

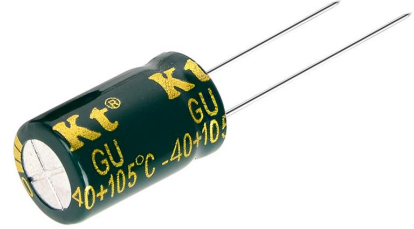
# Kingtronics®

# GKT-GU

## Aluminum Electrolytic Capacitor— Radial

### FEATURES

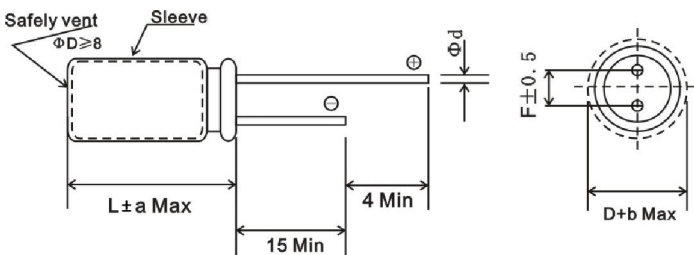
- ◆ Wide temperature range, 105°C, long life: 3000 hours, Miniature.
- ◆ Used in DVD, Color-TV, Air conditioning electron gas meter circuits, etc.



### SPECIFICATIONS

OPERATING TEMPERATURE RANGE (°C)	-40°C ~ +105°C		-25°C ~ +105°C													
Rated Voltage Range (V)	6.3V ~ 100V		160V ~ 450V													
Capacitance Range (μF)	0.1μF ~ 22000μF															
CAPACITANCE TOLERANCE (+20°C, 120Hz)	±20%															
LEAKAGE CURRENT (μA) (+20°C, max)	I ≤ 0.01CV or 3μA (after 2 minutes, whichever is greater)		I ≤ 0.03CV(μA) + 40μA (2 minutes)													
DISSIPATION FACTOR (+20°C, 120Hz)	U <sub>R</sub> (V)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	
	tgδ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.15	0.15	0.15	0.20	0.20	0.20	
Temperature Characteristics (Impedance ratio at 120Hz)	When nominal capacitance exceeds 1000μF, add 0.02 to the value above for each 1000μF increase.															
	U <sub>R</sub> (V)	6.3	10	16	25	35	50	63	100	160 ~ 250	350 ~ 400	450				
	Z-25°C/+20°C	5	4	3			3			3	6					
Z-40°C/+20°C	12	10	8	5	4	3			--	--						
LOAD LIFE	After applying rated voltage with specified ripple current for 3000 hours at 105°C and then resumed 24 hours: Capacitance Change: ±20% of the initial measured value Leakage current: ≤the initial specified value Dissipation factory: ≤200% of the initial specified value															
SHELF LIFE	After storage for 1000 hours at +105°C, U <sub>R</sub> to be applied for 30 minutes and then resumed 24 hours: Capacitance Change: ±20% of the initial measured value Leakage current: the initial specified value Dissipation factory: ≤200% of the initial specified value															

### DIMENSIONS (mm)



ΦD	5	6.3	8	10	12.5	16	18
F	2.0	2.5	3.5	5.0		7.5	
Φd ±0.05	0.5		0.6		0.8		

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

b Max.	(D<18)	0.5
	(D≥18)	1.0

### MULTIPLIER FOR RIPPLE CURRENT

Frequency Coefficient							
Frequency (Hz)	50(60)	120	300	1K	10K	100K	
Cap (μF)							
CAP ≤ 10	0.65	1.0	1.35	1.75	2.30	2.50	
10 < CAP ≤ 100	0.75	1.0	1.25	1.50	1.75	1.80	
100 < CAP ≤ 1000	0.8	1.0	1.15	1.30	1.40	1.50	
1000 < CAP	0.85	1.0	1.03	1.05	1.08	1.08	

Temperature Coefficient				
Temperature (°C)	+70	+85	+105	
Rated Voltage (V)				
6.3 ~ 100	2.0	1.7	1.0	
160 ~ 450	1.8	1.4	1.0	

