

PC33 - Surface Mount Aluminum Electrolytic Capacitor

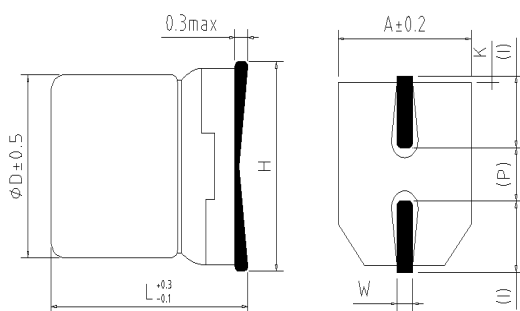
- * Features: 125°C 2000 hours, Higher temperature range, Low profile vertical chip, Low impedance
- * Recommended Applications: Automatic Mounting and Reflow Soldering
- * Corresponding product to RoHS



Specifications

Item	Characteristics																												
Operating Temperature Range	-40 ~ +125°C																												
Rated Voltage Range (WV)	6.3 ~ 50VDC																												
Capacitance Range	47 ~ 1000μF																												
Capacitance Tolerance	± 20% at 120Hz, 20°C																												
Leakage Current (MAX) (20°C)	$I \leq 0.01CV$ or $3\mu A$ whichever is greater. (After rated voltage applied for 2 minutes) I= Leakage Current (μA) C= Nominal Capacitance (μF) V= Rated Voltage (V)																												
Dissipation Factor (MAX) (tan δ) (120Hz, 20°C)	Shown in the table of standard rating																												
Low Temperature Stability Impedance Ratio (MAX)	<table border="1"> <thead> <tr> <th>WV</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Z(120HZ)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Z(-25°C) / Z(20°C)</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>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	WV	6.3	10	16	25	35	50	Z(120HZ)							Z(-25°C) / Z(20°C)	2	2	2	2	2	2	Z(-40°C) / Z(20°C)	3	3	3	3	3	3
WV	6.3	10	16	25	35	50																							
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Endurance	<p>After applying rated voltage for 1000~2000 hours at 125°C, the capacitor shall meet the following requirement.</p> <table border="1"> <tbody> <tr> <td>Capacitance Change</td> <td colspan="2">Within ± 30% of the initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td colspan="2">Not more than 300% of the specified value</td> </tr> <tr> <td>DΦ</td> <td>8x6.2</td> <td>≥ 8x10.2</td> </tr> <tr> <td>Life</td> <td>1000hrs</td> <td>2000hrs</td> </tr> </tbody> </table>	Capacitance Change	Within ± 30% of the initial value		Dissipation Factor	Not more than 300% of the specified value		DΦ	8x6.2	≥ 8x10.2	Life	1000hrs	2000hrs																
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DΦ	8x6.2	≥ 8x10.2																											
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Shelf Life	After placed at 125°C without voltage applied for 1000 hours(500 hours for 8x6.2), the capacitor shall meet the same requirement as Endurance.																												

Diagram of Dimensions (mm)



ΦD	L	A	H	I	W	P	K
8.0	6.2	8.3	9.5 Max	3.4	0.65±0.1	2.2±0.2	0.35 +0.15 -0.20
8.0	10.2	8.3	10.0 Max	3.4	0.90±0.2	3.1±0.2	0.70±0.2
10.0	10.2	10.3	12.0 Max	3.5	0.90±0.2	4.6±0.2	0.70±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 (°C)	70	85	105	125
Coefficient	1.90	1.75	1.40	1.00

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Case Size / $\tan \delta$ / Max Ripple Current / Impedance

Capacitance (μF)	Rated (Surge) Voltage											
	6.3(8)				10(13)				16(20)			
	ΦDxL	$\tan\delta$	RC	Z	ΦDxL	$\tan\delta$	RC	Z	ΦDxL	$\tan\delta$	RC	Z
100	8x6.2	0.30	100	0.50	8x6.2	0.26	100	0.50	8x6.2	0.20	100	0.50
150	8x6.2	0.30	100	0.50	8x6.2	0.26	100	0.50	8x10.2	0.20	197	0.30
220	8x6.2	0.30	100	0.50	8x10.2	0.26	197	0.30	8x10.2	0.20	197	0.30
330	8x10.2	0.30	197	0.30	8x10.2	0.26	197	0.30	8x10.2	0.20	197	0.30
470	8x10.2	0.30	197	0.30	10x10.2	0.26	297	0.20	10x10.2	0.20	297	0.20
680	10x10.2	0.30	297	0.20	10x10.2	0.26	297	0.20				
1000	10x10.2	0.30	297	0.20								

Capacitance (μF)	Rated (Surge) Voltage											
	25(32)				35(44)				50(63)			
	ΦDxL	$\tan\delta$	RC	Z	ΦDxL	$\tan\delta$	RC	Z	ΦDxL	$\tan\delta$	RC	Z
47	8x6.2	0.18	100	0.50	8x10.2	0.14	197	0.30	8x10.2	0.12	133	0.75
100	8x10.2	0.18	197	0.30	8x10.2	0.14	197	0.30	10x10.2	0.12	221	0.50
150	8x10.2	0.18	197	0.30	10x10.2	0.14	297	0.20				
220	10x10.2	0.18	297	0.20	10x10.2	0.14	297	0.20				
330	10x10.2	0.18	297	0.20								

☆CASE SIZE : ΦDxL (mm) 、MAX DISSIPATION FACTOR : $\tan\delta$ / 120 Hz,20°C 、

MAX PERMISSIBLE RIPPLE CURRENT : RC(mArms) / 100KHz,125°C 、

MAX IMPEDANCE : Z(Ω) / 100KHz,20°C