

EV Ultra Low Impedance Series

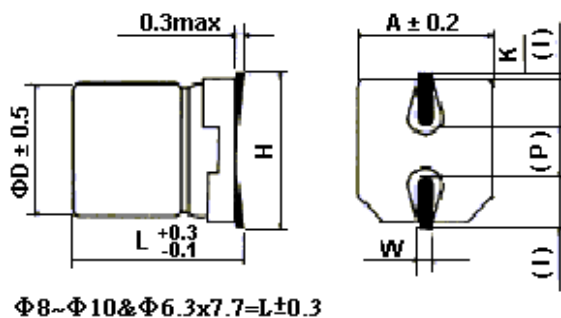
- Features : 105°C 2000 hours , Low profile vertical chip, Ultra low impedance
- Recommended Applications: AV(TV,Video,Audio) ,Monitor/Computer, OA/HA/Communication ,SMPS



Specifications

Item	Characteristics																							
Operating Temperature Range	-40 ~ +105℃																							
Rated Voltage Range (WV)	6.3 ~ 35VDC																							
Capacitance Range	4.7 ~ 1500 μ F																							
Capacitance Tolerance	± 20 % at 120Hz , 20℃																							
Leakage Current (MAX) (20℃)	I ≤ 0.01CV or 3 μ A whichever is greater(After rated voltage applied for 2 minutes)																							
	I= Leakage Current (μ A) C= Nominal Capacitance (μ F) V= Rated Voltage (V)																							
Dissipation Factor (MAX) (tan δ) (120Hz ,20℃)	Shown in the table of standard rating																							
Low Temperature Stability Impedance Ratio (MAX)	<table><tr><td>WV Z(120HZ)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td></tr><tr><td>Z(-25℃) / Z(20℃)</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Z(-40℃) / Z(20℃)</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td></tr></table>						WV Z(120HZ)	6.3	10	16	25	35	Z(-25℃) / Z(20℃)	2	2	2	2	2	Z(-40℃) / Z(20℃)	3	3	3	3	3
							WV Z(120HZ)	6.3	10	16	25	35												
							Z(-25℃) / Z(20℃)	2	2	2	2	2												
							Z(-40℃) / Z(20℃)	3	3	3	3	3												
Endurance	After applying rated voltage with rated ripple current for 2000 hours at 105℃ , the capacitor shall meet the following requirement.																							
	Capacitance Change		Within±30% of the initial value																					
	Dissipation Factor		Not more than 200% of the specified value																					
	Leakage Current		Not more than the specified value																					
Shelf Life	After placed at 105℃ without voltage applied for 1000 hours, the capacitor shall meet the same requirement as Endurance.																							

Diagram of Dimensions(mm)



() : Reference size

ϕD	L	A	H	I	W	P	K
4.0	5.4	4.3	5.5 Max	1.8	0.65 $\pm$ 0.1	1.0 $\pm$ 0.2	0.35 $\begin{matrix} +0.15 \\ -0.20 \end{matrix}$
5.0	5.4	5.3	6.5 Max	2.2	0.65 $\pm$ 0.1	1.5 $\pm$ 0.2	0.35 $\begin{matrix} +0.15 \\ -0.20 \end{matrix}$
6.3	5.4	6.6	7.8 Max	2.6	0.65 $\pm$ 0.1	1.8 $\pm$ 0.2	0.35 $\begin{matrix} +0.15 \\ -0.20 \end{matrix}$
6.3	7.7	6.6	7.8 Max	2.6	0.65 $\pm$ 0.1	1.8 $\pm$ 0.2	0.35 $\begin{matrix} +0.15 \\ -0.20 \end{matrix}$
8.0	6.2	8.3	9.5 Max	3.4	0.65 $\pm$ 0.1	2.2 $\pm$ 0.2	0.35 $\begin{matrix} +0.15 \\ -0.20 \end{matrix}$
8.0	10.2	8.3	10.0 Max	3.4	0.90 $\pm$ 0.2	3.1 $\pm$ 0.2	0.70 $\pm$ 0.2
10.0	10.2	10.3	12.0 Max	3.5	0.90 $\pm$ 0.2	4.6 $\pm$ 0.2	0.70 $\pm$ 0.2