**Kingtronics® International Company**

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### STANDARD RATINGS

Cap(μF) \ V	6.3V		10V		16V		25V		35V		50V	
0.10	--	--	--	--	--	--	--	--	--	--	5x11	1.3
0.22	--	--	--	--	--	--	--	--	--	--	5x11	2.9
0.33	--	--	--	--	--	--	--	--	--	--	5x11	4.3
0.47	--	--	--	--	--	--	--	--	--	--	5x11	6.2
1	--	--	--	--	--	--	--	--	--	--	5x11	13
2.2	--	--	--	--	--	--	--	--	--	--	5x11	20
3.3	--	--	--	--	--	--	--	--	--	--	5x11	25
4.7	--	--	--	--	--	--	5x11	25	5x11	28	5x11	30
10	--	--	--	--	5x11	34	5x11	36	5x11	41	5x11	40
22	--	--	5x11	46	5x11	51	5x11	54	5x11	61	5x11	65
33	5x11	54	5x11	57	5x11	63	5x11	67	5x11	75	6.3x11	90
47	5x11	64	5x11	68	5x11	75	5x11	80	5x11	90	6.3x11	110
100	5x11	94	5x11	100	5x11	110	6.3x11	130	6.3x11	150	8x12	180
220	5x11	140	6.3x11	170	6.3x11	180	8x12	230	8x12	270	10x12	300
330	6.3x11	190	6.3x11	200	8x12	260	8x12	310	10x12	350	10x16	410
470	6.3x11	230	8x12	250	8x12	310	10x12	380	10x16	460	10x20	530
1000	8x12	380	10x12	460	10x16	560	10x20	680	12.5x20	810	12.5x25	950
2200	10x20	710	10x20	760	12.5x20	920	12.5x25	1090	16x25	1260	16x35	1470
3300	10x20	840	12.5x20	1000	12.5x25	1170	16x25	1400	16x35	1610	18x35	1770
4700	12.5x20	1090	12.5x25	1260	16x25	1480	16x30	1710	18x35	1910	--	--
6800	12.5x25	1350	16x25	1570	16x30	1780	18x35	2040	--	--	--	--
10000	16x25	1650	16x35	1890	18x35	2060	--	--	--	--	--	--
15000	16x35	2010	18x35	2180	--	--	--	--	--	--	--	--
22000	18x40	2350	--	--	--	--	--	--	--	--	--	--

Cap(μF) \ V	63V		100V		160V		200V		250V		350V		400V		450V			
0.10	--	--	5x11	1.5	--	--	--	--	--	--	--	--	--	--	--	--		
0.22	--	--	5x11	3.4	--	--	--	--	--	--	--	--	--	--	--	--		
0.33	--	--	5x11	5.0	--	--	--	--	--	--	--	--	--	--	--	--		
0.47	--	--	5x11	7.1	--	--	--	--	--	--	6.3x11	11	--	--	8x12	11		
1	--	--	5x11	15	--	--	6.3x11	16	--	--	6.3x11	16	6.3x11	16	8x12	18		
2.2	--	--	5x11	21	--	--	6.3x11	22	6.3x11	22	8x12	26	6.3x11	30	8x12	25		
3.3	--	--	5x11	29	6.3x11	32	6.3x11	32	6.3x11	32	8x12	34	8x12	35	10x12	36		
4.7	--	--	5x11	62	6.3x11	38	8x12	48	8x12	34	10x12	38	10x12	38	10x16	40		
10	5x11	46	6.3x11	54	8x12	65	8x12	78	10x12	34	10x12	38	10x12	38	10x16	40		
22	5x11	71	8x12	93	10x12	76	10x12	82	10x12	38	10x12	48	10x12	48	10x20	55		
33	6.3x11	100	8x12	130	10x12	98	10x16	128	10x20	48	10x12	52	10x12	52	10x20	55		
47	6.3x11	120	10x12	165	10x16	108	10x20	132	12.5x20	82	10x16	82	10x20	115	12.5x20	100		
68	--	--	--	--	10x20	120	--	--	10x20	84	10x16	82	10x20	88	--	--		
82	--	--	--	--	10x12	128	10x16	128	10x20	86	--	10x20	88	--	--	12.5x25	168	
100	10x12	215	10x20	265	10x16	158	10x20	185	10x20	128	12.5x20	145	12.5x20	154	12.5x25	192	16x20	185
120	--	--	--	--	10x20	182	12.5x20	225	12.5x20	145	12.5x20	154	12.5x20	154	12.5x25	192	--	--
150	--	--	--	--	12.5x20	205	12.5x20	225	12.5x20	154	12.5x20	154	12.5x20	154	12.5x25	192	--	--
180	--	--	--	--	12.5x20	205	12.5x20	225	12.5x20	154	12.5x20	154	12.5x20	154	12.5x25	192	--	--
220	10x16	335	12.5x25	440	12.5x20	205	12.5x20	225	12.5x20	154	12.5x20	154	12.5x20	154	12.5x25	192	--	--
330	10x20	510	16x25	540	12.5x20	205	12.5x20	225	12.5x20	154	12.5x20	154	12.5x20	154	12.5x25	192	--	--
470	12.5x20	640	16x30	715	12.5x20	205	12.5x20	225	12.5x20	154	12.5x20	154	12.5x20	154	12.5x25	192	--	--
1000	16x25	930	18x40	985	12.5x20	205	12.5x20	225	12.5x20	154	12.5x20	154	12.5x20	154	12.5x25	192	--	--

Ripple Current (mA, +105°C, 120Hz)  
Customer products are available on request.

**Kingtronics® International Company**

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**Kingtronics**®**GKT-GU**

Aluminum Electrolytic Capacitor— Radial

**HOW TO ORDER**

<u>GKT</u>	<u>GU</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	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.

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