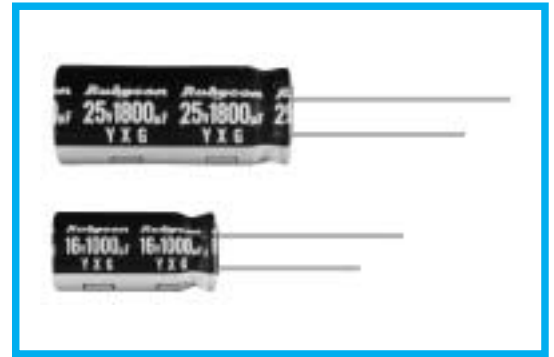


YXG SERIES
105°C High ripple current. Long Life.
◆FEATURES

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


www.DataSheet4U.com
◆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)																											
Dissipation Factor(MAX) (tan δ)	<table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> </tr> </thead> <tbody> <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> </tbody> </table> (20°C, 120Hz) When rated capacitance is over 1000 μF, tan δ shall be added 0.02 to the listed value with increase of every 1000 μF.	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									
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																				
Endurance	After life test with rated ripple current at conditions stated in the table below, the capacitors shall meet the following requirements. <table border="1"> <thead> <tr> <th>Capacitance Change</th> <th>Within ±25% of the initial value.</th> <th>Case Dia</th> <th>Life Time (hrs)</th> </tr> </thead> <tbody> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> <td>φ D≤6.3</td> <td>3000</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> <td>φ D=8</td> <td>4000</td> </tr> <tr> <td></td> <td></td> <td>φ D=10</td> <td>5000</td> </tr> <tr> <td></td> <td></td> <td>φ D≥12.5</td> <td>6000</td> </tr> </tbody> </table>	Capacitance Change	Within ±25% of the initial value.	Case Dia	Life Time (hrs)	Dissipation Factor	Not more than 200% of the specified value.	φ D≤6.3	3000	Leakage Current	Not more than the specified value.	φ D=8	4000			φ D=10	5000			φ D≥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.	φ D≤6.3	3000																									
Leakage Current	Not more than the specified value.	φ D=8	4000																									
		φ D=10	5000																									
		φ D≥12.5	6000																									
Low Temperature Stability Impedance Ratio(MAX)	<table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> </tr> </thead> <tbody> <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> </tbody> </table> (120Hz)	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

◆PART NUMBER

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

◆ DIMENSIONS

(mm)

ϕD	5	6.3	8	10	12.5	16	18
ϕd	0.5		0.6		0.8		
F	2.0	2.5	3.5	5.0		7.5	
α	$L \leq 16 : \alpha = 1.5$						$L \geq 20 : \alpha = 2.0$

◆ STANDARD SIZE

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

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

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

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

Rated voltage 35V(1V)				
Rated capacitance (μ F)	Size ϕ D \times L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)	
			20°C, 100kHz	-10°C, 100kHz
33	5 \times 11	210	0.58	2.3
56	6.3 \times 11	340	0.22	0.87
150	8 \times 11.5	640	0.13	0.52
220	8 \times 16	840	0.087	0.35
220	10 \times 12.5	865	0.080	0.32
270	8 \times 20	1050	0.069	0.27
330	10 \times 16	1210	0.060	0.24
470	10 \times 20	1400	0.046	0.18
470	12.5 \times 16	1450	0.049	0.16
560	10 \times 23	1650	0.042	0.17
680	10 \times 28	1910	0.031	0.12
680	12.5 \times 20	1900	0.035	0.12
680	16 \times 16	1940	0.042	0.12
1000	12.5 \times 25	2230	0.027	0.089
1000	18 \times 16	2210	0.043	0.11
1200	12.5 \times 30	2650	0.024	0.078
1200	16 \times 20	2530	0.027	0.078
1500	12.5 \times 35	2880	0.020	0.065
1800	12.5 \times 40	3350	0.017	0.056
1800	16 \times 25	2930	0.021	0.060
1800	18 \times 20	2860	0.026	0.067
2200	16 \times 31.5	3450	0.017	0.050
2200	18 \times 25	3140	0.019	0.049
2700	16 \times 35.5	3610	0.015	0.044
2700	18 \times 31.5	4170	0.015	0.040
3300	16 \times 40	4080	0.013	0.038
3300	18 \times 35.5	4220	0.014	0.038
3900	18 \times 40	4280	0.012	0.032

