



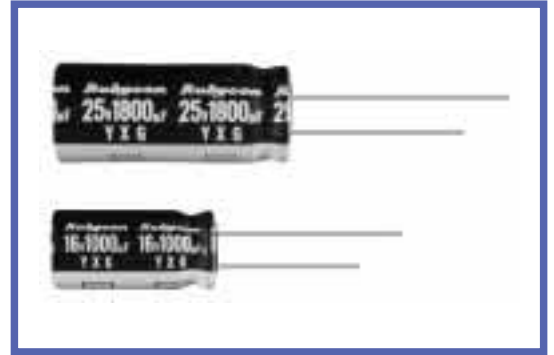
MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS YXG

YXG SERIES

105°C High ripple current. Long Life.

◆ FEATURES

- Low impedance at 100kHz with selected materials.
- Load Life : 105°C 3000~6000hours.



◆ SPECIFICATIONS

Items	Characteristics																														
Operating Temperature Range	-40~+105°C																														
Rated Voltage Range	6.3~100V.DC																														
Capacitance Tolerance	±20% (20°C, 120Hz)																														
Leakage Current(MAX)	I=0.01CV or 3µA whichever is greater. (After 2 minutes) 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>50</td> <td>63</td> <td>100</td> <td>(20°C, 120Hz)</td> </tr> <tr> <td>tanδ</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td>0.08</td> <td></td> </tr> </table> <p>When nominal capacitance is over 1000µF, tδ shall be added 0.02 to the listed value with increase of every 1000µF.</p>	Rated Voltage (V)	6.3	10	16	25	35	50	63	100	(20°C, 120Hz)	tanδ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08											
Rated Voltage (V)	6.3	10	16	25	35	50	63	100	(20°C, 120Hz)																						
tanδ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08																							
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 ±25% 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>φD≤6.3</td> <td>3000</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> <td>φD=8</td> <td>4000</td> </tr> <tr> <td></td> <td></td> <td>φD=10</td> <td>5000</td> </tr> <tr> <td></td> <td></td> <td>φD≥12.5</td> <td>6000</td> </tr> </table>	Capacitance Change	Within ±25% of the initial value.	Case Dia	Life Time(hrs)	Dissipation Factor	Not more than 200% of the specified value.	φD≤6.3	3000	Leakage Current	Not more than the specified value.	φD=8	4000			φD=10	5000			φD≥12.5	6000										
Capacitance Change	Within ±25% of the initial value.	Case Dia	Life Time(hrs)																												
Dissipation Factor	Not more than 200% of the specified value.	φD≤6.3	3000																												
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		φD=10	5000																												
		φD≥12.5	6000																												
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>50</td> <td>63</td> <td>100</td> <td>(120Hz)</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td></td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td></td> </tr> </table>	Rated Voltage(V)	6.3	10	16	25	35	50	63	100	(120Hz)	Z(-25°C)/Z(20°C)	4	3	2	2	2	2	2	2		Z(-40°C)/Z(20°C)	8	6	4	3	3	3	3	3	
Rated Voltage(V)	6.3	10	16	25	35	50	63	100	(120Hz)																						
Z(-25°C)/Z(20°C)	4	3	2	2	2	2	2	2																							
Z(-40°C)/Z(20°C)	8	6	4	3	3	3	3	3																							

