

CapXon HV Series

HV Series

Features

- ◆ Long life of 2000 hrs at 105°C
- ◆ Reflow soldering is available
- ◆ Available for high density mounting
- ◆ For detail specifications, please refer to Engineering Bulletin No. E131
- ◆ RoHS Compliant



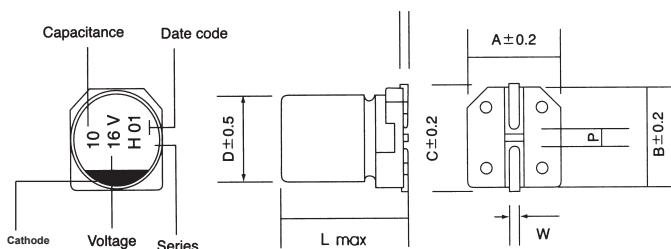
Specifications

Item	Performance Characteristics																					
Operating Temperature Range	-40~ +105°C																					
Rated Voltage Range	6.3~50 VDC																					
Capacitance Range	0.1 to 1500 μ F																					
Capacitance Tolerance	$\pm 20\%$ (120Hz, +20°C)																					
Leakage Current (+20°C, max.)	$I \leq 0.01$ CV or 3 (μ A) After 2 minutes, whichever is greater measured with rated working voltage applied																					
Dissipation Factor ($\tan \delta$, at 20°C, 120Hz)	<table border="1"> <tr> <td>Rated voltage(VDC)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>D.F. (%) max.</td> <td>30</td> <td>24</td> <td>20</td> <td>16</td> <td>14</td> <td>14</td> </tr> </table>	Rated voltage(VDC)	6.3	10	16	25	35	50	D.F. (%) max.	30	24	20	16	14	14							
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D.F. (%) max.	30	24	20	16	14	14																
Low Temperature Characteristics (at 120Hz)	Impedance ratio max																					
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	Rated voltage(VDC)	6.3	10	16	25	35	50															
Z-25°C / AZ+20°C	6	4	4	3	2	2																
Z-40°C / AZ+20°C	12	10	8	6	4	4																
Test conditions																						
Load Life	Duration time	:2000 Hrs																				
	Ambient temperature	:+105°C																				
	Applied voltage	:Rated DC working voltage																				
	After test requirements at +20°C:																					
	Capacitance change	:Within $\pm 30\%$ of the initial value																				
	Dissipation factor	:Not more than 300% of specified value																				
Shelf Life	Leakage current	:Not more than the specified value																				
	Test conditions																					
	Duration time	:1000 Hrs																				
	Ambient temperature	:+105°C																				
	Applied voltage	:None																				
	After test requirements at +20°C	: Same limits as Load life.																				
Resistance to soldering heat	Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.																					
	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	1.0	1.20	1.30	1.50
100~1000 μ F	0.8	1.0	1.10	1.15	1.20

Diagram of Dimensions:(unit:mm)



ϕ D	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(μ F)	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		
0.22											4X5.5	2.0		
0.33											4X5.5	3.0		
0.47											4X5.5	4.0		
1											4X5.5	8.4		
2.2											4X5.5	11		
3.3											4X5.5	13		
4.7							4X5.5	12	4X5.5	14	4X5.5	18		
10					4X5.5	20	4X5.5	22	4X5.5	24	6.3X5.5	28		
22	4X5.5	23	4X5.5	25	4X5.5	31	5X5.5	38	5X5.5	40	6.3X7.7	50		
					5X5.5	35			6.3X5.5	46	8X6.5	55		
33	4X5.5	28	4X5.5	34	5X5.5	36	6.3X5.5	48	6.3X7.7	47	6.3X7.7	95		
					6.3X5.5	40			8X6.5	50	8X10.5	135		
47	4X5.5	37	5X5.5	40	5X5.5	45	6.3X7.7	56	6.3X7.7	60	6.3X7.7	115		
	5X5.5	42			6.3X5.5	56	8X6.5	60	8X6.5	65	8X10.5	155		
100	5X5.5	46	6.3X5.5	55	6.3X5.5	56	6.3X7.7	110	6.3X7.7	130	10X10.5	315		
	6.3X5.5	57			6.3X7.7	58			8X10.5	160			8X10.5	180
					8X6.5	62								
150	6.3X5.5	70	6.3X5.5	90	6.3X7.7	125	8X10.5	175	8X10.5	190	10X10.5	330		
	8X6.5	90			8X6.5	140			8X6.5	140				
220	6.3X7.7	90	6.3X7.7	140	6.3X7.7	170	8X10.5	180	8X10.5	250	10X10.5	350		
	8X6.5	130			8X6.5	160			8X10.5	185			10X10.5	190
330	6.3X7.7	140	8X10.5	195	8X10.5	250	8X10.5	290	10X10.5	360				
	8X10.5	170												
470	8X10.5	210	8X10.5	350	8X10.5	370	10X10.5	440						
			10X10.5	420	10X10.5	420								
560	8X10.5	310	10X10.5	450	10X10.5	480								
680	10X10.5	370	10X10.5	480	10X10.5	540								
1000	10X10.5	480	10X10.5	530										
1200	10X10.5	500												
1500	10X10.5	520												

Ripple Current (mA, rms) at 105°C 120Hz

SMD