

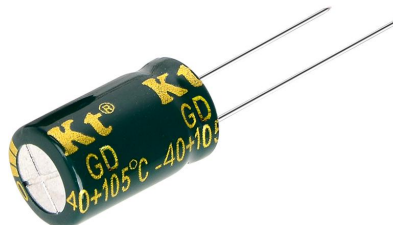
# Kingtronics®

# GKT-GD

## Aluminum Electrolytic Capacitor— Radial

### FEATURES

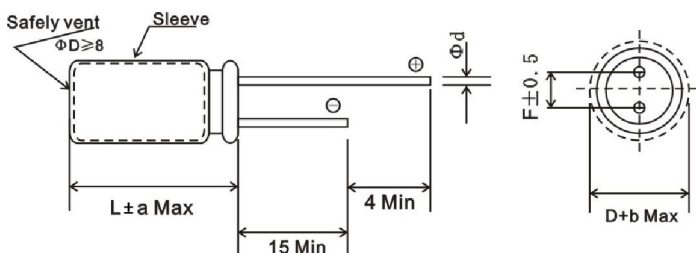
- ◆ Miniaturized, high stability, long life.
- ◆ Ensure life: 105°C 6000 hours.
- ◆ Extremely designed for LED lamps, LED driver.



### SPECIFICATIONS

OPERATING TEMPERATURE RANGE (°C)	-40°C ~ +105°C (160V~400V) ; -25°C~+105°C (450V~500V)							
Capacitance Range (µF)	1µF ~ 150µF							
Rated Voltage Range (V)	160V ~ 500V							
CAPACITANCE TOLERANCE (+20°C, 120Hz)	±20%							
LEAKAGE CURRENT (µA)	160V ~ 400V I ≤ 0.02CV +10µA		450V ~ 500V I ≤ 0.03CV +10µA		I: Leakage Current (µA)		C: Nominal Capacitance (µF)	
DISSIPATION FACTOR (+20°C, 120Hz)	Wv (V)	160	200	250	350	400	450	500
	Tan δ	0.15	0.15	0.15	0.20	0.20	0.20	0.24
Temperature Characteristics (Impedance ratio at 120Hz)	U <sub>R</sub> (V)	160	200	250	350	400	450	500
	Z-25°C/+20°C	3	3	3	5	5	6	6
	Z-40°C/+20°C	6	6	6	6	6	---	---
LOAD LIFE	After application of DC voltage with rated ripple current (the voltage peak is not more than rated voltage) at 105°C 6,000 hours, measuring the parameters when the capacitors are restored to 20°C, the capacitors shall meet the requirements as below: Capacitance Change: ±20% of the initial measured value Leakage current: ≤the initial specified value Dissipation factory: ≤200% of the initial specified value							
SHELF LIFE	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours at +105°C without voltage application. Capacitance Change: ±20% of the initial measured value Leakage current: ≤200% of the initial specified value Dissipation factory: ≤200% of the initial specified value							

### DIMENSIONS (mm)



ΦD	6.3	8	10	13	16	18	22
F	2.5	3.5	5.0	5.0	7.5	7.5	10
Φd ±0.05	0.5	0.5	0.6	0.6	0.6	0.8	0.8

a Max.	D<18	D=18		D>18
		L<35.5	L≥35.5	
	+1.5 -1.0	+1.5 -1.0	+2.0 -1.0	+2.0 -1.0

b Max.	(D<18)	0.5
	(D≥18)	1.0

### MULTIPLIER FOR RIPPLE CURRENT

Frequency Coefficient					
Frequency (Hz)	120	1K	10K	100K	
Coefficient	160-500	0.5	0.8	0.9	1.00