Rated voltage 50V(1H)				
Rated capacitance (μ F)	Size ϕ D \times L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)	
			20°C, 100kHz	-10°C, 100kHz
22	5 \times 11	180	0.70	2.8
56	6.3 \times 11	295	0.30	1.2
100	8 \times 11.5	555	0.17	0.68
120	8 \times 16	730	0.12	0.48
150	10 \times 12.5	760	0.12	0.48
180	8 \times 20	910	0.091	0.36
220	10 \times 16	1050	0.084	0.34
270	10 \times 20	1220	0.060	0.24
270	12.5 \times 16	1260	0.061	0.20
330	10 \times 23	1440	0.055	0.22
470	10 \times 28	1690	0.043	0.17
470	12.5 \times 20	1660	0.045	0.15
470	16 \times 16	1690	0.055	0.17
560	12.5 \times 25	1950	0.034	0.11
560	18 \times 16	1930	0.054	0.15
680	12.5 \times 30	2310	0.030	0.10
820	12.5 \times 35	2510	0.025	0.083
820	16 \times 20	2210	0.034	0.10
1000	12.5 \times 40	2920	0.021	0.069
1000	16 \times 25	2555	0.025	0.075
1000	18 \times 20	2490	0.036	0.097
1200	16 \times 31.5	3010	0.022	0.066
1200	18 \times 25	2740	0.026	0.070
1500	16 \times 35.5	3150	0.019	0.057
1800	16 \times 40	3710	0.016	0.048
1800	18 \times 31.5	3635	0.021	0.057
2200	18 \times 35.5	3680	0.017	0.046
2700	18 \times 40	3800	0.014	0.038

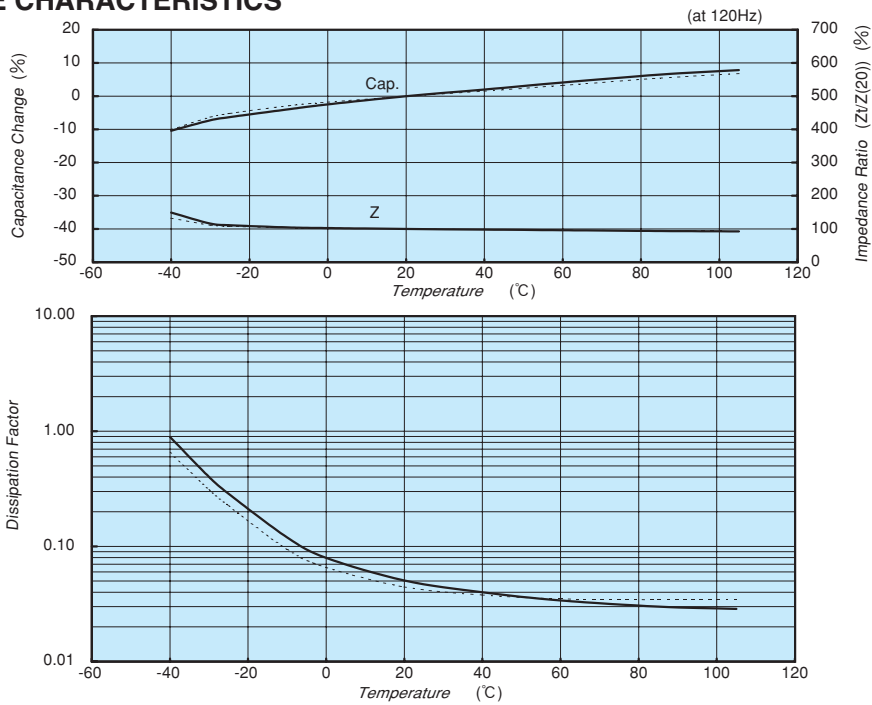
Rated voltage 63V(1J)				
Rated capacitance (μ F)	Size ϕ D \times L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)	
			20°C, 100kHz	-10°C, 100kHz
15	5 \times 11	55	2.3	9.3
33	6.3 \times 11	115	1.2	5.0
56	8 \times 11.5	232	0.63	2.8
82	8 \times 16	300	0.45	2.1
82	10 \times 12.5	288	0.43	1.8
120	8 \times 20	362	0.33	1.6
120	10 \times 16	357	0.31	1.5
180	10 \times 20	466	0.21	0.94
180	12.5 \times 16	466	0.23	1.1
220	10 \times 23	531	0.20	0.84
270	10 \times 28	663	0.15	0.71
270	12.5 \times 20	690	0.16	0.64
270	16 \times 16	795	0.14	0.66
330	12.5 \times 25	784	0.12	0.45
390	18 \times 16	920	0.12	0.50
470	12.5 \times 30	905	0.10	0.42
470	16 \times 20	1040	0.091	0.38
560	12.5 \times 35	1050	0.083	0.35
560	16 \times 25	1250	0.073	0.27
680	12.5 \times 40	1180	0.071	0.30
680	18 \times 20	1240	0.080	0.30
820	16 \times 31.5	1570	0.054	0.20
820	18 \times 25	1490	0.057	0.21
1000	16 \times 35.5	1790	0.045	0.17
1000	18 \times 31.5	1630	0.047	0.17
1200	16 \times 40	2020	0.040	0.15
1200	18 \times 35.5	1790	0.040	0.15
1500	18 \times 40	2330	0.036	0.15

