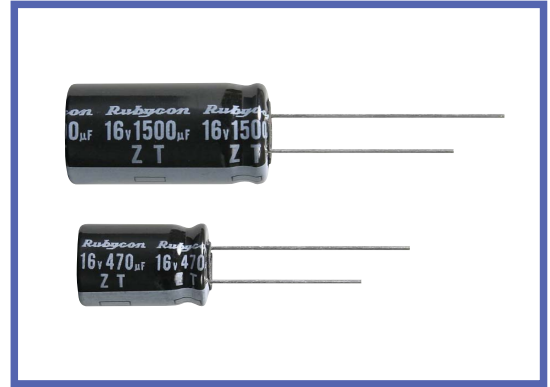


ZT SERIES
Load Life: 125°C 1000~4000hours. Low impedance.
◆ FEATURES

- Low impedance at 100kHz with selected materials.
- Load Life : 125°C 1000~4000hours.
- RoHS compliance.


◆ SPECIFICATIONS

Items	Characteristics																				
Category Temperature Range	- 40 ~ + 125°C																				
Rated Voltage Range	6.3 ~ 35V.DC																				
Capacitance Tolerance	± 20%(20°C, 120Hz)																				
Leakage Current(MAX)	I=0.03CV or 3 μ A whichever is greater. (After 2 minutes) I=Leakage Current(μ A) C=Rated Capacitance(μ F) V=Rated Voltage(V)																				
Dissipation Factor(MAX) (tan δ)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>(20°C, 120Hz)</td> </tr> <tr> <td>tan δ</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td></td> </tr> </table> <p>When nominal capacitance is over 1000 μ F, tan δ shall be added 0.02 to the listed value with increase of every 1000 μ F.</p>	Rated Voltage (V)	10	16	25	35	(20°C, 120Hz)	tan δ	0.20	0.16	0.14	0.12									
Rated Voltage (V)	10	16	25	35	(20°C, 120Hz)																
tan δ	0.20	0.16	0.14	0.12																	
Endurance	<p>After life test with rated 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 ±30% of the initial value.</td> <td>Case size</td> <td>Life Time (hrs)</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 300%of the specified value.</td> <td>φ D ≤ 6.3</td> <td>1000</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> <td>φ D=8</td> <td>2000</td> </tr> <tr> <td></td> <td></td> <td>φ D=10</td> <td>3000</td> </tr> <tr> <td></td> <td></td> <td>φ D=12.5</td> <td>4000</td> </tr> </table>	Capacitance Change	Within ±30% of the initial value.	Case size	Life Time (hrs)	Dissipation Factor	Not more than 300%of the specified value.	φ D ≤ 6.3	1000	Leakage Current	Not more than the specified value.	φ D=8	2000			φ D=10	3000			φ D=12.5	4000
Capacitance Change	Within ±30% of the initial value.	Case size	Life Time (hrs)																		
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Low Temperature Stability Impedance Ratio(MAX)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>(120Hz)</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td></td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> <td></td> </tr> </table>	Rated Voltage (V)	10	16	25	35	(120Hz)	Z(-25°C)/Z(20°C)	3	2	2	2		Z(-40°C)/Z(20°C)	6	4	3	3			
Rated Voltage (V)	10	16	25	35	(120Hz)																
Z(-25°C)/Z(20°C)	3	2	2	2																	
Z(-40°C)/Z(20°C)	6	4	3	3																	

◆ MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

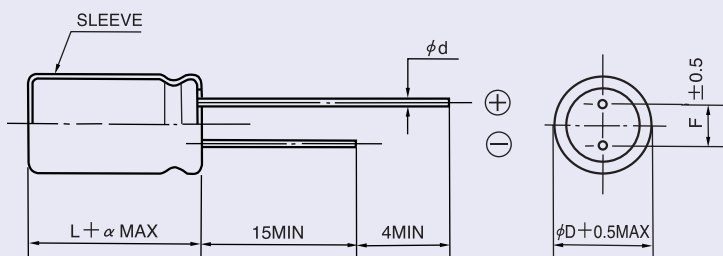
Frequency (Hz)		120	1k	10k	100k ≤
Coefficient	22 ~ 33 μ F	0.20	0.50	0.80	1.00
	39 ~ 100 μ F	0.25	0.60	0.90	1.00
	120 ~ 270 μ F	0.35	0.70	0.92	1.00
	330 ~ 680 μ F	0.45	0.75	0.95	1.00
	820 ~ 1800 μ F	0.50	0.80	0.96	1.00
	2200 μ F	0.55	0.85	0.98	1.00

