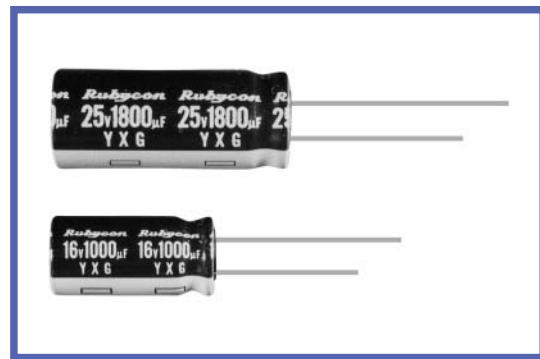


YXG SERIES

105°C High ripple current. Long Life.

◆ FEATURES

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



◆ SPECIFICATIONS

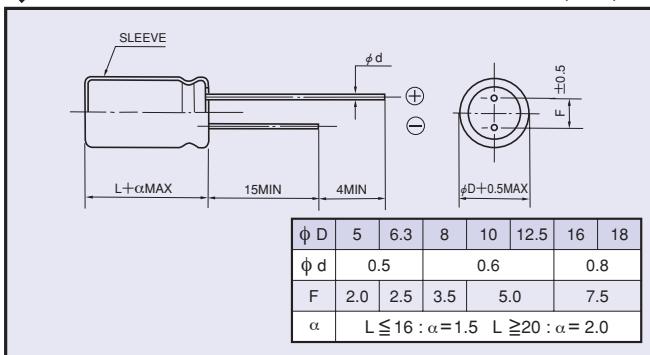
Items	Characteristics																																																																																
Category Temperature Range	-40~+105°C																																																																																
Rated Voltage Range	6.3~100V.DC																																																																																
Capacitance Tolerance	±20% (20°C, 120Hz)																																																																																
Leakage Current(MAX)	I=0.01CV or 3 μA whichever is greater. (After 2 minutes) I=Leakage Current(μA) C=Rated Capacitance(μF) V=Rated Voltage(V)																																																																																
(tanδ) 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> </tr> <tr> <td>tan δ</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> </tr> </table> <p>(20°C, 120Hz)</p> <p>When rated capacitance is over 1000 μF, tan δ shall be added 0.02 to the listed value with increase of every 1000 μF.</p>									Rated Voltage (V)	6.3	10	16	25	35	50	63	100	tan δ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08																																																						
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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 colspan="8">Within ±25% of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td colspan="8">Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td colspan="8">Not more than the specified value.</td> </tr> </table> <table border="1"> <tr> <td>Case Size</td> <td colspan="8">Life Time (hrs)</td> </tr> <tr> <td>φ D ≤ 6.3</td> <td colspan="8">3000</td> </tr> <tr> <td>φ D = 8</td> <td colspan="8">4000</td> </tr> <tr> <td>φ D = 10</td> <td colspan="8">5000</td> </tr> <tr> <td>φ D ≥ 12.5</td> <td colspan="8">6000</td> </tr> </table>									Capacitance Change	Within ±25% of the initial value.								Dissipation Factor	Not more than 200% of the specified value.								Leakage Current	Not more than the specified value.								Case Size	Life Time (hrs)								φ D ≤ 6.3	3000								φ D = 8	4000								φ D = 10	5000								φ D ≥ 12.5	6000							
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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> <td>50</td> <td>63</td> <td>100</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> </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> </tr> </table> <p>(120Hz)</p>									Rated Voltage (V)	6.3	10	16	25	35	50	63	100	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																																																																									
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

Frequency coefficient

	Frequency (Hz)	120	1k	10k	100k ≤
Coefficient	6.8~33 μF	0.42	0.70	0.90	1.00
	39~270 μF	0.50	0.73	0.92	1.00
	330~680 μF	0.55	0.77	0.94	1.00
	820~1800 μF	0.60	0.80	0.96	1.00
	2200~18000 μF	0.70	0.85	0.98	1.00

