

DK series

Features

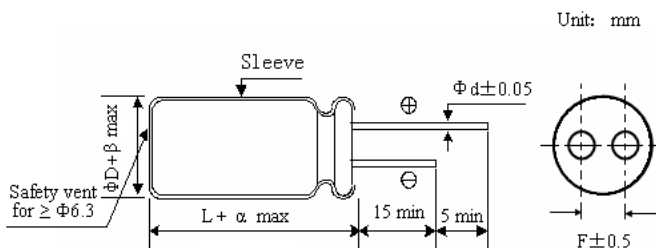
- ◆ Low impedance for high ripple current , Lower water series , 2000 to 4000 hours at 105°C.
- ◆ Used in communication equipments ,switching power supply, industrial measuring instruments, etc.
- ◆ RoHS Compliant .



Specifications

Item	Performance Characteristics																											
Temperature Range	-40~+105°C																											
Rated Voltage Range	6.3~100Vdc																											
Capacitance Range	10~4700µF																											
Capacitance Tolerance	±20% (120Hz, +20°C)																											
Leakage Current (+20°C,max.)	$I \leq 0.01CV$ 或 $3(\mu A)$ After 2 minutes, whichever is greater measured with rated working voltage applied																											
Dissipation Factor (tgδ) 120Hz, +20°C	<table border="1"> <tr> <td>Working Voltage(Vdc)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>D.F (%) max.</td> <td>22</td> <td>19</td> <td>16</td> <td>14</td> <td>12</td> <td>10</td> <td>9</td> <td>8</td> </tr> </table>	Working Voltage(Vdc)	6.3	10	16	25	35	50	63	100	D.F (%) max.	22	19	16	14	12	10	9	8									
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D.F (%) max.	22	19	16	14	12	10	9	8																				
For capacitance>1000µF , Add 2% per another 1000µF (120Hz, +20°C)																												
Low Temperature Characteristics (120Hz)	Impedance ratio max.																											
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Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple Current is applied for the specified period of time at 105°C																											
	<table border="1"> <tr> <td>Time</td> <td colspan="2">Φ5 to Φ6.3:2000hours ,Φ8 to Φ10:3000hours, ≥Φ13:4000hours</td> </tr> <tr> <td>Rated Voltage</td> <td>6.3 to 10Vdc</td> <td>16 to 100Vdc</td> </tr> <tr> <td>Capacitance Change</td> <td>≤±30% of the initial value</td> <td>≤±25% of the initial value</td> </tr> <tr> <td>D.F.(tgδ)</td> <td colspan="2">≤200% of the initial specified value</td> </tr> <tr> <td>Leakage Current</td> <td colspan="2">≤The initial specified value</td> </tr> </table>	Time	Φ5 to Φ6.3:2000hours ,Φ8 to Φ10:3000hours, ≥Φ13:4000hours		Rated Voltage	6.3 to 10Vdc	16 to 100Vdc	Capacitance Change	≤±30% of the initial value	≤±25% of the initial value	D.F.(tgδ)	≤200% of the initial specified value		Leakage Current	≤The initial specified value													
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Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the load life characteristics listed above.																											
Others	JISC-5101(IEC 60384)																											

Diagram of Dimensions



Frequency Multipliers

µF \ Hz	120	1K	10K	100K
<220	0.40	0.75	0.90	1.00
220~560	0.50	0.85	0.94	1.00
680~1800	0.60	0.87	0.95	1.00
2200~3900	0.75	0.90	0.95	1.00
4700	0.85	0.95	0.98	1.00

ΦD	5	6.3	8	10	13
F	2.0	2.5	3.5	5.0	5.0
Φd	0.5	0.5	0.5	0.6	0.6
α	(L< 20) + 1.5		(L≥20) + 2.0		
β	(D< 20) + 0.5		(D≥20) + 1.0		

DK series

Standard Ratings

Voltage	6.3V			10V			16V			25V		
Cap(μF)	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
47										6.3×11	0.52	220
100	5×11	0.65	180	5×11	0.63	201	6.3×11	0.36	265	6.3×11	0.25	320
220	6.3×11	0.30	290	6.3×11	0.27	343	8×12	0.16	446	8×12	0.16	580
330	6.3×11	0.27	343	6.3×11	0.22	433	8×12	0.16	578	8×12	0.16	616
470	8×12	0.17	488	8×12	0.17	534	8×12	0.16	616	8×16	0.10	808
560	8×12	0.17	488	8×12	0.16	569	10×12	0.11	718	10×17	0.08	981
680	8×12	0.17	534	8×12	0.16	620	8×16	0.10	808	10×17	0.07	1081
1000	8×12	0.16	620	8×16	0.10	808	10×17	0.07	1084	10×20	0.06	1326
1500	8×20	0.09	952	10×20	0.07	1176	10×20	0.06	1223	10×25	0.05	1561
1800	10×20	0.09	1076	10×20	0.05	1228	10×25	0.04	1498	13×25	0.04	1859
2200	10×20	0.07	1176	10×20	0.05	1326	13×20	0.04	1559	13×25	0.04	1889
2700	10×25	0.05	1405	10×25	0.05	1567						
3300	10×25	0.05	1482	13×25	0.04	1876						
3900	13×20	0.05	1592									
4700	13×25	0.04	1876									

Voltage	35V			50V			63V			100V		
Cap(μF)	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
10				5×11	1.40	110	5×11	1.20	100	6.3×11	1.43	94
22				5×11	0.64	163	6.3×11	0.960	115	8×12	0.621	209
33				6.3×11	0.43	136	6.3×11	0.960	115	8×16	0.400	300
47	6.3×11	0.36	266	6.3×11	0.30	162	8×12	0.504	232	10×12	0.344	314
68	6.3×11	0.25	320	8×12	0.18	376	8×12	0.504	232	10×17	0.248	357
100	8×12	0.16	445	10×12	0.16	479	8×16	0.360	300	10×20	0.168	466
220	8×12	0.16	616	10×17	0.11	722	10×20	0.168	466	13×25	0.096	922
330	8×20	0.08	903	13×20	0.06	979	13×20	0.128	690			
470	10×17	0.07	1077	13×25	0.05	1180						
680	10×20	0.06	1326									
1000	13×20	0.05	1592									

Max Allowable Ripple Current (mA,rms) at 105°C 100KHz, Max Impedance(Ω) at 20°C 100 KHz,Case Size ΦD×L(mm).

Above size is the standard size for our product. If you need special size please contact our sales offices.