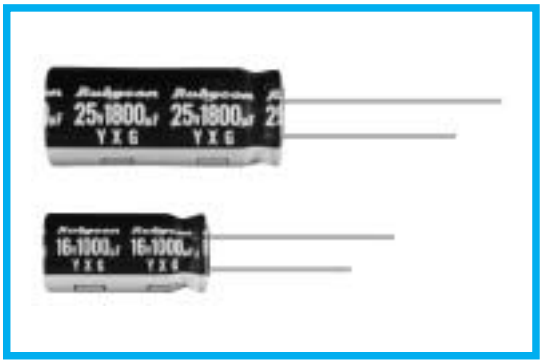
YXG SERIES

105℃ High ripple current. Long Life.



◆FEATURES

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

◆SPECIFICATIONS

Items	Characteristics
Category Temperature Range	−40～+105℃
Rated Voltage Range	6.3～100V.DC
Capacitance Tolerance	±20%（20℃，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)	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 （20℃，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.
Endurance	After life test with rated ripple current at conditions stated in the table below, the capacitors shall meet the following requirements. 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 Dia / Life Time (hrs): φD≦6.3 / 3000; φD=8 / 4000; φD=10 / 5000; φD≧12.5 / 6000
Low Temperature Stability Impedance Ratio(MAX)	Rated Voltage (V): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 100 Z(−25℃)/Z(20℃): 4 / 3 / 2 / 2 / 2 / 2 / 2 / 2 Z(−40℃)/Z(20℃): 8 / 6 / 4 / 3 / 3 / 3 / 3 / 3 （120Hz）

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

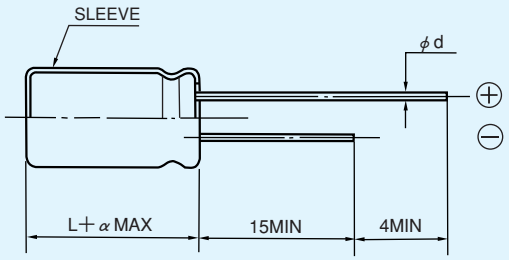
Frequency (Hz)		120	1k	10k	100k≦
Coefficient	6.8～33 μF	0.42	0.70	0.90	1.00
	39～270 μF	0.50	0.73	0.92	1.00
	330～680 μF	0.55	0.77	0.94	1.00
	820～1800 μF	0.60	0.80	0.96	1.00
	2200～18000 μF	0.70	0.85	0.98	1.00

◆PART NUMBER

□□□ Rated Voltage | YXG Series | □□□□□ Rated Capacitance | □ Capacitance Tolerance | □□□ Option | □□ Lead Forming | D×L 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≦16 : α=1.5 L≧20 : α=2.0						

◆STANDARD SIZE

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

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

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

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

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

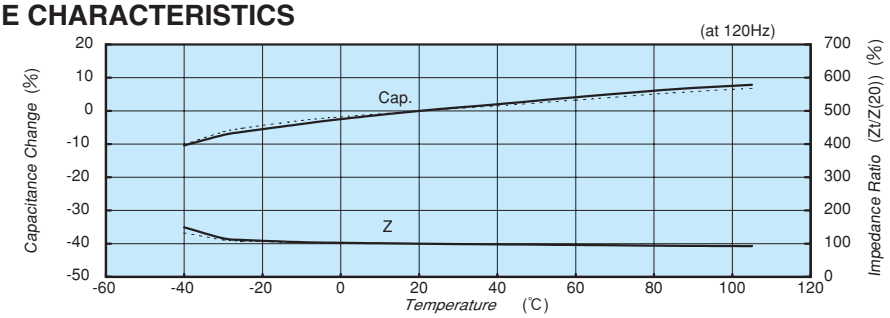
Rated voltage 63V(1J)				
Rated capacitance (μF)	Size φD×L(mm)	Rated ripple current (mA r.m.s./105℃, 100kHz)	Impedance (Ω MAX)	
			20℃, 100kHz	−10℃, 100kHz
15	5×11	55	2.3	9.3
33	6.3×11	115	1.2	5.0
56	8×11.5	232	0.63	2.8
82	8×16	300	0.45	2.1
82	10×12.5	288	0.43	1.8
120	8×20	362	0.33	1.6
120	10×16	357	0.31	1.5
180	10×20	466	0.21	0.94
180	12.5×16	466	0.23	1.1
220	10×23	531	0.20	0.84
270	10×28	663	0.15	0.71
270	12.5×20	690	0.16	0.64
270	16×16	795	0.14	0.66
330	12.5×25	784	0.12	0.45
390	18×16	920	0.12	0.50
470	12.5×30	905	0.10	0.42
470	16×20	1040	0.091	0.38
560	12.5×35	1050	0.083	0.35
560	16×25	1250	0.073	0.27
680	12.5×40	1180	0.071	0.30
680	18×20	1240	0.080	0.30
820	16×31.5	1570	0.054	0.20
820	18×25	1490	0.057	0.21
1000	16×35.5	1790	0.045	0.17
1000	18×31.5	1630	0.047	0.17
1200	16×40	2020	0.040	0.15
1200	18×35.5	1790	0.040	0.15
1500	18×40	2330	0.036	0.13