Multiplier for Ripple Current

Frequency coefficient

Frequency (Hz)	120	1K	10K	100K
Coefficient	0.70	0.80	0.90	1.00

EV

Ultra Low Impedance
Series■ Case Size / $\tan \delta$ / Max Ripple Current / Impedance

Capacitance (μ F)	Rated (Surge) Voltage											
	6.3(8)				10(13)				16(20)			
	ϕ DxL	$\tan \delta$	RC	Z	ϕ DxL	$\tan \delta$	RC	Z	ϕ DxL	$\tan \delta$	RC	Z
22	4x5.4	0.26	90	1.93	4x5.4	0.19	90	1.93	4x5.4	0.16	90	1.93
									5x5.4	0.16	160	1.00
33	4x5.4	0.26	90	1.93	4x5.4	0.19	90	1.93	5x5.4	0.16	160	1.00
					5x5.4	0.19	160	1.00				
47	4x5.4	0.26	90	1.93	6.3x5.4	0.19	190	0.52	5x5.4	0.16	160	1.00
	5x5.4	0.26	160	1.00					6.3x5.4	0.16	240	0.52
100	5x5.4	0.26	160	1.00	6.3x5.4	0.19	190	0.52	6.3x5.4	0.16	240	0.52
	6.3x5.4	0.26	240	0.52								
150	8x6.2	0.26	240	0.30	6.3x7.7	0.19	240	0.34	6.3x7.7	0.16	280	0.34
220	8x6.2	0.26	240	0.30	6.3x7.7	0.19	280	0.34	8x10.2	0.16	370	0.22
					8x6.2	0.19	300	0.26				
330	6.3x7.7	0.26	280	0.34	8x10.2	0.19	600	0.16	8x10.2	0.16	600	0.16
	8x6.2	0.26	300	0.26								
470	8x10.2	0.26	600	0.16	8x10.2	0.19	600	0.16	8x10.2	0.16	600	0.16
680	8x10.2	0.26	600	0.16	10x10.2	0.19	600	0.12	10x10.2	0.16	850	0.08
1000	8x10.2	0.26	600	0.16								
1500	10x10.2	0.26	850	0.08								

Capacitance (μ F)	Rated (Surge) Voltage							
	25(32)				35(44)			
	ϕ DxL	$\tan \delta$	RC	Z	ϕ DxL	$\tan \delta$	RC	Z
4.7					4x5.4	0.12	90	1.93
10	4x5.4	0.14	90	1.93	4x5.4	0.12	90	1.93
					5x5.4	0.12	160	1.00
22	5x5.4	0.14	160	1.00	5x5.4	0.12	160	1.00
33	5x5.4	0.14	160	1.00	6.3x5.4	0.12	240	0.52
	6.3x5.4	0.14	240	0.52				
47	6.3x5.4	0.14	240	0.52	6.3x5.4	0.12	240	0.52
68	6.3x5.4	0.14	240	0.52	6.3x7.7	0.12	280	0.34
100	6.3x7.7	0.14	280	0.34	8x10.2	0.12	600	0.16
	8x6.2	0.14	300	0.26				
150	8x10.2	0.14	600	0.16	8x10.2	0.12	600	0.16
220	8x10.2	0.14	600	0.16	10x10.2	0.12	600	0.16
330	10x10.2	0.14	600	0.16	10x10.2	0.12	850	0.08
470	10x10.2	0.14	850	0.08				

☆ CASE SIZE : ϕ DxL(mm) 、 MAX DISSIPATION FACTOR : $\tan \delta$ / 120Hz, 20°C 、
 MAX PERMISSIBLE RIPPLE CURRENT : RC(mArms) / 100KHz, 105°C 、
 MAX IMPEDANCE : Z(Ω) / 100KHz, 20°C