◆ MULTIPLIER FOR RIPPLE CURRENT

(1) Frequency coefficient

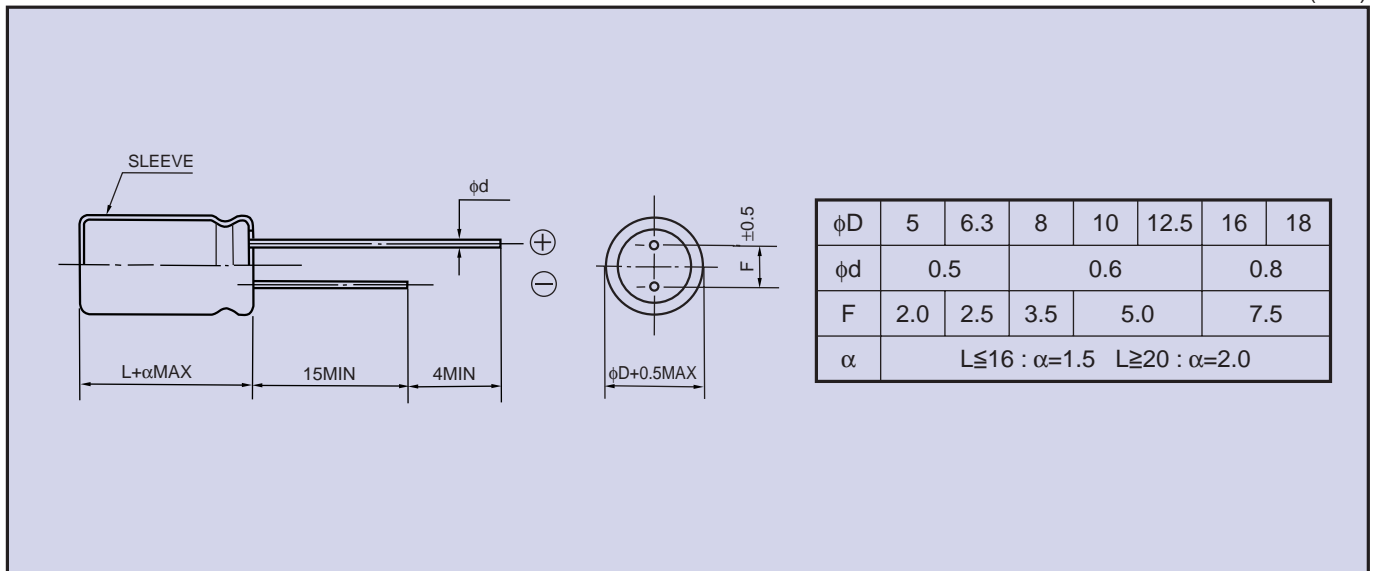
Frequency(Hz)		60(50)	120	1k	10k	100k≤
Coefficient	6.8~33µF	0.45	0.55	0.75	0.90	1.00
	39~330µF	0.60	0.70	0.85	0.95	1.00
	390~1000µF	0.65	0.75	0.90	0.98	1.00
	1200~18000µF	0.75	0.80	0.95	1.00	1.00

(2) Temperature coefficient

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

◆ DIMENSIONS

(mm)


◆ 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	-10°C, 100kHz
150	5x11	210	0.58	2.3
330	6.3x11	340	0.22	0.87
680	8x11.5	640	0.13	0.52
1000	8x16	840	0.087	0.35
1200	8x20	1050	0.069	0.27
820	10x12.5	865	0.080	0.32
1200	10x16	1210	0.060	0.24
1500	10x20	1400	0.046	0.18
2200	10x23	1650	0.042	0.17
2700	10x28	1910	0.031	0.12
1800	12.5x16	1450	0.049	0.16
3300	12.5x20	1900	0.035	0.12
3900	12.5x25	2230	0.027	0.089
4700	12.5x30	2650	0.024	0.078
5600	12.5x35	2880	0.020	0.065
6800	12.5x40	3350	0.017	0.056
2700	16x16	1940	0.042	0.12
5600	16x20	2530	0.027	0.078
6800	16x25	2930	0.021	0.060
8200	16x31.5	3450	0.017	0.050
10000	16x35.5	3610	0.015	0.044
12000	16x40	4080	0.013	0.038
3900	18x16	2210	0.043	0.11
6800	18x20	2860	0.026	0.067
10000	18x25	3140	0.019	0.049
12000	18x31.5	4170	0.015	0.040
15000	18x35.5	4220	0.014	0.038
18000	18x40	4280	0.012	0.032

