

# Kingtronics®

# GKT-SC

## Aluminum Electrolytic Capacitor – Snap-in

### FEATURES

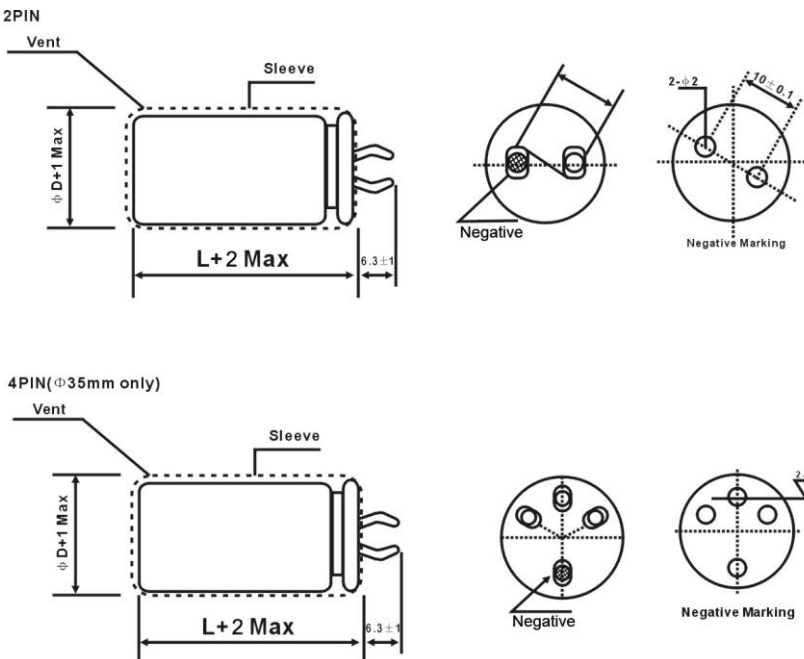
- ◆ Load life of 5000 hours at 85°C, equal to 80000 hours (9 years) at 45°C
- ◆ Smaller size
- ◆ High ripple current
- ◆ PCB Mounting



### SPECIFICATIONS

OPERATING TEMPERATURE RANGE (°C)	10V~100V: -40°C+85°C		160V~450V: -25°C~+85°C						
CAPACITANCE TOLERANCE (25°C, 120Hz)	±20%								
LEAKAGE CURRENT (µA)	0.01CV or 1.5mA whichever is smaller. (25°C, after 5 minutes) C: Nominal Capacitance (µF) V: Rated Voltage (V)								
DISSIPATION FACTOR (25°C, 120Hz)	Rated Voltage (V)	10	16	25	35	50	63~100	160~250	315~450
	Tan δ (Max)	0.80	0.60	0.50	0.40	0.30	0.20	0.15	0.15
TEMPERATURE STABILITY (120Hz)	Rated Voltage (V)		10	16~35	50~100	160~200	250~400	450	
	Impedance Ratio	Z-25°C/Z+20°C	5	4	3	3	4	4	
		Z-40°C/Z+20°C	18	15	10	6	8	--	
LOAD LIFE (+85°C)	Time	5000hours							
	Leakage Current	Not more than the specified value.							
	Capacitance Change	Within±20% of the initial value							
	Dissipation Factor	Not more than 200% of the specified value.							
SHELF LIFE (+85°C)	After storage for 1000hours at 85°C with no voltage applied, the capacitor shall meet the specified limits for "Load Life" after test: U <sub>R</sub> to be applied for 60 minutes, 24 to 48 hours before measurement.								

### DIMENSIONS (mm)



### MULTIPLIER FOR RIPPLE CURRENT

Frequency Coefficient					
Frequency(Hz)	50	120	1K	10K	20K
Rated Voltage(V) ≤50	0.95	1	1.10	1.15	1.15
63~100	0.95	1	1.16	1.30	1.33
≥160	0.90	1	1.20	1.50	1.55

Temperature Coefficient					
Temperature(°C)	+40	+55	+70	+85	
Rated Voltage (V) <160	2.1	1.9	1.5	1.0	
≥160	1.7	1.5	1.3	1.0	