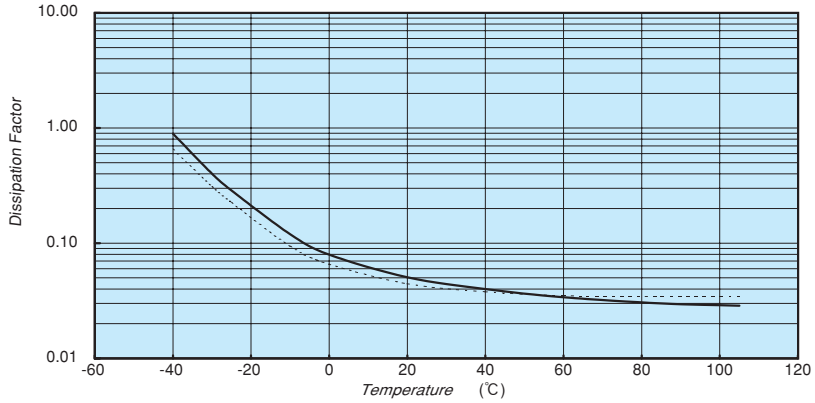
Rated voltage 100V(2A)				
Rated capacitance (μF)	Size φD×L(mm)	Rated ripple current (mA r.m.s./105℃, 100kHz)	Impedance (Ω MAX)	
			20℃, 100kHz	−10℃, 100kHz
6.8	5×11	55	2.3	9.3
15	6.3×11	115	1.2	5.0
27	8×11.5	232	0.63	2.8
39	8×16	300	0.45	2.1
47	10×12.5	288	0.43	1.8
56	8×20	362	0.33	1.6
68	10×16	357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

◆CHARACTERISTIC DATA

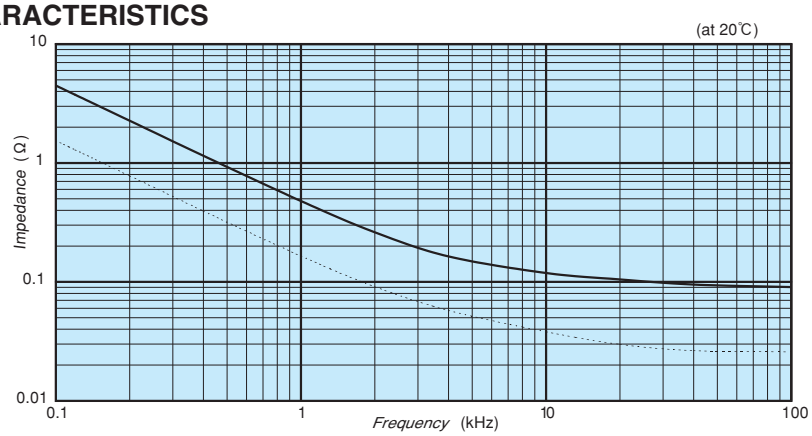
16 YXG 330 M 8×11.5
25 YXG 1000 M 12.5×20

・TEMPERATURE CHARACTERISTICS





・FREQUENCY CHARACTERISTICS



・ENDURANCE