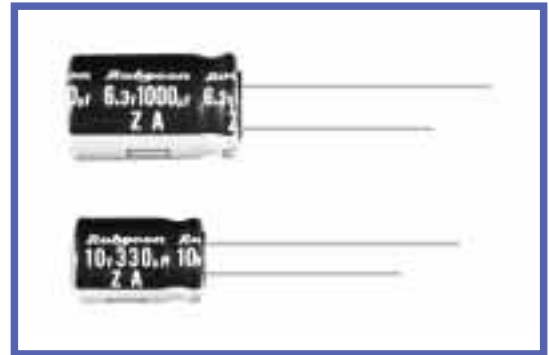


ZA SERIES
105°C Ultra Low impedance.
◆ FEATURES

- 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 3μA whichever is greater. (After 2 minutes application of rated voltage) I=Leakage Current(μA) C=Nominal Capacitance(μF) V=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> <td>(20°C, 120Hz)</td> </tr> <tr> <td>tanδ</td> <td>0.15</td> <td>0.13</td> <td>0.12</td> <td>0.10</td> <td>0.10</td> <td></td> </tr> </table>	Rated Voltage (V)	6.3	10	16	25	35	(20°C, 120Hz)	tanδ	0.15	0.13	0.12	0.10	0.10	
Rated Voltage (V)	6.3	10	16	25	35	(20°C, 120Hz)									
tanδ	0.15	0.13	0.12	0.10	0.10										
Load Life	<p>After life test with max. ripple current at conditions stated in the table below, the capacitors shall meet the following requirements.</p> <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±20% of the initial value.</td> <td>Case Dia</td> <td>Life Time (hrs)</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> <td>φ4, φ5, φ6.3</td> <td>1000</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> <td>φ8, φ10</td> <td>2000</td> </tr> </table>	Capacitance Change	Within ±20% of the initial value.	Case Dia	Life Time (hrs)	Dissipation Factor	Not more than 200% of the specified value.	φ4, φ5, φ6.3	1000	Leakage Current	Not more than the specified value.	φ8, φ10	2000		
Capacitance Change	Within ±20% of the initial value.	Case Dia	Life Time (hrs)												
Dissipation Factor	Not more than 200% of the specified value.	φ4, φ5, φ6.3	1000												
Leakage Current	Not more than the specified value.	φ8, φ10	2000												
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> <td>(120Hz)</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td></td> </tr> </table>	Rated Voltage(V)	6.3	10	16	25	35	(120Hz)	Z(-40°C)/Z(20°C)	2	2	2	2	2	
Rated Voltage(V)	6.3	10	16	25	35	(120Hz)									
Z(-40°C)/Z(20°C)	2	2	2	2	2										

◆ MULTIPLIER FOR RIPPLE CURRENT

(1) Frequency coefficient

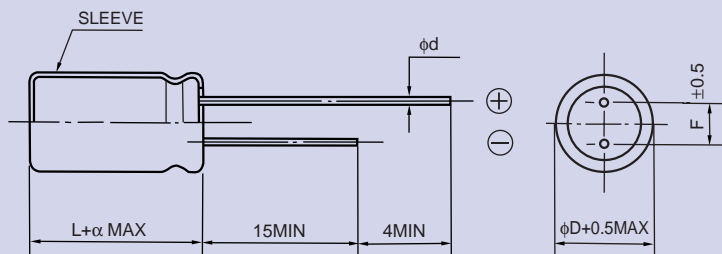
Frequency(Hz)	120	1k	10k	100k≤
4.7~33μF	0.40	0.68	0.90	1.00
47~330μF	0.47	0.75	0.95	1.00
470~1000μF	0.55	0.85	0.98	1.00

(2) Temperature coefficient

Ambient Temperature (°C)	105	85	65≥
Coefficient	1.0	1.7	2.1

◆ 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 $\phi D \times L$ (mm)	Maximum permissible ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX/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 $\phi D \times L$ (mm)	Maximum permissible ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX/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