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### STANDARD RATINGS

WV(V) / DxL (mm)	10		16		25		35		50		63		80		100	
	Cap	Ripple	Cap	Ripple	Cap	Ripple	Cap	Ripple	Cap	Ripple	Cap	Ripple	Cap	Ripple	Cap	Ripple
	uF	Arms	uF	Arms	uF	Arms	uF	Arms	uF	Arms	uF	Arms	uF	Arms	uF	Arms
22x25	10000	2.5	8200	2.2	5600	2.0	3300	1.8	2200	1.7	1500	1.6	1000	1.3	680	1.1
22x30	15000	3.2	10000	2.6	6800	2.3	3900	2.1	2700	1.9	2200	2.0	1200	1.5	820	1.2
22x35	18000	3.6	12000	2.9	8200	2.6	5600	2.3	3900	2.1	2700	2.2	1800	1.9	1200	1.6
22x40	22000	4.0	15000	3.3	10000	2.9	6800	2.9	4700	2.4	3300	2.3	2200	2.1	1500	1.8
22x45	--	--	18000	3.8	12000	3.3	--	--	--	--	3900	2.5	--	--	--	--
22x50	--	--	22000	4.2	--	--	8200	2.8	5600	2.5	--	--	2700	2.5	1800	2.1
25x25	15000	3.1	10000	2.6	6800	2.3	4700	2.2	2700	1.9	2200	2.0	1500	1.7	1000	1.4
25x30	18000	3.6	15000	3.3	10000	2.8	5600	2.3	3900	2.1	2700	2.3	1800	1.9	1200	1.6
25x35	22000	4.1	18000	3.7	12000	3.2	6800	2.6	4700	2.4	3300	2.3	2200	2.2	1500	1.7
25x40	--	--	22000	4.2	15000	3.7	8200	2.8	5600	2.5	3900	2.6	2700	2.5	1800	2.0
25x45	--	--	--	--	--	--	10000	3.1	6800	2.8	5600	3.1	3300	2.8	2200	2.2
25x50	--	--	--	--	18000	4.3	12000	3.5	8200	3.2	--	--	3900	3.1	2700	2.6
30x25	22000	4.1	15000	3.4	10000	3.0	6800	2.7	3900	2.4	3300	2.3	2200	2.2	1500	1.8
30x30	--	--	22000	4.2	12000	3.4	8200	2.8	5600	2.5	3900	2.6	2700	2.5	1800	2.1
30x35	--	--	--	--	18000	4.2	10000	3.2	6800	2.8	5600	3.2	3300	2.8	2200	2.3
30x40	--	--	--	--	22000	4.8	12000	3.5	8200	3.0	6800	3.6	3900	3.2	2700	2.7
30x45	--	--	--	--	--	--	15000	4.1	10000	3.4	--	--	4700	3.6	3300	3.0
30x50	--	--	--	--	--	--	18000	4.6	12000	3.8	8200	3.7	5600	3.5	3900	3.4
35x25	--	--	22000	4.4	15000	3.9	8200	2.9	5600	2.6	3900	2.7	2700	2.5	1800	2.2
35x30	--	--	--	--	18000	4.4	12000	3.6	8200	3.0	5600	3.3	3900	3.2	2200	2.5
35x35	--	--	--	--	22000	5.0	15000	4.1	10000	3.4	6800	3.7	4700	3.6	3300	3.1
35x40	--	--	--	--	--	--	18000	4.7	12000	3.8	8200	3.8	5600	3.5	3900	3.4
35x45	--	--	--	--	--	--	22000	5.3	--	--	10000	4.3	--	--	--	--
35x50	--	--	--	--	--	--	--	--	15000	4.5	12000	4.8	6800	4.4	4700	4.0