Rated voltage 10V(1A)				
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°C, 100kHz
100	5x11	210	0.58	2.3
220	6.3x11	340	0.22	0.87
470	8x11.5	640	0.13	0.52
680	8x16	840	0.087	0.35
1000	8x20	1050	0.069	0.27
680	10x12.5	865	0.080	0.32
1000	10x16	1210	0.060	0.24
1200	10x20	1400	0.046	0.18
1500	10x23	1650	0.042	0.17
2200	10x28	1910	0.031	0.12
1500	12.5x16	1450	0.049	0.16
2200	12.5x20	1900	0.035	0.12
3300	12.5x25	2230	0.027	0.089
3900	12.5x30	2650	0.024	0.078
4700	12.5x35	2880	0.020	0.065
5600	12.5x40	3350	0.017	0.056
2200	16x16	1940	0.042	0.12
3900	16x20	2530	0.027	0.078
5600	16x25	2930	0.021	0.060
6800	16x31.5	3450	0.017	0.050
8200	16x35.5	3610	0.015	0.044
10000	16x40	4080	0.013	0.038
2700	18x16	2210	0.043	0.11
5600	18x20	2860	0.026	0.067
6800	18x25	3140	0.019	0.049
8200	18x31.5	4170	0.015	0.040
10000	18x35.5	4220	0.014	0.038
12000	18x40	4280	0.012	0.032

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	-10°C, 100kHz
56	5x11	210	0.58	2.3
120	6.3x11	340	0.22	0.87
330	8x11.5	640	0.13	0.52
470	8x16	840	0.087	0.35
680	8x20	1050	0.069	0.27
470	10x12.5	865	0.080	0.32
680	10x16	1210	0.060	0.24
1000	10x20	1400	0.046	0.18
1200	10x23	1650	0.042	0.17
1500	10x28	1910	0.031	0.12
1000	12.5x16	1450	0.049	0.16
1500	12.5x20	1900	0.035	0.12
2200	12.5x25	2230	0.027	0.089
2700	12.5x30	2650	0.024	0.078
3300	12.5x35	2880	0.020	0.065
3900	12.5x40	3350	0.017	0.056
1500	16x16	1940	0.042	0.12
2700	16x20	2530	0.027	0.078
3900	16x25	2930	0.021	0.060
4700	16x31.5	3450	0.017	0.050
5600	16x35.5	3610	0.015	0.044
6800	16x40	4080	0.013	0.038
2200	18x16	2210	0.043	0.11
3900	18x20	2860	0.026	0.067
4700	18x25	3140	0.019	0.049
5600	18x31.5	4170	0.015	0.040
8200	18x35.5	4220	0.014	0.038
10000	18x40	4280	0.012	0.032

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°C, 100kHz
47	5x11	210	0.58	2.3
100	6.3x11	340	0.22	0.87
220	8x11.5	640	0.13	0.52
330	8x16	840	0.087	0.35
470	8x20	1050	0.069	0.27
330	10x12.5	865	0.080	0.32
470	10x16	1210	0.060	0.24
680	10x20	1400	0.046	0.18
820	10x23	1650	0.042	0.17
1000	10x28	1910	0.031	0.12
680	12.5x16	1450	0.049	0.16
1000	12.5x20	1900	0.035	0.12
1500	12.5x25	2230	0.027	0.089
1800	12.5x30	2650	0.024	0.078
2200	12.5x35	2880	0.020	0.065
2700	12.5x40	3350	0.017	0.056
1000	16x16	1940	0.042	0.12
1800	16x20	2530	0.027	0.078
2700	16x25	2930	0.021	0.060
3300	16x31.5	3450	0.017	0.050
3900	16x35.5	3610	0.015	0.044
4700	16x40	4080	0.013	0.038
1200	18x16	2210	0.043	0.11
2200	18x20	2860	0.026	0.067
3300	18x25	3140	0.019	0.049
3900	18x31.5	4170	0.015	0.040
4700	18x35.5	4220	0.014	0.038
5600	18x40	4280	0.012	0.032

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	-10°C, 100kHz
33	5x11	210	0.58	2.3
56	6.3x11	340	0.22	0.87
150	8x11.5	640	0.13	0.52
220	8x16	840	0.087	0.35
270	8x20	1050	0.069	0.27
220	10x12.5	865	0.080	0.32
330	10x16	1210	0.060	0.24
470	10x20	1400	0.046	0.18
560	10x23	1650	0.042	0.17
680	10x28	1910	0.031	0.12
470	12.5x16	1450	0.049	0.16
680	12.5x20	1900	0.035	0.12
1000	12.5x25	2230	0.027	0.089
1200	12.5x30	2650	0.024	0.078
1500	12.5x35	2880	0.020	0.065
1800	12.5x40	3350	0.017	0.056
680	16x16	1940	0.042	0.12
1200	16x20	2530	0.027	0.078
1800	16x25	2930	0.021	0.060
2200	16x31.5	3450	0.017	0.050
2700	16x35.5	3610	0.015	0.044
3300	16x40	4080	0.013	0.038
1000	18x16	2210	0.043	0.11
1800	18x20	2860	0.026	0.067
2200	18x25	3140	0.019	0.049
2700	18x31.5	4170	0.015	0.040
3300	18x35.5	4220	0.014	0.038
3900	18x40	4280	0.012	0.032

