

GRP

GK

◆ FEATURES

Load Life:105°C 6000~10000 hours.  
 Excellent endurance of high ripple current and high temperature,low ESR,high stability.  
 Used for LED and LED Driver.

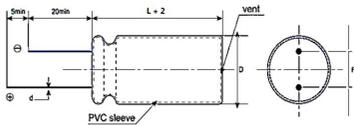
◆ SPECIFICATIONS

Items	Characteristics												
Category Temperature Range	-40~105°C												
Rated Voltage Range	6.3V~100V DC												
Capacitance Tolerance	±20%(20°C,120Hz)												
Leakage Current(MAX)	I=0.03CV(After 2 minutes) F: Leakage Current(µA) C:Capacitance(µF) V:Rated Voltage(V)												
Dissipation Factor	Rated Voltage(V)	6.3	10	16	25	35	50	63	82	100			
	tgδ	0.22	0.19	0.16	0.15	0.15	0.15	0.15	0.15	0.15			
When capacitance is over 1000µF, tgδ shall be added 0.02 to the listed value with increase of every 1000µF.													
Endurance	After life test with rated ripple current at conditions stated in the table below at 105°C,						Case Size	Life Time (hrs)	the capacitors shall meet the following requirements				
							D≤6.3	6000					
							D=8	8000					
							D≥10	10000					
	Capacitance Change Within ±25% of the initial value.(6.3V 10±30%)												
Dissipation Factor Not more than 200% of the specified value.													
Leakage Current(MAX) Not more than the specified value.													
Low Temperature Stability	Rated Voltage(V)	6.3	10	16	25	35	50	63	82	100			
	Impedance Ratio-Z (-40°C)/Z(20°C)	4	3	2	2	2	2	2	2	2			

◆ MULTIPLIER FOR RIPPLE CURRENT

Frequency (Hz)	120	1K	10K	100K	
Coefficient	1-680µF	0.55	0.77	0.94	1.00
	820-1800µF	0.70	0.85	0.80	1.00
	2200-18000µF	0.70	0.85	0.98	1.00

◆ DIMENSIONS



D±0.5	5	6.3	8	10	12	13	16	18	22
F±0.6	2	2.6	3	5			7.5	10	
d±0.1	0.5	0.5	0.5	0.6			0.8	0.8	

◆ STANDARD SIZE(Impedance Ratio:20°C,100KHZ,Rated ripple current:105°C,100KHZ)

Rated Voltage (V)	6.3V			10V			16V			25V			35V		
	Size(mm) D×L	Impedance Ratio (Ωmax)	Rated ripple current(mArms)	Size(mm) D×L	Impedance Ratio (Ωmax)	Rated ripple current(mArms)	Size(mm) D×L	Impedance Ratio (Ωmax)	Rated ripple current(mArms)	Size(mm) D×L	Impedance Ratio (Ωmax)	Rated ripple current(mArms)	Size(mm) D×L	Impedance Ratio (Ωmax)	Rated ripple current(mArms)
4.7													5×11	1.09	54
5.6													5×11	1.02	58
6.8													5×11	0.97	66
8.2													5×11	0.92	72
10							5×11	0.92	54				5×11	0.83	80
15							5×11	0.83	60				5×11	0.77	83
22				5×11	0.97	54	5×11	0.77	66				5×11	0.70	102
27				5×11	0.92	56	5×11	0.70	78				5×11	0.64	106
33	5×11	0.91	60	5×11	0.83	66	5×11	0.64	84				5×11	0.59	128
39	5×11	0.83	66	5×11	0.78	72	5×11	0.59	102				5×11	0.54	130
47	5×11	0.77	78	5×11	0.71	82	5×11	0.54	144				5×11	0.50	146
56	5×11	0.70	90	5×11	0.64	90	5×11	0.50	240				5×11	0.43	178
68	5×11	0.63	102	5×11	0.59	114	5×11	0.35	264	6.3×11	0.35	195	6.3×11	0.17	198
82	5×11	0.61	113	5×11	0.54	118	5×11	0.28	276	6.3×11	0.28	230	6.3×11	0.17	220
100	5×11	0.54	126	5×11	0.50	126	5×11	0.21	300	6.3×11	0.19	280	6.3×11	0.15	320
150	6.3×11	0.50	240	6.3×11	0.30	346	6.3×11	0.19	318	6.3×11	0.17	320	8×12	0.11	330
180	6.3×11	0.43	282	6.3×11	0.28	356	6.3×11	0.17	384	8×12	0.15	350	8×12	0.10	410
220	6.3×11	0.37	288	6.3×11	0.19	368	8×12	0.17	456	8×12	0.11	380	10×12	0.08	680
270	6.3×11	0.33	312	6.3×11	0.10	376	8×12	0.16	540	8×12	0.10	420	10×12	0.06	800
330	6.3×11	0.19	408	6.3×11	0.15	530	8×12	0.11	756	10×12	0.08	650	10×12	0.05	1200
390	6.3×11	0.18	426	6.3×11	0.13	540	8×12	0.09	780	10×12	0.07	756	10×16	0.04	1500
470	8×12	0.10	480	8×12	0.11	556	8×12	0.08	1008	10×16	0.06	1008	10×16	0.04	1740
560	8×12	0.14	636	8×12	0.09	658	10×12	0.07	1092	10×16	0.05	1092	10×20	0.03	1980
680	10×12	0.11	756	10×12	0.08	850	10×12	0.06	1440	10×16	0.04	1380	10×20	0.03	2304
820	10×12	0.07	1032	10×12	0.07	1180	12.5×20	0.05	1600	10×16	0.04	1608	12.5×20	0.03	2400
1000	8×14	0.08	1030	10×12	0.06	1280	10×16	0.04	1680	10×20	0.03	1980	12.5×20	0.02	2460
	10×16	0.06	1056												
1200	10×16	0.06	1200	10×16	0.04	1320	10×20	0.04	1720	12.5×20	0.03	2280	13×20	0.02	2910
1500	10×16	0.04	1480	10×16	0.04	1750	10×20	0.03	1800	12.5×20	0.02	2320	12.5×25	0.02	3250
1800	10×20	0.04	1740	10×20	0.03	1890	12.5×20	0.02	1950	12.5×25	0.02	2520	16×25	0.01	3280
2200	10×20	0.04	1980	10×20	0.03	2180	12.5×20	0.02	2300	12.5×25	0.02	3060	16×25	0.01	3340
2700	10×20	0.03	2292	10×20	0.03	2250	12.5×20	0.02	2800	16×25	0.01	3300	18×30	0.01	3430
3300	12.5×20	0.03	2340	12.5×20	0.02	2500	12.5×25	0.02	3300	16×25	0.01	3450	18×30	0.01	3430
3900	13×20	0.02	2400	13×20	0.02	2910	13×25	0.01	3450	18×25	0.01	3550			
4700	12.5×25	0.02	2650	12.5×25	0.02	3120	16×25	0.01	3610	18×30	0.01	3620			