



MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

ZA

ZA SERIES

NEW

105°C, Ultra Low impedance.

◆ FEATURES

- Extremely reduced impedance at high frequency range.
- Suitable for miniaturized and high performance equipments.



◆ SPECIFICATIONS

Items	Characteristics																	
Operating Temperature Range	-40~+105°C																	
Rated Voltage Range	6.3~35V.DC																	
Capacitance Tolerance	±20%(20°C, 120Hz)																	
Leakage Current(MAX)	$I=0.01CV$ or $3\mu A$ whichever is greater. (After 2 minutes) $I=\text{Leakage Current}(\mu A)$ $C=\text{Nominal Capacitance}(\mu F)$ $V=\text{Rated Voltage}(V)$																	
Dissipation Factor(MAX)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> </tr> <tr> <td>$\tan\delta$</td> <td>0.15</td> <td>0.13</td> <td>0.12</td> <td>0.10</td> <td>0.10</td> </tr> </table> (20°C, 120Hz)						Rated Voltage (V)	6.3	10	16	25	35	$\tan\delta$	0.15	0.13	0.12	0.10	0.10
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Load Life	After life test with max. ripple current at conditions stated in the table below, the capacitors shall meet the following requirements. <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±20% of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </table> <table border="1"> <tr> <th>Case Dia</th> <th>Life Time (hrs)</th> </tr> <tr> <td>φ4, φ5, φ6.3</td> <td>1000</td> </tr> <tr> <td>φ8, φ10</td> <td>2000</td> </tr> </table>						Capacitance Change	Within ±20% of the initial value.	Dissipation Factor	Not more than 200% of the specified value.	Leakage Current	Not more than the specified value.	Case Dia	Life Time (hrs)	φ4, φ5, φ6.3	1000	φ8, φ10	2000
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Low Temperature Stability Impedance Ratio(MAX)	<table border="1"> <tr> <td>Rated Voltage(V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> </tr> <tr> <td>$Z(-40^\circ\text{C})/Z(20^\circ\text{C})$</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> </table> (120Hz)						Rated Voltage(V)	6.3	10	16	25	35	$Z(-40^\circ\text{C})/Z(20^\circ\text{C})$	2	2	2	2	2
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Reference Standard	JIS C 5141, EIAJ RC-2372																	

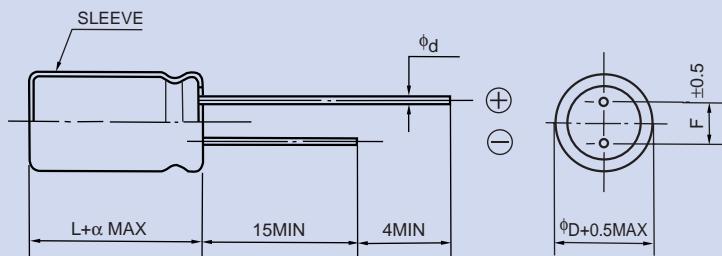
◆ MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

Cap(μF) \ Freq(Hz)	120	1k	10k	100k≤
4.7~33	0.40	0.68	0.90	1.00
47~330	0.47	0.75	0.95	1.00
470~1000	0.55	0.85	0.98	1.00

◆ DIMENSIONS

(mm)



φD	4x7	5x7	6.3x7	6.3x11	8x11.5	10x12.5	10x16
φd	0.45			0.5	0.6		
F	1.5	2.0	2.5	2.5	3.5	5.0	
α	1.0			1.5			

◆ STANDARD SIZE

Rated voltage 6.3V(0J)			
Nominal capacitance (μF)	Size φDxL(mm)	Maximum permissible ripple current (mA r.m.s./105°C, 100kHz)	Impedance (ΩMAX/20°C, 100kHz)
33	4x7	230	0.48
47	5x7	350	0.26
100	6.3x7	480	0.15
220	6.3x11	640	0.077
330	8x11.5	910	0.043
470	8x11.5	910	0.043
1000	10x16	1650	0.024

Rated voltage 10V(1A)			
Nominal capacitance (μF)	Size φDxL(mm)	Maximum permissible ripple current (mA r.m.s./105°C, 100kHz)	Impedance (ΩMAX/20°C, 100kHz)
22	4x7	230	0.49
33	5x7	350	0.26
47	5x7	350	0.26
100	6.3x7	480	0.15
220	8x11.5	910	0.044
330	8x11.5	910	0.043
470	10x12.5	1230	0.030



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Rated voltage 16V(1C)			
Nominal capacitance (μ F)	Size ϕ DxL(mm)	Maximum permissible ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX/20°C, 100kHz)
22	5x7	350	0.27
33	5x7	350	0.26
47	6.3x7	480	0.15
100	6.3x11	640	0.078
220	8x11.5	910	0.044
330	10x12.5	1230	0.030
470	10x16	1650	0.025

Rated voltage 25V(1E)			
Nominal capacitance (μ F)	Size ϕ DxL(mm)	Maximum permissible ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX/20°C, 100kHz)
10	4x7	230	0.52
22	5x7	350	0.27
33	6.3x7	480	0.16
47	6.3x7	480	0.15
100	6.3x11	640	0.078
220	10x12.5	1230	0.031
330	10x16	1650	0.026

Rated voltage 35V(1V)			
Nominal capacitance (μ F)	Size ϕ DxL(mm)	Maximum permissible ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX/20°C, 100kHz)
4.7	4x7	230	0.64
10	5x7	350	0.33
22	6.3x7	480	0.17
33	6.3x7	480	0.16
47	6.3x11	640	0.089
100	8x11.5	910	0.048
220	10x16	1650	0.026