WV(V) / DxL (mm)	160		180		200		250		315		350		400		450	
	Cap	Ripple	Cap	Ripple	Cap	Ripple	Cap	Ripple	Cap	Ripple	Cap	Ripple	Cap	Ripple	Cap	Ripple
	uF	Arms	uF	Arms	uF	Arms	uF	Arms	uF	Arms	uF	Arms	uF	Arms	uF	Arms
22x25	330	1.3	270	1.2	220	1.1	180	0.94	100	0.67	82	0.64	68	0.55	--	--
22x30	390	1.5	330	1.4	330	1.4	220	1.1	150	0.85	120	0.82	100	0.70	68	0.57
22x35	560	1.9	470	1.7	390	1.6	270	1.2	180	0.96	150	0.94	120	0.79	100	0.72
22x40	680	2.1	560	1.9	470	1.8	330	1.4	220	1.1	180	1.1	150	0.90	120	0.80
22x45	--	--	--	--	560	2.0	390	1.6	270	1.2	220	1.2	180	1.0	--	--
22x50	820	2.5	680	2.3	--	--	470	1.8	--	--	--	--	220	1.1	150	0.95
25x25	390	1.5	390	1.5	330	1.4	220	1.1	150	0.85	120	0.81	100	0.70	--	--
25x30	560	1.9	470	1.7	390	1.6	330	1.4	180	0.96	150	0.94	150	0.89	100	0.73
25x35	680	2.2	560	2.0	560	2.0	390	1.6	220	1.1	220	1.2	180	1.0	120	0.83
25x40	820	2.4	680	2.2	680	2.3	470	1.8	270	1.3	--	--	220	1.2	150	0.95
25x45	1000	2.7	820	2.5	--	--	560	2.0	330	1.4	270	1.4	270	1.3	180	1.1
25x50	1200	3.1	1000	2.9	820	2.6	--	--	390	1.6	330	1.6	--	--	220	1.2
30x25	560	2.0	470	1.8	470	1.9	330	1.5	220	1.1	180	1.1	150	0.95	--	--
30x30	820	2.5	680	2.3	560	2.1	470	1.8	270	1.3	220	1.2	180	1.1	150	0.98
30x35	1000	2.8	820	2.6	680	2.4	560	2.0	330	1.4	270	1.4	220	1.2	180	1.1
30x40	1200	3.2	1000	2.9	820	2.7	680	2.3	390	1.6	390	1.7	270	1.4	220	1.3
30x45	1500	3.7	1200	3.3	1000	3.1	820	2.6	470	1.8	470	2.0	330	1.6	270	1.4
30x50	--	--	--	--	1200	3.4	--	--	560	2.0	--	--	390	1.8	--	--
35x25	820	2.4	680	2.2	560	2.0	470	1.9	270	1.3	220	1.3	180	1.2	180	1.2
35x30	1000	2.7	820	2.5	820	2.5	680	2.4	390	1.6	330	1.6	270	1.5	220	1.3
35x35	1200	3.0	1200	3.1	1000	2.8	820	2.6	470	1.8	390	1.8	330	1.7	270	1.5
35x40	1500	3.5	--	--	1200	3.2	1000	3.0	560	2.0	470	2.0	390	1.8	--	--
35x45	1800	3.9	1500	3.6	--	--	1200	3.4	680	2.3	560	2.3	470	2.1	390	1.9
35x50	2200	4.5	1800	4.1	1500	3.8	--	--	--	--	680	2.6	560	2.3	470	2.2

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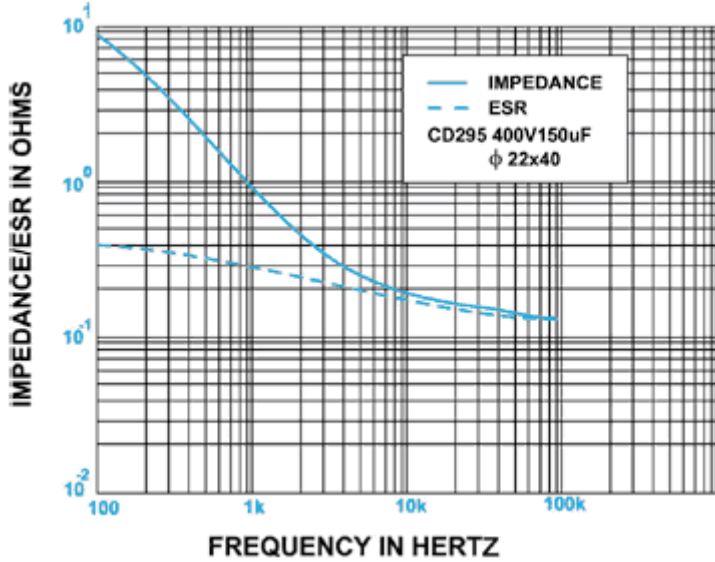
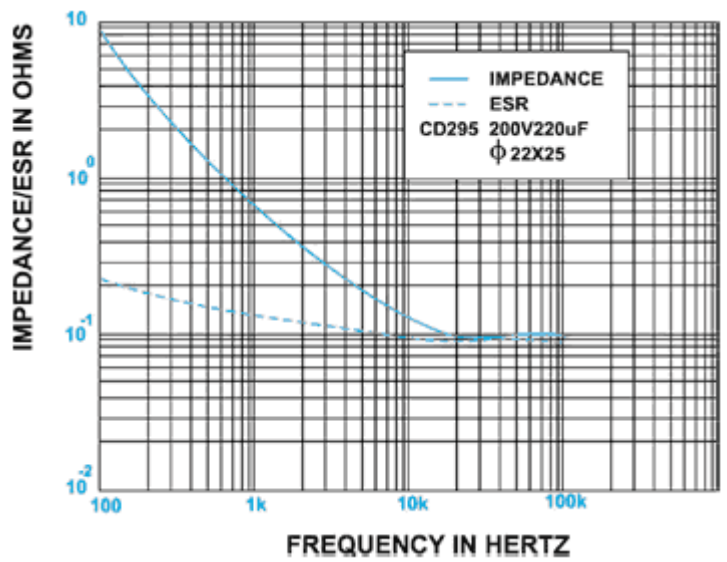
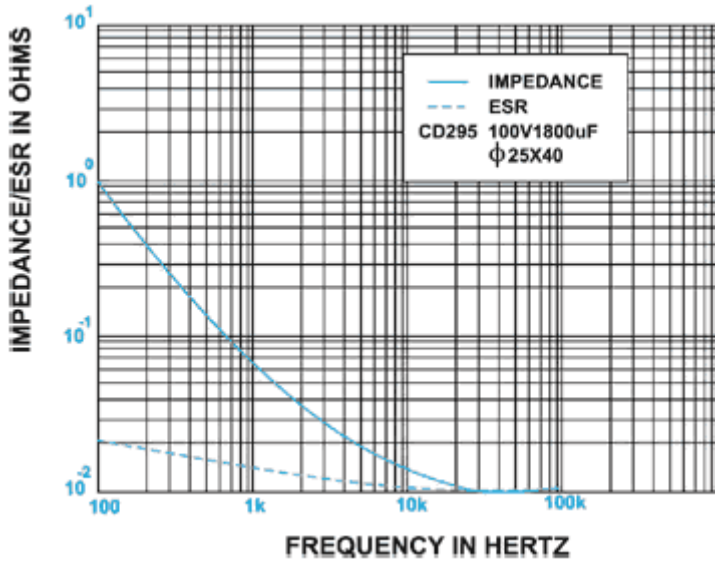
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## TYPICAL CURVES