◆ DIMENSIONS (mm)



◆ PART NUMBER

□□□ YXG □□□□□□ □ □□□ □□ DXL
 Rated Voltage Series Rated Capacitance Capacitance Tolerance Option Lead Forming Case Size

◆STANDARD SIZE

Rated Voltage (V·DC)	Rated capacitance (μF)	Size $\phi \times L(\text{mm})$	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (ΩMAX)		Rated Voltage (V·DC)	Rated capacitance (μF)	Size $\phi \times L(\text{mm})$	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (ΩMAX)	
				20°C, 100kHz	-10°C, 100kHz					20°C, 100kHz	-10°C, 100kHz
6.3 (0J)	150	5×11	210	0.58	2.3	16 (1C)	56	5×11	210	0.58	2.3
	330	6.3×11	340	0.22	0.87		120	6.3×11	340	0.22	0.87
	680	8×11.5	640	0.13	0.52		330	8×11.5	640	0.13	0.52
	820	10×12.5	865	0.080	0.32		470	8×16	840	0.087	0.35
	1000	8×16	840	0.087	0.35		470	10×12.5	865	0.080	0.32
	1200	8×20	1050	0.069	0.27		680	8×20	1050	0.069	0.27
	1200	10×16	1210	0.060	0.24		680	10×16	1210	0.060	0.24
	1500	10×20	1400	0.046	0.18		1000	10×20	1400	0.046	0.18
	1800	12.5×16	1450	0.049	0.16		1000	12.5×16	1450	0.049	0.16
	2200	10×23	1650	0.042	0.17		1200	10×23	1650	0.042	0.17
	2700	10×28	1910	0.031	0.12		1500	10×28	1910	0.031	0.12
	2700	16×16	1940	0.042	0.12		1500	12.5×20	1900	0.035	0.12
	3300	12.5×20	1900	0.035	0.12		1500	16×16	1940	0.042	0.12
	3900	12.5×25	2230	0.027	0.089		2200	12.5×25	2230	0.027	0.089
	3900	18×16	2210	0.043	0.11		2200	18×16	2210	0.043	0.11
	4700	12.5×30	2650	0.024	0.078		2700	12.5×30	2650	0.024	0.078
	5600	12.5×35	2880	0.020	0.065		2700	16×20	2530	0.027	0.078
	5600	16×20	2530	0.027	0.078		3300	12.5×35	2880	0.020	0.065
	6800	12.5×40	3350	0.017	0.056		3900	12.5×40	3350	0.017	0.056
	6800	16×25	2930	0.021	0.060		3900	16×25	2930	0.021	0.060
	6800	18×20	2860	0.026	0.067		3900	18×20	2860	0.026	0.067
	8200	16×31.5	3450	0.017	0.050		4700	16×31.5	3450	0.017	0.050
	10000	16×35.5	3610	0.015	0.044		4700	18×25	3140	0.019	0.049
	10000	18×25	3140	0.019	0.049		5600	16×35.5	3610	0.015	0.044
