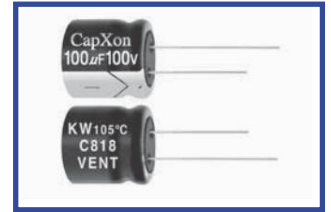


KW Series 9~25mm height, Low Profile 105°C

Features

- ◆ Used in space-saving equipment, low profile
- ◆ Endurance 2000hrs at 105°C
- ◆ Safety vent construction design.
- ◆ ROHS Compliant



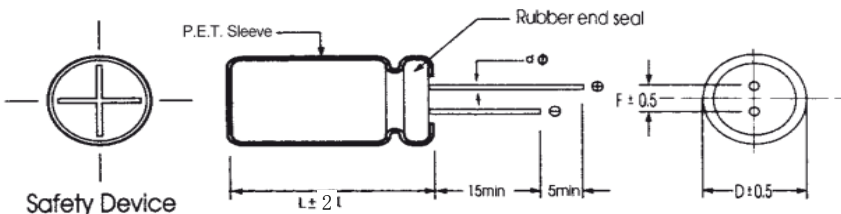
Specifications

Item	Performance Characteristics																																										
Operating Temperature Range	-40 to +105°C	-25 to +105°C																																									
Rated Voltage Range	6.3 to 100 VDC	160 to 450 VDC																																									
Capacitance Range	2.2 to 10000µF	1.5 to 150µF																																									
Capacitance Tolerance	±20% (120Hz, +20°C)																																										
Leakage Current (+20°C, max.)	$I \leq 0.01CV$ or $3(\mu A)$ After 2 minutes whichever is greater measured with rated working voltage applied.	$I \leq 0.04CV+100 (\mu A)$ After 2 minutes with rated working voltage applied.																																									
Dissipation Factor (tanδ, 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> <td>63</td> <td>100</td> </tr> <tr> <td>D.F. (%)max.</td> <td>24</td> <td>22</td> <td>20</td> <td>16</td> <td>14</td> <td>12</td> <td>10</td> <td>10</td> </tr> </table> <table border="1"> <tr> <td>Rated Voltage(VDC)</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>D.F. (%)max.</td> <td>15</td> <td>15</td> <td>15</td> <td>15</td> <td>20</td> <td>20</td> </tr> </table> <p>For capacitance > 1000µF, add 2% per another 1000µF.</p>		Rated Voltage(VDC)	6.3	10	16	25	35	50	63	100	D.F. (%)max.	24	22	20	16	14	12	10	10	Rated Voltage(VDC)	160	200	250	350	400	450	D.F. (%)max.	15	15	15	15	20	20									
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Low Temperature Characteristics (at 120Hz)	<p>Impedance ratio max</p> <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> <td>63</td> <td>100</td> </tr> <tr> <td>Z-25°C / Z+20°C</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C / Z+20°C</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table> <table border="1"> <tr> <td>Rated Voltage(VDC)</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>Z-25°C / Z+20°C</td> <td>3</td> <td>3</td> <td>3</td> <td>6</td> <td>6</td> <td>6</td> </tr> </table> <p>For capacitance > 1000µF, add 0.5 per another 1000µF for -25°C/+20°C add 1 per another 1000µF for -40°C/+20°C</p>		Rated Voltage(VDC)	6.3	10	16	25	35	50	63	100	Z-25°C / Z+20°C	4	3	2	2	2	2	2	2	Z-40°C / Z+20°C	8	6	4	4	3	3	3	3	Rated Voltage(VDC)	160	200	250	350	400	450	Z-25°C / Z+20°C	3	3	3	6	6	6
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Z-40°C / Z+20°C	8	6	4	4	3	3	3	3																																			
Rated Voltage(VDC)	160	200	250	350	400	450																																					
Z-25°C / Z+20°C	3	3	3	6	6	6																																					
Endurance	<p>Test conditions</p> <p>Duration time : 2000Hrs</p> <p>Ambient temperature : +105°C</p> <p>Applied voltage : Rated DC working voltage</p> <p>After test requirement at +20°C</p> <p>Capacitance change : $\leq \pm 20\%$ of the initial measured value</p> <p>Dissipation factor : $\leq 200\%$ of the initial specified value</p>																																										
Shelf Life	<p>Test conditions</p> <p>Duration time : 1000Hrs</p> <p>Ambient temperature : +105°C</p> <p>Applied voltage : None</p> <p>After test requirement at +20°C: Same limits as Endurance.</p> <p>Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.</p>																																										

Multiplier for Ripple Current vs.

