

KV Series



Features

- ◆ 85°C Low leakage current case diameter $\Phi 4 \sim \Phi 8$
- ◆ Reflow soldering is available
- ◆ Available for high density mounting
- ◆ RoHS Compliant

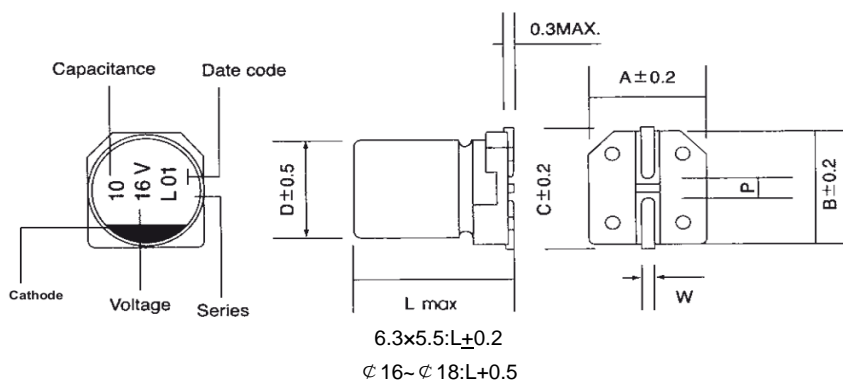
Specifications

Item	Performance Characteristics																					
Operating Temperature Range	-40~ +85°C																					
Rated Voltage Range	6.3~50VDC																					
Capacitance Range	0.1 to 330 μ F																					
Capacitance Tolerance	$\pm 20\%$ (120Hz,+20°C)																					
Leakage Current (+20°C,max.)	$I \leq 0.002 CV$ or $0.4 (\mu A)$ After 2 minutes, whichever is greater measured with rated working voltage applied																					
Dissipation Factor (tan δ , at 20°C, 120Hz)	<table border="1"> <thead> <tr> <th>Rated voltage(VDC)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>D.F.(%)max</td> <td>26</td> <td>22</td> <td>18</td> <td>16</td> <td>14</td> <td>12</td> </tr> </tbody> </table>	Rated voltage(VDC)	6.3	10	16	25	35	50	D.F.(%)max	26	22	18	16	14	12							
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Endurance	Test conditions Duration time :1000 Hrs Ambient temperature :+85°C Applied voltage :Rated DC working voltage After test requirement at +20°C: Capacitance change :Within $\pm 25\%$ of the initial value Dissipation factor :Not more than 200% of specified value Leakage current :Not more than the specified value																					
Shelf Life	Test conditions Duration time :1000 Hrs Ambient temperature :+85°C Applied voltage :None After test requirement at +20°C : Same limits as Endurance. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.																					
Resistance to soldering heat	The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the characteristic requirements listed under. <table border="1"> <tbody> <tr> <td>Leakage</td> <td>Less than specified value</td> </tr> <tr> <td>Capacitance</td> <td>Within $\pm 10\%$ of initial value</td> </tr> <tr> <td>tanδ</td> <td>Less than specified value</td> </tr> </tbody> </table>	Leakage	Less than specified value	Capacitance	Within $\pm 10\%$ of initial value	tan δ	Less than specified value															
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Multiplier for Ripple Current vs. Frequency

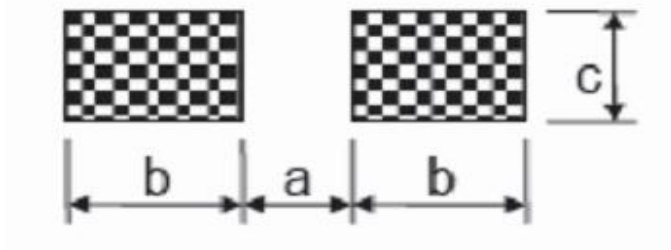
CAP(μ F) \ Frequency(Hz)	60(50)	120	500	1K	$\geq 10K$
$0.1 \leq CAP \leq 100\mu F$	0.8	1.0	1.20	1.30	1.50
$100 < CAP \leq 330\mu F$	0.8	1.0	1.10	1.15	1.20

Diagram of Dimensions:(unit:mm)



ϕD	L	A	B	C	W	P
4	5.5	4.3	4.3	4.9	0.5~0.8	1.0
5	5.5	5.3	5.3	5.9	0.5~0.8	1.4
6.3	5.5	6.6	6.6	7.2	0.5~0.8	2.2
6.3	6.1	6.6	6.6	7.2	0.5~0.8	2.2
6.3	7.7	6.6	6.6	7.2	0.5~0.8	2.2
8	6.5	8.3	8.3	9.0	0.5~0.8	2.3
8	10.5	8.3	8.3	9.0	0.7~1.1	3.1
10	10.5	10.3	10.3	11.0	0.7~1.1	4.5
12.5	14	13	13	13.9	1.0~1.4	4.5
16	17	17.1	17.1	18.0	1.0~1.4	7.0
16	21.5	17.1	17.1	18.0	1.0~1.4	7.0
18	16.5	19.1	19.1	20.0	1.0~1.4	7.5
18	21.5	19.1	19.1	20.0	1.0~1.4	7.5

Recommended land pattern:(unit:mm)



$\Phi D \times L$	a	b	c
4 x all	1	2.6	1.6
5 x all	1.4	3	1.6
6.3 x all	2.1	3.5	1.6
8 x 6.5(height \leq 6.5)	2.1	4.5	1.6
8 x 6.5(height >6.5)	2.8	4.2	1.9
10 x all	4.3	4.4	1.9
12.5 x all	4.3	5.8	2.5
16 x all	6	6.5	3.5
18 x all	6	7.5	3.5

