 300% of the specified value				Not more than 200% of the specified value			
	Leakage Current	Not more than the specified value				Not more than the specified value			
Shelf Life	In 105℃ degrees Celsius environment, without load for 1000 hours, after 16 hours was measured at room temperature, the capacitors shall meet the following requirements :								
	Rated Voltage (V)	6.3V ~ 50V				160V ~ 450V			
	Capacitance Change	Within ± 30% of the initial value				Within ± 20% of the initial value			
	Dissipation Factor	Not more than 300% of the specified value				Not more than 200% of the specified value			
	Leakage Current	Within 300% of initial specified value				Within 200% of initial specified value			
Resistance to Soldering Heat	The capacitors shall be kept on then hot plate maintained at 250℃ for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the following requirement:								
	Capacitance Change	Within ± 10% of initial value							
	Dissipation Factor	Not more than the initial specified value							
	Leakage Current	Not more than the initial specified value							
Low Temperature Stability Impedance Ratio (MAX) 120Hz	Rated Voltage (V)	6.3	10	16	25	35	50	160~250	400~450
	Z-25℃ / Z+20℃	4	3	2	2	2	2	6	6
	Z-40℃ / Z+20℃	10	8	6	4	3	3	10	18

DRAWING (Unit: mm)

Fig. 1 (Φ4 ~ Φ10)

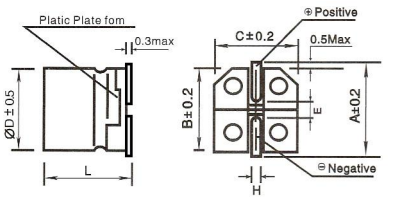
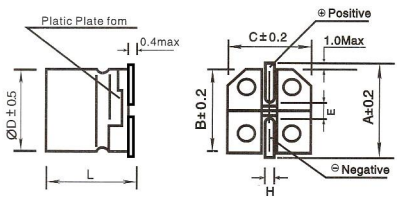
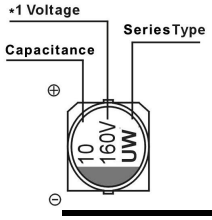


Fig. 2 (≥Φ12.5)





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

ΦD	L	A	B	C	E	H	Fig. No.
6.3	7.7±0.3	7.2	6.6	6.6	2.1	0.5~0.9	1
6.3	10.2±0.3	7.2	6.6	6.6	2.1	0.5~0.9	1
8	10.2±0.5	9.1	8.3	8.3	3.1	0.8~1.1	1
8	12.5±0.5	9.1	8.3	8.3	3.1	0.8~1.1	1
10	10.2±0.5	11.1	10.3	10.3	4.5	0.8~1.1	1
10	12.5±0.5	11.1	10.3	10.3	4.5	0.8~1.1	1
12.5	13.5±0.5	13.7	13.0	13.0	4.4	1.0~1.4	2
12.5	16±0.5	13.7	13.0	13.0	4.4	1.0~1.4	2
16	16.5±0.5	18.0	17.0	17.0	6.4	1.0~1.4	2
16	21.5±0.5	18.0	17.0	17.0	6.4	1.0~1.4	2
18	16.5±0.5	20.0	19.0	19.0	6.4	1.0~1.4	2
18	21.5±0.5	20.0	19.0	19.0	6.4	1.0~1.4	2

Kingtronics® GKT-VW

Aluminum Electrolytic Capacitor – SMD

MULTIPLIER FOR RIPPLE CURRENT

Frequency Coefficient

Frequency	120Hz	1kHz	10kHz	100kHz
Coefficient	1.00	1.60	1.80	2.00

STANDARD RATINGS

WV	6.3			10			16			25			35			50		
μF	DxL	Tan δ	mA	DxL	Tan δ	mA	DxL	Tan δ	mA	DxL	Tan δ	mA	DxL	Tan δ	mA	DxL	Tan δ	mA
10	--	--	--	--	--	--	--	--	--	--	--	--	6.3x7.7	0.14	31	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--	--	6.3x7.7	0.14	43	--	--	--
33	--	--	--	--	--	--	--	--	--	6.3x7.7	0.16	48	--	--	--	8x10.2	0.14	79
47	--	--	--	--	--	--	6.3x7.7	0.26	50	--	--	--	8x10.2	0.14	90	8x10.2	0.14	95
100	6.3x7.7	0.32	60	--	--	--	--	--	--	8x10.2	0.16	119	8x10.2	0.14	132	10x10.2	0.14	155
220	--	--	--	8x10.2	0.28	145	8x10.2	0.26	159	--	--	--	10x10.2	0.14	220	--	--	--
330	8x10.2	0.32	165	--	--	--	8x10.2	0.26	194	--	--	--	--	--	--	--	--	--
470	8x10.2	0.32	196	--	--	--	10x10.2	0.26	260	--	--	--	--	--	--	--	--	--
1000	10x10.2	0.32	315	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

WV	160			200			250			400			450		
μF	DxL	Tan δ	mA	DxL	Tan δ	mA	DxL	Tan δ	mA	DxL	Tan δ	mA	DxL	Tan δ	mA
1							6.3x10.5	0.20	20	6.3x10.5	0.24	17	8x10.2	0.24	20
2.2							6.3x10.5	0.20	31	8x10.2	0.24	30	10x10.2	0.24	35
3.3							8x10.2	0.20	43	10x10.2	0.24	39	10x10.2	0.24	38
4.7				8x10.2	0.20	53	8x10.2	0.20	52	10x10.2	0.24	56	10x10.2	0.24	59
5.6				8x10.2	0.20	58	8x12.5	0.20	62	10x10.2	0.24	66	12.5x13.5	0.24	75
6.8	8x10.2	0.20	68	8x10.2	0.20	64	10x10.2	0.20	72	12.5x13.5	0.24	72			
8.2	10x10.2	0.20	85	8x12.5	0.20	77	10x12.5	0.20	85						
10	10x10.2	0.20	95	12.5x13.5	0.20	110	12.5x13.5	0.20	110						
12	10x10.2	0.20	104	12.5x13.5	0.20	125	12.5x13.5	0.20	120						
15	12.5x13.5	0.20	140	12.5x13.5	0.20	140									

Rated ripple current (mA, 105℃, 120Hz)

HOW TO ORDER

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

NOTE:

1. Rated Voltage

Code	0J	1A	1C	1E	1V	1H	2C	2D	2E	2G	2W
Voltage	6.3	10	16	25	35	50	160	200	250	400	450

2. Capacitance Tolerance

Code	K	M
Tolerance	±10%	±20%

3. Capacitance

Code	010	2R2	3R3	4R7	5R6	6R8	8R2	100	120	150	220	101	102
Capacitance (µF)	1	2.2	3.3	4.7	5.6	6.8	8.2	10	12	15	22	100	1000

4. Case Size

Code	063077	063105	080102	080125	100102	100125
Case Size (mm)	6.3x7.7	6.3x10.5	8x10.2	8x12.5	10x10.2	10x12.5
Code	125135	125160	160165	160215	180165	180215
Case Size (mm)	12.5x13.5	12.5x16	16x16.5	16x21.5	18x16.5	18x21.5

5. Packing

Code	T
Packing	Tape & Reel

6. Pb

Code	R
Pb	RoHS

Note: Specifications are subject to change without notice.