◆ PART NUMBER

□□□	ZT	□□□□□	□	□□□	□□	D × L
Rated Voltage	Series	Rated Capacitance	Capacitance Tolerance	Option	Lead Forming	Case Size

◆ DIMENSIONS

(mm)



ϕD	5	6.3	8	10	12.5
ϕd	0.5		0.6		
F	2.0	2.5	3.5	5.0	
α	$L \leq 16 : \alpha = 1.5 \quad L \geq 20 : \alpha = 2.0$				

◆ STANDARD SIZE

Rated voltage 10V(1A)				
Rated capacitance (μF)	Size $\phi D \times L$ (mm)	Rated ripple current (mA r.m.s./125°C, 100kHz)	Impedance (Ω MAX)	
			20°C, 100kHz	-10°C, 100kHz
56	5 × 11	250	0.40	1.3
120	6.3 × 11	405	0.17	0.53
330	8 × 11.5	760	0.094	0.29
470	8 × 16	995	0.073	0.23
680	8 × 20	1250	0.054	0.17
470	10 × 12.5	1030	0.069	0.21
680	10 × 16	1430	0.050	0.16
1000	10 × 20	1500	0.030	0.090
1200	10 × 23	1620	0.029	0.086
1500	12.5 × 20	1720	0.028	0.069
2200	12.5 × 25	1900	0.024	0.059

Rated voltage 16V(1C)				
Rated capacitance (μF)	Size $\phi D \times L$ (mm)	Rated ripple current (mA r.m.s./125°C, 100kHz)	Impedance (Ω MAX)	
			20°C, 100kHz	-10°C, 100kHz
47	5 × 11	250	0.40	1.3
100	6.3 × 11	405	0.17	0.53
220	8 × 11.5	760	0.094	0.29
330	8 × 16	995	0.073	0.23
470	8 × 20	1250	0.054	0.17
330	10 × 12.5	1030	0.069	0.21
470	10 × 16	1430	0.050	0.16
680	10 × 20	1500	0.030	0.090
820	10 × 23	1620	0.029	0.086
1000	12.5 × 20	1720	0.028	0.069
1500	12.5 × 25	1900	0.024	0.059

Rated voltage 25V(1E)				
Rated capacitance (μ F)	Size ϕ D \times L(mm)	Rated ripple current (mA r.m.s./125°C, 100kHz)	Impedance (Ω MAX)	
			20°C, 100kHz	-10°C, 100kHz
33	5 \times 11	250	0.40	1.3
56	6.3 \times 11	405	0.17	0.53
150	8 \times 11.5	760	0.094	0.29
220	8 \times 16	995	0.073	0.23
270	8 \times 20	1250	0.054	0.17
220	10 \times 12.5	1030	0.069	0.21
330	10 \times 16	1430	0.050	0.16
470	10 \times 20	1500	0.030	0.090
560	10 \times 23	1620	0.029	0.086
680	12.5 \times 20	1720	0.028	0.069
1000	12.5 \times 25	1900	0.024	0.059

Rated voltage 35V(1V)				
Rated capacitance (μ F)	Size ϕ D \times L(mm)	Rated ripple current (mA r.m.s./125°C, 100kHz)	Impedance (Ω MAX)	
			20°C, 100kHz	-10°C, 100kHz
22	5 \times 11	250	0.40	1.3
56	6.3 \times 11	405	0.17	0.53
100	8 \times 11.5	760	0.094	0.29
120	8 \times 16	995	0.073	0.23
180	8 \times 20	1250	0.054	0.17
150	10 \times 12.5	1030	0.069	0.21
220	10 \times 16	1430	0.050	0.16
270	10 \times 20	1500	0.030	0.090
330	10 \times 23	1620	0.029	0.086
470	12.5 \times 20	1720	0.028	0.069
560	12.5 \times 25	1900	0.024	0.059