

CapXon KV Series

KV Series

Features

- ◆ 85°C Low leakage current case diameter $\phi 4 \sim \phi 8$
- ◆ Reflow soldering is available
- ◆ Available for high density mounting
- ◆ For detail specifications, please refer to Engineering Bulletin No.E134
- ◆ RoHS Compliant



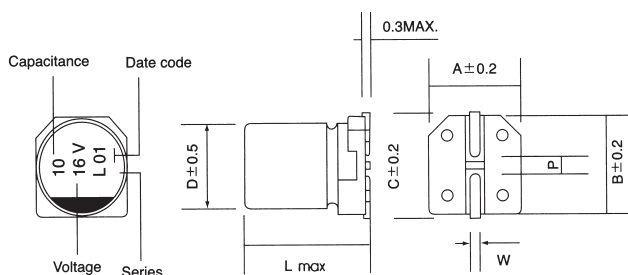
Specifications

Item	Performance Characteristics						
Operating Temperature Range	-40~ +85°C						
Rated Voltage Range	6.3~50 VDC						
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 ($\tan \delta$, at 20°C , 120Hz)	Working voltage(VDC)	6.3	10	16	25	35	50
	D.F. (%) max.	26	22	18	16	14	12
Low Temperature Characteristics (at 120Hz)	Impedance ratio max						
	Working voltage(VDC)	6.3	10	16	25	35	50
	Z -25°C / AZ +20°C	4	3	2	2	2	2
	Z -40°C / AZ +20°C	8	6	4	4	3	3
Load Life	Test conditions						
	Duration time	:1000 Hrs					
	Ambient temperature	:+85°C					
	Applied voltage	:Rated DC working voltage					
	After test requirements 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 requirements at +20°C : Same limits as Load life.						
	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.						
	Leakage current	Less than specified value					
	Capacitance change	Within $\pm 10\%$ of initial value					
	$\tan \delta$	Less than specified value					

Multiplier for Ripple Current vs. Frequency

CAP(μ F) \ Frequency(Hz)	60(50)	120	500	1K	$\geq 10K$
0.1~47 μ F	0.8	1	1.2	1.3	1.5
100~1000 μ F	0.8	1	1.1	1.15	1.2

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	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

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Case Size

φ DxL(mm)

WV (SV) Cap(μF)	6.3 (8)		10 (13)		16 (20)		25 (32)		35 (44)		50 (63)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1											4x5.5	1
0.22											4x5.5	2
0.33											4x5.5	2.8
0.47											4x5.5	4
1											4x5.5	8.4
2.2									4x5.5	8.4	4x5.5	13
3.3							4x5.5	10	4x5.5	15	4x5.5	17
4.7					4x5.5	10	4x5.5	16	4x5.5	18	6.3x5.5	20
10	4x5.5	15	4x5.5	23	4x5.5	23	4x5.5	27	6.3x5.5	29	6.3x5.5	33
22	4x5.5	28	4x5.5	33	5x5.5	37	5x5.5	42	6.3x5.5	46	6.3x7.7	48
											8x6.5	52
33	4x5.5	37	5x5.5	41	6.3x5.5	49	6.3x5.5	52	6.3x7.7	58	6.3x7.7	66
									8x6.5	62	8x6.5	71
47	4x5.5	45	6.3x5.5	52	6.3x5.5	58	6.3x7.7	65	6.3x7.7	75		
							8x6.5	70	8x6.5	80		
100	5x5.5	70	6.3x7.7	75	6.3x7.7	85	6.3x7.7	102				
			8x6.5	80	8x6.5	92	8x6.5	110				
220	6.3x7.7	102	6.3x7.7	125								
	8x6.5	110	8x6.5	135								
330	6.3x7.7	155										
	8x6.5	170										

Ripple Current (mA, rms) at 85°C 120Hz

SMD