	12000	16×40	4080	0.013	0.038		5600	18×31.5	4170	0.015	0.040
	12000	18×31.5	4170	0.015	0.040		6800	16×40	4080	0.013	0.038
	15000	18×35.5	4220	0.014	0.038		8200	18×35.5	4220	0.014	0.038
	18000	18×40	4280	0.012	0.032		10000	18×40	4280	0.012	0.032
10 (1A)	100	5×11	210	0.58	2.3	25 (1E)	47	5×11	210	0.58	2.3
	220	6.3×11	340	0.22	0.87		100	6.3×11	340	0.22	0.87
	470	8×11.5	640	0.13	0.52		220	8×11.5	640	0.13	0.52
	680	8×16	840	0.087	0.35		330	8×16	840	0.087	0.35
	680	10×12.5	865	0.080	0.32		330	10×12.5	865	0.080	0.32
	1000	8×20	1050	0.069	0.27		470	8×20	1050	0.069	0.27
	1000	10×16	1210	0.060	0.24		470	10×16	1210	0.060	0.24
	1200	10×20	1400	0.046	0.18		680	10×20	1400	0.046	0.18
	1500	10×23	1650	0.042	0.17		680	12.5×16	1450	0.049	0.16
	1500	12.5×16	1450	0.049	0.16		820	10×23	1650	0.042	0.17
	2200	10×28	1910	0.031	0.12		1000	10×28	1910	0.031	0.12
	2200	12.5×20	1900	0.035	0.12		1000	12.5×20	1900	0.035	0.12
	2200	16×16	1940	0.042	0.12		1000	16×16	1940	0.042	0.12
	2700	18×16	2210	0.043	0.11		1200	18×16	2210	0.043	0.11
	3300	12.5×25	2230	0.027	0.089		1500	12.5×25	2230	0.027	0.089
	3900	12.5×30	2650	0.024	0.078		1800	12.5×30	2650	0.024	0.078
	3900	16×20	2530	0.027	0.078		1800	16×20	2530	0.027	0.078
	4700	12.5×35	2880	0.020	0.065		2200	12.5×35	2880	0.020	0.065
	5600	12.5×40	3350	0.017	0.056		2200	18×20	2860	0.026	0.067
	5600	16×25	2930	0.021	0.060		2700	12.5×40	3350	0.017	0.056
	5600	18×20	2860	0.026	0.067		2700	16×25	2930	0.021	0.060
	6800	16×31.5	3450	0.017	0.050		3300	16×31.5	3450	0.017	0.050
	6800	18×25	3140	0.019	0.049		3300	18×25	3140	0.019	0.049
	8200	16×35.5	3610	0.015	0.044		3900	16×35.5	3610	0.015	0.044
	8200	18×31.5	4170	0.015	0.040		3900	18×31.5	4170	0.015	0.040
	10000	16×40	4080	0.013	0.038		4700	16×40	4080	0.013	0.038
	10000	18×35.5	4220	0.014	0.038		4700	18×35.5	4220	0.014	0.038
	12000	18×40	4280	0.012	0.032		5600	18×40	4280	0.012	0.032