Rated voltage 100V(2A)				
Rated capacitance (μ F)	Size ϕ D \times L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)	
			20°C, 100kHz	-10°C, 100kHz
6.8	5 \times 11	55	2.3	9.3
15	6.3 \times 11	115	1.2	5.0
27	8 \times 11.5	232	0.63	2.8
39	8 \times 16	300	0.45	2.1
47	10 \times 12.5	288	0.43	1.8
56	8 \times 20	362	0.33	1.6
68	10 \times 16	357	0.31	1.5
82	10 \times 20	466	0.21	0.94
82	12.5 \times 16	466	0.23	1.1
100	10 \times 23	531	0.20	0.84
120	10 \times 28	663	0.15	0.71
120	12.5 \times 20	690	0.16	0.64
150	16 \times 16	795	0.14	0.66
180	12.5 \times 25	784	0.12	0.45
180	18 \times 16	920	0.12	0.50
220	12.5 \times 30	905	0.10	0.42
220	16 \times 20	1040	0.091	0.38
270	12.5 \times 35	1050	0.083	0.35
270	16 \times 25	1250	0.073	0.27
330	12.5 \times 40	1180	0.071	0.30
330	18 \times 20	1240	0.080	0.30
390	16 \times 31.5	1570	0.054	0.20
390	18 \times 25	1490	0.057	0.21
470	16 \times 35.5	1790	0.045	0.17
470	18 \times 31.5	1630	0.047	0.17
560	16 \times 40	2020	0.040	0.15
680	18 \times 35.5	1790	0.040	0.15
820	18 \times 40	2330	0.036	0.13

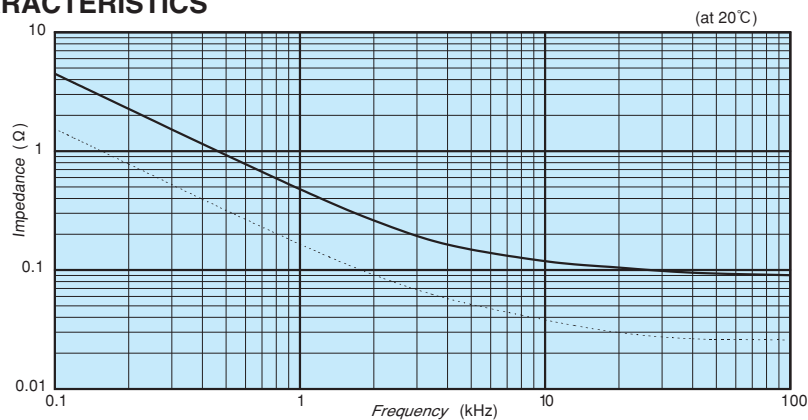
◆ CHARACTERISTIC DATA

————— 16 YXG 330 M 8×11.5
 - - - - - 25 YXG 1000 M 12.5×20

· TEMPERATURE CHARACTERISTICS



· FREQUENCY CHARACTERISTICS



· ENDURANCE