CAP(µF) / Frequency(Hz)	50(60)	120	400	1K	≥ 10K
0.47 < CAP ≤ 100	0.80	1.00	1.20	1.30	1.50
100 < CAP ≤ 1000	0.80	1.00	1.10	1.15	1.20
2200 < CAP ≤ 10000	0.80	1.00	1.05	1.10	1.15

Diagram of Dimensions:(unit:mm)



Dφ	5	6	8	10	13	16	18
F	2	3	4	5	5	8	8
dφ	0.5		0.6		0.8		

Case Size

WV (Vdc)	Cap (uF)	Size mm	Rated Ripple current (mA rms/105°C /120Hz)
6.3	100	5x9	120
6.3	150	5x9	135
6.3	220	6.3x9	165
6.3	330	6.3x9	185
6.3	470	8x9	260
6.3	680	10x9	310
6.3	1000	10x9	370
6.3	2200	13x16	620
6.3	3300	16x16	860
6.3	4700	16x16	1010
6.3	6800	16x16	1210
6.3	10000	18x20	1450
10	68	5x9	115
10	100	5x9	135
10	150	6.3x9	150
10	220	6.3x9	165
10	330	8x9	205
10	470	8x9	275
10	470	10x9	280
10	680	10x9	360
10	1000	10x9	450
10	2200	13x16	690
10	3300	16x16	950
10	4700	16x20	1150
10	6800	18x20	1350
10	10000	18x25	1700
16	47	5x9	105
16	68	6.3x9	125
16	100	6.3x9	150
16	150	6.3x9	160
16	220	8x9	200
16	330	8x9	250
16	470	10x9	310
16	680	13x13	390
16	1000	13x13	520
16	2200	16x16	850
16	3300	16x20	1180
16	4700	18x20	1480
16	6800	18x25	1600
25	47	5x9	110
25	68	6.3x9	130
25	100	6.3x9	160
25	150	8x9	185
25	220	8x9	230
25	330	10x9	310
25	470	10x12.5	370
25	680	13x16	520
25	1000	13x16	600
25	2200	16x20	950
25	2200	18x16	940
25	3300	18x20	1250
25	4700	18x25	1470
35	33	5x9	90
35	47	6.3x9	120
35	68	8x9	145
35	100	8x9	180
35	150	8x9	210
35	220	10x9	255
35	330	10x12.5	360
35	470	13x13	410

WV (Vdc)	Cap (uF)	Size mm	Rated Ripple current (mA rms/105°C /120Hz)
35	470	13x16	430
35	680	13x16	580
35	1000	16x16	750
35	2200	18x20	1200
35	3300	18x25	1450
50	2.2	5x9	19
50	3.3	5x9	25
50	4.7	5x9	40
50	6.8	5x9	48
50	10	5x9	54
50	22	5x9	75
50	33	6.3x9	115
50	47	6.3x9	130
50	68	8x9	169
50	100	10x9	200
50	150	10x9	250
50	220	10x12.5	290
50	330	13x13	375
50	330	13x16	400
50	470	16x16	550
50	680	16x16	700
50	1000	16x20	850
50	2200	18x25	1300
63	2.2	5x9	20
63	3.3	5x9	26
63	4.7	5x9	41
63	6.8	5x9	49
63	10	5x9	55
63	22	6.3x9	107
63	33	6.3x9	114
63	47	8x9	136
63	68	10x9	170
63	100	10x9	173
63	150	10x16	245
63	220	13x13	317
63	330	13x16	382
63	470	16x16	490
63	680	16x20	730
63	1000	16x25	1050
100	2.2	5x9	20
100	3.3	5x9	27
100	4.7	5x9	42
100	6.8	6.3x9	56
100	10	8x9	72
100	22	8x9	114
100	33	10x9	141
100	47	10x16	197
100	68	10x16	200
100	100	13x13	247
100	150	13x16	295
100	150	16x16	346
100	220	16x16	373
100	330	16x20	500
160	4.7	8x9	50
160	6.8	8x9	55
160	10	10x9	80
160	22	13x16	120
160	33	13x16	175
160	47	16x16	225
160	68	16x20	305