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### STANDARD RATINGS

Rated Voltage (Vdc)	Capacitance (µF)	Size ØDxL (mm)	tan δ	Rated ripple current (mArms) 105°C/100KHz
160V	1	6.3x12	0.15	40
	1.5	6.3x12	0.15	50
	1.8	6.3x12	0.15	56
	2.2	6.3x12	0.15	60
	2.8	6.3x12	0.15	65
	3.3	6.3x12	0.15	68
	4.7	6.3x12	0.15	72
	5.6	8x12	0.15	76
	6.8	8x12	0.15	96
	10	8x12	0.15	206
		8x16	0.15	216
	15	8x16	0.15	225
		8x20	0.15	360
	22	10x16	0.15	360
	33	10x20	0.15	450
47	10x20	0.15	500	
68	13x20	0.15	600	
	13x25	0.15	722	
100	16x20	0.15	722	
150	16x25	0.15	798	
200V	1	6.3x12	0.15	42
	1.5	6.3x12	0.15	54
	1.8	6.3x12	0.15	60
	2.2	6.3x12	0.15	68
	2.8	6.3x12	0.15	71
	3.3	6.3x12	0.15	78
	4.7	6.3x12	0.15	85
	5.6	8x12	0.15	98
	6.8	8x16	0.15	103
	10	8x16	0.15	216
		8x16	0.15	225
	15	8x20	0.15	250
		8x20	0.15	380
	22	10x16	0.15	380
	33	10x20	0.15	450
47	13x20	0.15	580	
68	13x25	0.15	665	
100	16x25	0.15	760	
150	16x30	0.15	895	
250V	1	6.3x12	0.15	46
	1.5	6.3x12	0.15	58
	1.8	6.3x12	0.15	62
	2.2	6.3x12	0.15	70
	2.8	6.3x12	0.15	78
	3.3	6.3x12	0.15	80
	4.7	8x12	0.15	102
	5.6	8x12	0.15	105
	6.8	8x16	0.15	115
	8.2	8x16	0.15	120
	10	8x16	0.15	216
	15	8x20	0.15	250
	22	10x16	0.15	380
	33	13x20	0.15	470
	47	13x20	0.15	580
	13x25	0.15	600	
68	16x25	0.15	720	
100	16x30	0.15	836	
150	16x35	0.15	978	
350V	1	6.3x12	0.20	50
	1.5	6.3x12	0.20	60
	1.8	6.3x12	0.20	64
	2.2	6.3x12	0.20	70
	2.8	8x12	0.20	80
	3.3	8x12	0.20	82
	4.7	8x12	0.20	102
	5.6	8x16	0.20	110
	6.8	8x20	0.20	128

Rated Voltage (Vdc)	Capacitance (µF)	Size ØDxL (mm)	tan δ	Rated ripple current (mArms) 105°C/100KHz
350V	8.2	8x20	0.20	144
	10	8x20	0.20	226
	15	10x20	0.20	285
	22	13x20	0.20	410
	33	13x25	0.20	480
	47	16x20	0.20	600
	68	18x20	0.20	720
	100	18x30	0.20	900
	1	6.3x12	0.20	59
	1.2	6.3x12	0.20	63
1.5	8x12	0.20	72	
1.8	8x12	0.20	75	
2.2	6.3x12	0.20	72	
	8x12	0.20	78	
2.8	8x16	0.20	85	
3.3	8x12	0.20	91	
	8x16	0.20	95	
4.7	8x12	0.20	104	
	8x16	0.20	110	
5.6	8x20	0.20	138	
	10x16	0.20	138	
6.8	8x20	0.20	148	
	10x16	0.20	148	
8.2	10x16	0.20	218	
	10x20	0.20	230	
10	10x16	0.20	226	
	10x20	0.20	238	
15	13x20	0.20	300	
22	13x25	0.20	420	
	16x20	0.20	420	
33	16x25	0.20	550	
	16x30	0.20	579	
47	12.5x40	0.20	630	
	16x30	0.20	637	
68	18x30	0.20	760	
100	18x40	0.20	1100	
450V	1	8x12	0.20	60
	1.5	8x12	0.20	70
	1.8	8x12	0.20	72
	2.2	8x16	0.20	75
	2.8	8x16	0.20	79
	3.3	8x16	0.20	86
	4.7	8x20	0.20	99
	5.6	10x16	0.20	115
	6.8	10x20	0.20	158
	8.2	10x20	0.20	209
	10	10x20	0.20	225
	15	13x20	0.20	332
	22	13x25	0.20	427
	33	10x45	0.20	510
		16x25	0.20	522
47	13x45	0.20	660	
	16x35	0.20	700	
68	18x30	0.20	769	
100	18x40	0.20	950	
500V	10	13x20	0.24	259
		13x25	0.24	272
	15	13x25	0.24	356
		16x20	0.24	356
	22	13x35	0.24	453
		16x25	0.24	453
	33	18x25	0.24	567
	47	18x30	0.24	713
68	22x35	0.24	1000	
100	22x35	0.24	1400	

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### HOW TO ORDER

<b>GKT</b>	<b>GD</b>	<b>0J</b>	<b>0R1</b>	<b>M</b>	<b>00500110</b>	<b>020</b>	<b>000</b>	<b>B</b>	<b>R</b>
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	01300200	01600300	03500450
Dimension (mm)	5x11	6.3x12	13x20	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.

**Kingtronics® International Company**

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