Rated voltage 50V(1H)				
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°C, 100kHz
22	5x11	180	0.70	2.8
56	6.3x11	295	0.30	1.2
100	8x11.5	555	0.17	0.68
120	8x16	730	0.12	0.48
180	8x20	910	0.091	0.36
150	10x12.5	760	0.12	0.48
220	10x16	1050	0.084	0.34
270	10x20	1220	0.060	0.24
330	10x23	1440	0.055	0.22
470	10x28	1690	0.043	0.17
270	12.5x16	1260	0.061	0.20
470	12.5x20	1660	0.045	0.15
560	12.5x25	1950	0.034	0.11
680	12.5x30	2310	0.030	0.10
820	12.5x35	2510	0.025	0.083
1000	12.5x40	2920	0.021	0.069
470	16x16	1690	0.055	0.17
820	16x20	2210	0.034	0.10
1000	16x25	2555	0.025	0.075
1200	16x31.5	3010	0.022	0.066
1500	16x35.5	3150	0.019	0.057
1800	16x40	3710	0.016	0.048
560	18x16	1930	0.054	0.15
1000	18x20	2490	0.036	0.097
1200	18x25	2740	0.026	0.070
1800	18x31.5	3635	0.021	0.057
2200	18x35.5	3680	0.017	0.046
2700	18x40	3800	0.014	0.038

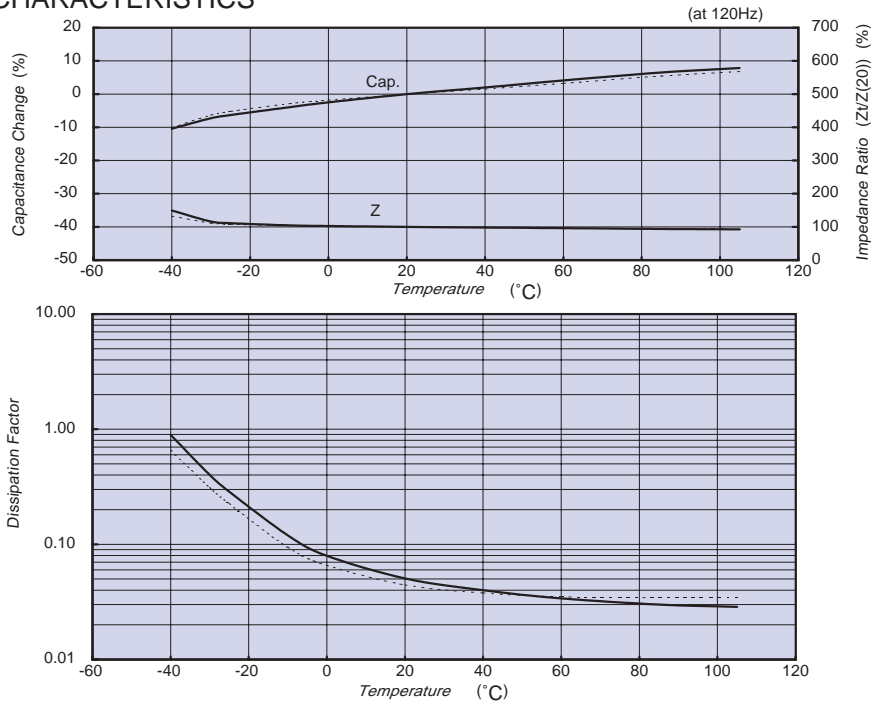
Rated voltage 63V(1J)				
Nominal capacitance (μ F)	Size ϕ DxL (mm)	Maximum permissible ripple current (mA r.m.s./105°C, 100kHz)	Impedance(Ω MAX)	
			20°C, 100kHz	-10°C, 100kHz
15	5x11	55	2.3	9.3
33	6.3x11	115	1.2	5.0
56	8x11.5	232	0.63	2.8
82	8x16	300	0.45	2.1
120	8x20	362	0.33	1.6
82	10x12.5	288	0.43	1.8
120	10x16	357	0.31	1.5
180	10x20	466	0.21	0.94
220	10x23	531	0.20	0.84
270	10x28	663	0.15	0.71
180	12.5x16	466	0.23	1.1
270	12.5x20	690	0.16	0.64
330	12.5x25	784	0.12	0.45
470	12.5x30	905	0.10	0.42
560	12.5x35	1050	0.083	0.35
680	12.5x40	1180	0.071	0.30
270	16x16	795	0.14	0.66
470	16x20	1040	0.091	0.38
560	16x25	1250	0.073	0.27
820	16x31.5	1570	0.054	0.20
1000	16x35.5	1790	0.045	0.17
1200	16x40	2020	0.040	0.15
390	18x16	920	0.12	0.50
680	18x20	1240	0.080	0.30
820	18x25	1490	0.057	0.21
1000	18x31.5	1630	0.047	0.17
1200	18x35.5	1790	0.040	0.15
1500	18x40	2330	0.036	0.13