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

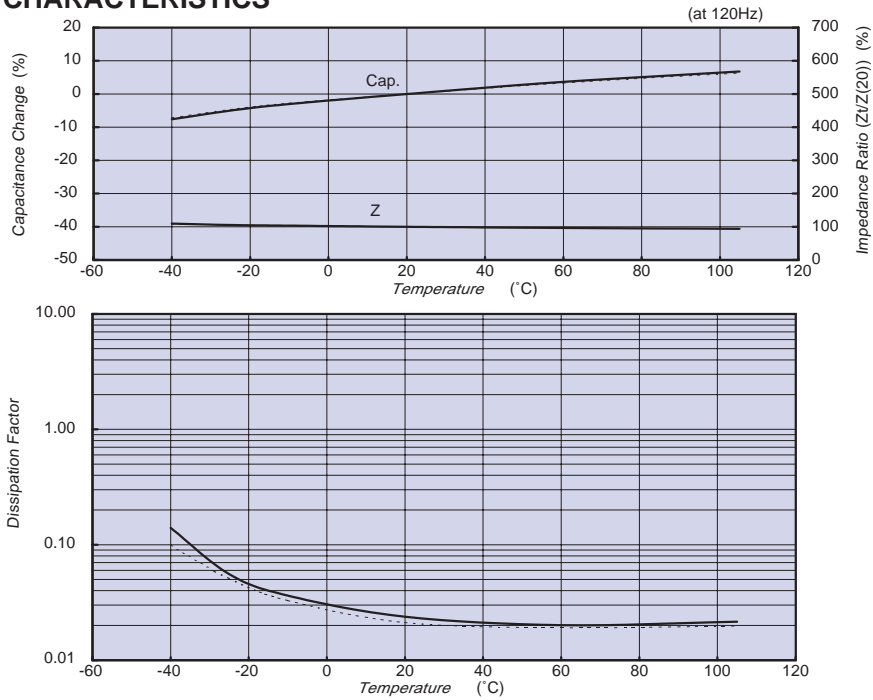
Rated voltage 25V(1E)			
Nominal capacitance (μ F)	Size ϕ DxL(mm)	Maximum permissible ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX/20°C, 100kHz)
10	4x7	230	0.52
22	5x7	350	0.27
33	6.3x7	480	0.16
47	6.3x7	480	0.15
100	6.3x11	640	0.078
220	10x12.5	1230	0.031
330	10x16	1650	0.026

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

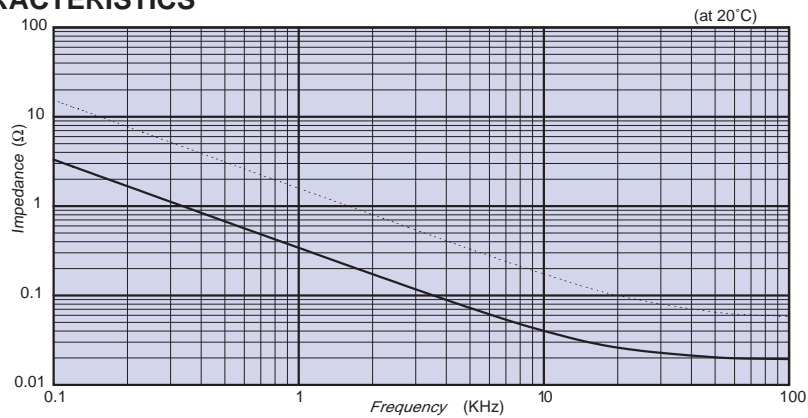
◆ **CHARACTERISTIC DATA**

————— 16 ZA 470 ϕ 10x16L
 - - - - - 25 ZA 100 ϕ 6.3x11L

• **TEMPERATURE CHARACTERISTICS**



• **FREQUENCY CHARACTERISTICS**



• **LOAD LIFE**

