

# Kingtronics®

# GKT-VY

## Aluminum Electrolytic Capacitor – SMD

### FEATURES

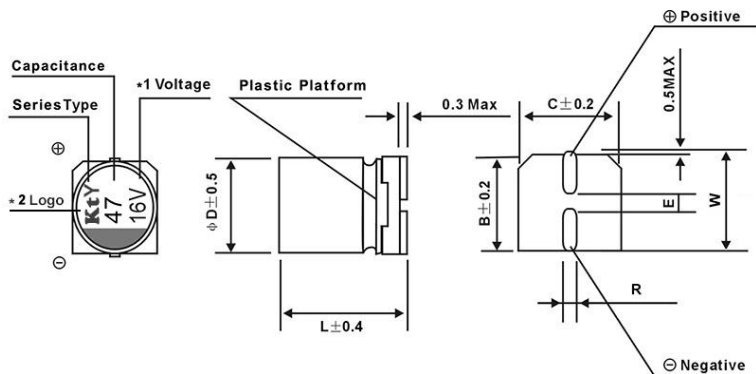
- ◆ Endurance : 105°C 2000H
- ◆ High rated ripple current, Extra Low Impedance
- ◆ Designed for reflow soldering
- ◆ Designed for surface mounting on high-density PCB



### SPECIFICATIONS

Rated Voltage (V)	-	6.3	10	16	25	35	50		
Surge Voltage (V)	Room temperature	7.3	11.5	18.4	28.8	40.3	57.5		
Category Temperature Range (°C)	-	-55 to +105							
Capacitance Tolerance (%)	120Hz/20°C	M : ±20							
Dissipation Factor (Tan δ)	tan δ (max) 120Hz/20°C	0.32	0.21	0.18	0.14	0.12	0.10		
Leakage Current (LC)	µA/after 2minutes (max)	I ≅ 0.01 CV or 3 µA whichever is greater							
Impedance Ratio at Low Temperature	Based on the value at 120Hz, +20°C	-25°C	Z/Z20°C	4	3	2	2	2	2
		-55°C	Z/Z20°C	8	5	4	3	3	3
Endurance	After applying rated working voltage for 2000H at +105°C ±2°C, and then being stabilized at +20°C, capacitors shall meet the following limits.	Δ C/C	Within ±30% of the initial value						
		tanδ	Less than 300% of the initial value						
		LC	Within the initial limit						
Shelf Life	-	After storage for 1000H at +105°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)



ΦDxL	6.3x5.8	6.3x7.7	8x6.5	8x10.5	10x10.5	10x13.5
B	6.6	6.6	8.3	8.3	10.3	10.3
C	6.6	6.6	8.3	8.3	10.3	10.3
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
R	0.5 to 0.8	0.5 to 0.8	0.7 to 1.2	0.7 to 1.2	0.7 to 1.2	0.7 to 1.2
W	7.3	7.3	9.2	9.2	11.2	11.2

\*1 Voltage mark for 6.3V is [6V] or [6.3V] \*2 Kt logo mark for D:4mm & 5mm is [K] Product Markings: KtY, RZ

Please visit our website to get more update data, those data & specification are subject to change without notice.

**Kingtronics® International Company**

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Aluminum Electrolytic Capacitor – SMD

**FREQUENCY COEFFICIENT OF ALLOWABLE RIPPLE CURRENT**

Frequency	50Hz	120Hz	1kHz	10kHz $\leq$
Capacitance: C( $\mu$ F)	0.60	0.70	0.85	1.00

**DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT&ESR**

WV uF Parameter		6.3			10			16		
		0J			1A			1C		
47	470							6.3x5.8	0.36	300
68	680							6.3x5.8	0.36	300
100	101	6.3x5.8	0.36	300				6.3x5.8 (6.3x7.7)	0.36 (0.26)	300 (300)
150	151				6.3x5.8	0.36	300	6.3x7.7	0.26	600
220	221	6.3x5.8	0.36	300	6.3x7.7 (8x6.5)	0.26 (0.26)	600 (500)	6.3x7.7 (8x6.5)	0.26 (0.26)	600 (500)
330	331	6.3x7.7 (8x6.5)	0.26 (0.26)	600 (500)	8x10.5	0.14	850	8x10.5	0.14	850
470	471	8x10.5	0.14	850	8x10.5	0.14	850	8x10.5	0.14	850
680	681	8x10.5	0.14	850	8x10.5	0.14	850	10x10.5	0.08	1190
820	821							10x10.5	0.08	1190
1000	102				10x10.5	0.08	1190	10x10.5	0.08	1190
1500	152	10x10.5	0.08	1190	10x13.5	0.08	1190			
2200	222	10x13.5	0.08	1190				Case size: $\Phi$ DxL(mm)	ESR ( $\Omega$ ) max at 100kHz, 20 $^{\circ}$ C	Rated ripple current mArms (100kHz,105 $^{\circ}$ C)

WV uF Parameter		25			35			50		
		1E			1V			1H		
33	330	6.3x5.8	0.36	300	6.3x5.8	0.36	300			
47	470	6.3x5.8	0.36	300	6.3x5.8	0.36	300			
68	680	6.3x5.8	0.36	300	6.3x7.7	0.26	600			
100	101	6.3x7.7 (8x6.5)	0.26 (0.26)	600 (500)	6.3x7.7 (8x10.5)	0.26 (0.14)	600 (850)	8x10.5	0.24	670
150	151	8x10.5	0.14	850	8x10.5	0.14	850			
220	221	8x10.5	0.14	850				10x10.5	0.14	900
330	331				10x10.5	0.08	1190			
390	391				10x10.5	0.08	1190			
470	471	10x10.5	0.08	1190						
560	561	10x10.5	0.08	1190				Case size: $\Phi$ DxL(mm)	ESR ( $\Omega$ ) max at 100kHz, 20 $^{\circ}$ C	Rated ripple current mArms (100kHz,105 $^{\circ}$ C)

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## Aluminum Electrolytic Capacitor – SMD

### HOW TO ORDER

<u>GKT</u>	<u>VY</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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