**Kingtronics® International Company**

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## Aluminum Electrolytic Capacitor – Snap-in

### HOW TO ORDER

<u>GKT</u>	<u>SC</u>	<u>0J</u>	<u>0R1</u>	<u>M</u>	<u>00500110</u>	<u>020</u>	<u>000</u>	<u>B</u>	<u>R</u>
Series	Sub Series	Rated Voltage	Capacitance	Capacitance Tolerance	Dimension	Pitch/Pins	Lead Length	Packing	Pb
		1.	2.	3.	4.	5.	6.	7.	8.

### NOTE:

#### 1. Rated Voltage

Code	0J	1A	1C	1D	1E	1V	1G	1H	1J	1K
Voltage	6.3V	10V	16V	20V	25V	35V	40V	50V	63V	80V

Code	2A	2B	2C	2K	2D	2E	2F	2U	2V	2G	2X	2W	2H	2Y
Voltage	100V	120V	160V	180V	200V	250V	315V	330V	350V	400V	420V	450V	500V	550V

#### 2. Capacitance

Code	0R1	R22	R33	R47	010	2R2	3R3	4R7	100	220	330	470	101
Capacitance (µF)	0.1	0.22	0.33	0.47	1	2.2	3.3	4.7	10	22	33	47	100

Code	221	271	331	391	471	561	681	102	222	332	472	103	223
Capacitance (µF)	220	270	330	390	470	560	680	1000	2200	3300	4700	10000	22000

#### 3. Capacitance Tolerance

Code	K	L	M	P	Q	R	T	U	V	H	F
Tolerance	±10%	±15%	±20%	+100-0%	+30-10%	+20-0%	+50-10%	+75-10%	+20-10%	+20-5%	+30-0

#### 4. Dimension

Code	00500110	00630120	01250200	01600300	03500450
Dimension (mm)	5x11	6.3x12	12.5x20	16x30	35x45

#### 5. Pitch/Pins

Code	020	025	035	050	075	100	127	4pins
Pitch (mm)/ Pins	2.0	2.5	3.5	5.0	7.5	10.0	12.7	4PS

#### 6. Lead Length

Code	000	040	045	050
Lead Length	Standard	4.0	4.5	5.0

#### 7. Packing

Code	A	B
Packing	Ammo	Bulk

#### 8. Pb

Code	L	R
Pb	Leaded	RoHS

Note: Specifications are subject to change without notice.

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