

## EV Series

Features  
 Lifetime: 105 ,1000hrs  
 Wide temperature range  
 Low profile vertical chip  
 Ultra low impedance

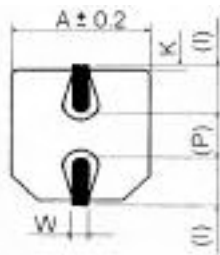
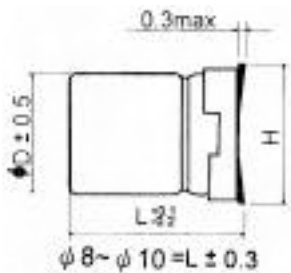
Recommended Applications  
 Monitor/Computer  
 Battery charger  
 DC/DC converter  
 SMPS  
 Noise filter



## Specifications

Items	Characteristics				
Capacitance Tolerance	$\pm 20\%$ (M) (120Hz, 20 )				
Rated Voltage Range (WV)	6.3~25 VDC				
Operating Temperature Range	-40 ~ +105				
Surge Voltage (V) (20 )	WV	6.3	10	16	25
	SV	8	13	20	32
Leakage Current (Max) (20 )	I = 0.01CV or 3 $\mu$ A whichever is greater (After rated voltage applied for 2 minutes)				
	I= Leakage Current ( $\mu$ A ) C= Nominal Capacitance ( $\mu$ F ) V= Rated Voltage (V)				
Dissipation Factor (Max) (tan ) (120Hz ,20 )	Shown in the table of standard rating				
Low Temperature Stability Impedance Ratio (Max)	WV	6.3	10	16	25
	Z(120Hz)				
	Z(-25 ) / Z(20 )	2	2	2	2
	Z(-40 ) / Z(20 )	3	3	3	3
Load Life	After applying rated voltage for 1000 hours at 105 , the capacitor shall meet the following requirement.				
	Capacitance Change	Within $\pm 20\%$ 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 load life.				
Applicable standards	Refer to JIS C 5101				

## Dimensions (mm)



( ) : Reference size

D	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 <sup>+0.15</sup> <sub>-0.20</sub>
5.0	5.4	5.3	6.5 Max	2.2	0.65 $\pm$ 0.1	1.5 $\pm$ 0.2	0.35 <sup>+0.15</sup> <sub>-0.20</sub>
6.3	5.4	6.6	7.8 Max	2.6	0.65 $\pm$ 0.1	1.8 $\pm$ 0.2	0.35 <sup>+0.15</sup> <sub>-0.20</sub>
8.0	6.2	8.3	9.5 Max	3.4	0.65 $\pm$ 0.1	2.2 $\pm$ 0.2	0.35 <sup>+0.15</sup> <sub>-0.20</sub>
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

Temperature coefficient

Ambient Temperature ( )	50	70	85	105
Coefficient	1.90	1.75	1.40	1.00

## Case Size / tan / Max Ripple Current / Impedance

CASE SIZE ( DxL(mm)) / MAX DISSIPATION FACTOR (tan / 120Hz,20 ) / MAX PERMISSIBLE RIPPLE CURRENT (RC(mArms) / 100KHz,105 ) / MAX IMPEDANCE (Z( ) / 100KHz,20 )

WV	6.3				10			
μ F \ SPEC	DxL	tan	RC	Z	DxL	tan	RC	Z
22	4x5.4	0.26	75	2.40	5x5.4	0.30	120	1.20
33	5x5.4	0.26	120	1.20	5x5.4	0.20	120	1.20
47	5x5.4	0.26	120	1.20	6.3x5.4	0.26	200	0.60
68	6.3x5.4	0.26	200	0.60	6.3x5.4	0.26	200	0.60
100	6.3x5.4	0.26	200	0.60	8*6.2	0.26	280	0.30
150	8x6.2	0.35	280	0.30	8x6.2	0.26	280	0.30
220	8x6.2	0.35	280	0.30	8x10.2	0.26	560	0.22
330	8x10.2	0.35	560	0.22	8x10.2	0.26	560	0.22
470	10x10.2	0.35	800	0.12	10x10.2	0.26	800	0.12
1000	10x10.2	0.35	800	0.12	10x10.2	0.26	800	0.12

WV	16				25			
μ F \ SPEC	DxL	tan	RC	Z	DxL	tan	RC	Z
4.7	4x5.4	0.26	75	2.40	4x5.4	0.14	75	2.40
6.8	4x5.4	0.26	75	2.40	4x5.4	0.14	75	2.40
10	4*5.4	0.16	75	2.40	5x5.4	0.14	120	1.20
22	5x5.4	0.16	120	1.20	6.3x5.4	0.14	200	0.60
33	6.3*5.4	0.16	200	0.60	6.3x5.4	0.14	200	0.60
47	6.3x5.4	0.16	200	0.60	8x6.2	0.16	280	0.30
68	8x6.2	0.20	280	0.30	8x10.2	0.16	560	0.22
100	8x6.2	0.20	280	0.30	8x10.2	0.16	560	0.22
150	8x10.2	0.20	560	0.22	10x10.2	0.16	800	0.12
220	8x10.2	0.20	560	0.22	10x10.2	0.16	800	0.12
330	10x10.2	0.20	800	0.12				
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