◆STANDARD SIZE

Rated Voltage (V·DC)	Rated capacitance (μF)	Size φ D×L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (ΩMAX)		Rated Voltage (V·DC)	Rated capacitance (μF)	Size φ D×L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (ΩMAX)	
				20°C, 100kHz	-10°C, 100kHz					20°C, 100kHz	-10°C, 100kHz
35 (1V)	33	5×11	210	0.58	2.3	63 (1J)	15	5×11	55	2.3	9.3
	56	6.3×11	340	0.22	0.87		33	6.3×11	115	1.2	5.0
	150	8×11.5	640	0.13	0.52		56	8×11.5	232	0.63	2.8
	220	8×16	840	0.087	0.35		82	8×16	300	0.45	2.1
	220	10×12.5	865	0.080	0.32		82	10×12.5	288	0.43	1.8
	270	8×20	1050	0.069	0.27		120	8×20	362	0.33	1.6
	330	10×16	1210	0.060	0.24		120	10×16	357	0.31	1.5
	470	10×20	1400	0.046	0.18		180	10×20	466	0.21	0.94
	470	12.5×16	1450	0.049	0.16		180	12.5×16	466	0.23	1.1
	560	10×23	1650	0.042	0.17		220	10×23	531	0.20	0.84
	680	10×28	1910	0.031	0.12		270	10×28	663	0.15	0.71
	680	12.5×20	1900	0.035	0.12		270	12.5×20	690	0.16	0.64
	680	16×16	1940	0.042	0.12		270	16×16	795	0.14	0.66
	1000	12.5×25	2230	0.027	0.089		330	12.5×25	784	0.12	0.45
	1000	18×16	2210	0.043	0.11		390	18×16	920	0.12	0.50
	1200	12.5×30	2650	0.024	0.078		470	12.5×30	905	0.10	0.42
	1200	16×20	2530	0.027	0.078		470	16×20	1040	0.091	0.38
	1500	12.5×35	2880	0.020	0.065		560	12.5×35	1050	0.083	0.35
	1800	12.5×40	3350	0.017	0.056		560	16×25	1250	0.073	0.27
	1800	16×25	2930	0.021	0.060		680	12.5×40	1180	0.071	0.30
	1800	18×20	2860	0.026	0.067		680	18×20	1240	0.080	0.30
	2200	16×31.5	3450	0.017	0.050		820	16×31.5	1570	0.054	0.20
	2200	18×25	3140	0.019	0.049		820	18×25	1490	0.057	0.21
	2700	16×35.5	3610	0.015	0.044		1000	16×35.5	1790	0.045	0.17
	2700	18×31.5	4170	0.015	0.040		1000	18×31.5	1630	0.047	0.17
	3300	16×40	4080	0.013	0.038		1200	16×40	2020	0.040	0.15
	3300	18×35.5	4220	0.014	0.038		1200	18×35.5	1790	0.040	0.15
	3900	18×40	4280	0.012	0.032		1500	18×40	2330	0.036	0.13
50 (1H)	22	5×11	180	0.70	2.8	100 (2A)	6.8	5×11	55	2.3	9.3
	56	6.3×11	295	0.30	1.2		15	6.3×11	115	1.2	5.0
	100	8×11.5	555	0.17	0.68		27	8×11.5	232	0.63	2.8
	120	8×16	730	0.12	0.48		39	8×16	300	0.45	2.1
	150	10×12.5	760	0.12	0.48		47	10×12.5	288	0.43	1.8
	180	8×20	910	0.091	0.36		56	8×20	362	0.33	1.6
	220	10×16	1050	0.084	0.34		68	10×16	357	0.31	1.5
	270	10×20	1220	0.060	0.24		82	10×20	466	0.21	0.94
	270	12.5×16	1260	0.061	0.20		82	12.5×16	466	0.23	1.1
	330	10×23	1440	0.055	0.22		100	10×23	531	0.20	0.84
	470	10×28	1690	0.043	0.17		120	10×28	663	0.15	0.71
	470	12.5×20	1660	0.045	0.15		120	12.5×20	690	0.16	0.64
	470	16×16	1690	0.055	0.17		150	16×16	795	0.14	0.66
	560	12.5×25	1950	0.034	0.11		180	12.5×25	784	0.12	0.45
	560	18×16	1930	0.054	0.15		180	18×16	920	0.12	0.50
	680	12.5×30	2310	0.030	0.10		220	12.5×30	905	0.10	0.42
	820	12.5×35	2510	0.025	0.083		220	16×20	1040	0.091	0.38
	820	16×20	2210	0.034	0.10		270	12.5×35	1050	0.083	0.35
	1000	12.5×40	2920	0.021	0.069		270	16×25	1250	0.073	0.27
	1000	16×25	2555	0.025	0.075		330	12.5×40	1180	0.071	0.30
	1000	18×20	2490	0.036	0.097		330	18×20	1240	0.080	0.30
	1200	16×31.5	3010	0.022	0.066		390	16×31.5	1570	0.054	0.20
	1200	18×25	2740	0.026	0.070		390	18×25	1490	0.057	0.21
	1500	16×35.5	3150	0.019	0.057		470	16×35.5	1790	0.045	0.17
	1800	16×40	3710	0.016	0.048		470	18×31.5	1630	0.047	0.17
	1800	18×31.5	3635	0.021	0.057		560	16×40	2020	0.040	0.15
	2200	18×35.5	3680	0.017	0.046		680	18×35.5	1790	0.040	0.15
	2700	18×40	3800	0.014	0.038		820	18×40	2330	0.036	0.13