Rated voltage 100V(2A)				
Nominal capacitance (μ F)	Size \varnothing DxL(mm)	Maximum permissible ripple current (mA r.m.s./10 ⁵ C, 100kHz)	Impedance (Ω MAX)	
			20°C, 100kHz	-10°C, 100kHz
6.8	5x11	55	2.3	9.3
15	6.3x11	115	1.2	5.0
27	8x11.5	232	0.63	2.8
39	8x16	300	0.45	2.1
56	8x20	362	0.33	1.6
47	10x12.5	288	0.43	1.8
68	10x16	357	0.31	1.5
82	10x20	466	0.21	0.94
100	10x23	531	0.20	0.84
120	10x28	663	0.15	0.71
82	12.5x16	466	0.23	1.1
120	12.5x20	690	0.16	0.64
180	12.5x25	784	0.12	0.45
220	12.5x30	905	0.10	0.42
270	12.5x35	1050	0.083	0.35
330	12.5x40	1180	0.071	0.30
150	16x16	795	0.14	0.66
220	16x20	1040	0.091	0.38
270	16x25	1250	0.073	0.27
390	16x31.5	1570	0.054	0.20
470	16x35.5	1790	0.045	0.17
560	16x40	2020	0.040	0.15
180	18x16	920	0.12	0.50
330	18x20	1240	0.080	0.30
390	18x25	1490	0.057	0.21
470	18x31.5	1630	0.047	0.17
680	18x35.5	1790	0.040	0.15
820	18x40	2330	0.036	0.13

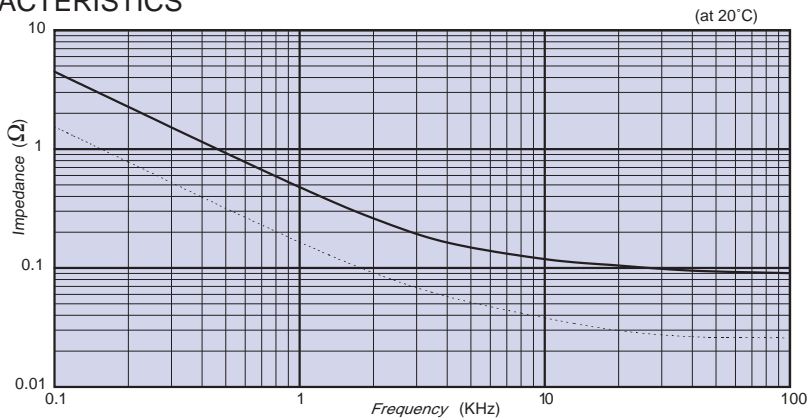
◆ CHARACTERISTIC DATA

———— 16 YXG 330 ϕ 8x11.5L
 - - - - - 25 YXG 1000 ϕ 12.5x20L

• TEMPERATURE CHARACTERISTICS



• FREQUENCY CHARACTERISTICS



• LOAD LIFE

