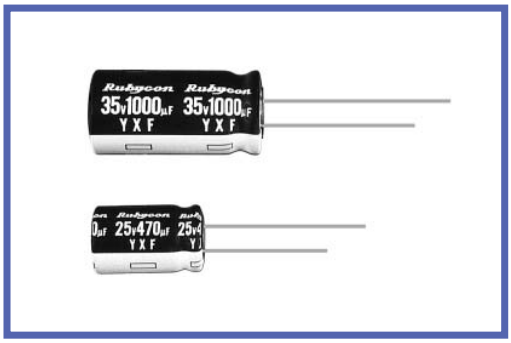
YXF SERIES

105°C Long Life. Low impedance.



◆FEATURES

- Load Life : 105°C 2000～10000hours.
- Low impedance at 100kHz with selected materials.
- RoHS compliance.

◆SPECIFICATIONS

Items	Characteristics
Category Temperature Range	−40～+105°C
Rated Voltage Range	6.3～250V.DC
Capacitance Tolerance	±20% (20°C, 120Hz)
Leakage Current(MAX)	6.3wv～100wv I=0.01CV or 3 μA whichever is greater. (After 2 minutes) 160wv～250wv I=0.04CV +100 μA (After 1 minute application of rated voltage) I=0.02CV +25 μA (After 5 minutes application of rated voltage) I=Leakage Current(μA) C=Rated Capacitance(μF) V=Rated Voltage(V)
(tanδ) Dissipation Factor(MAX)	(20°C, 120Hz)

Rated Voltage (V)	6.3	10	16	25	35	50	63	100	160	200	250
tan δ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.12	0.12	0.12

When rated capacitance is over 1000 μF, tanδ 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.(160wv to 250wv:±20%)
Dissipation Factor	Not more than 200% of the specified value.
Leakage Current	Not more than the specified value.

Case Size	Life Time(hrs)		
	6.3～10WV	16～100WV	160～250WV
φD≦6.3	4000	5000	–
φD＝8	6000	7000	–
φD＝10	6000	7000	2000
φD≧12.5	8000	10000	2000

Low Temperature Stability Impedance Ratio(MAX)

(120Hz)

Rated Voltage(V)	6.3	10	16	25	35	50	63	100	160	200	250
Z(−25°C)/Z(20°C)	4	3	2	2	2	2	2	2	3	3	3
Z(−40°C)/Z(20°C)	8	6	4	3	3	3	3	3	4	4	4

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

(6.3wv～100wv)

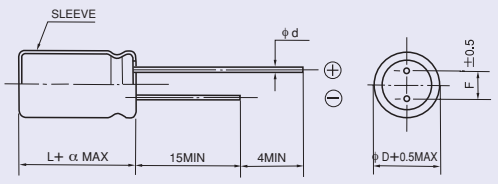
Frequency (Hz)		120	1k	10k	100k ≦
Coefficient	0.47～10 μF	0.42	0.60	0.80	1.00
	22～33 μF	0.55	0.75	0.90	1.00
	47～330 μF	0.70	0.85	0.95	1.00
	470～1000 μF	0.75	0.90	0.98	1.00
	2200～15000 μF	0.80	0.95	1.00	1.00

(160wv～250wv)

Frequency (Hz)	60(50)	120	1k	10k	100k ≦
Coefficient	0.40	0.50	0.75	0.90	1.00

◆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						

◆PART NUMBER

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

◆STANDARD SIZE

Rated Voltage (V·DC)	Rated capacitance (μF)	Size φ D×L(mm)	Rated ripple current (mA r.m.s./105℃, 100kHz)	Impedance(Ω MAX)	
				20℃, 100kHz	−10℃, 100kHz
6.3 (0J)	100	5×11	150	0.90	3.6
	220	6.3×11	250	0.40	1.6
	330	6.3×11	250	0.40	1.6
	470	8×11.5	400	0.25	1.0
	1000	10×12.5	580	0.16	0.65
	2200	12.5×20	1300	0.062	0.21
	3300	12.5×20	1300	0.062	0.21
	4700	16×25	1850	0.034	0.096
	6800	16×25	1850	0.034	0.096
	10000	16×31.5	2000	0.029	0.087
	15000	18×35.5	2200	0.025	0.058
10 (1A)	100	5×11	150	0.90	3.6
	220	6.3×11	250	0.40	1.6
	330	8×11.5	400	0.25	1.0
	470	8×11.5	400	0.25	1.0
	1000	10×16	770	0.12	0.46
	2200	12.5×20	1300	0.062	0.21
	3300	12.5×25	1650	0.048	0.16
	4700	16×25	1850	0.034	0.096
	6800	16×31.5	2000	0.029	0.087
	10000	18×35.5	2200	0.025	0.058
16 (1C)	47	5×11	150	0.90	3.6
	100	6.3×11	250	0.40	1.6
	220	8×11.5	400	0.25	1.0
	330	8×11.5	400	0.25	1.0
	470	10×12.5	580	0.16	0.65
	1000	10×20	1050	0.078	0.30
	2200	12.5×25	1650	0.048	0.16
	3300	16×25	1850	0.034	0.096
	4700	16×31.5	2000	0.029	0.087
	6800	18×35.5	2200	0.025	0.058
25 (1E)	33	5×11	150	0.90	3.6
	47	5×11	150	0.90	3.6
	100	6.3×11	250	0.40	1.6
	220	8×11.5	400	0.25	1.0
	330	10×12.5	580	0.16	0.65
	470	10×16	770	0.12	0.46
	1000	12.5×20	1300	0.062	0.21
	2200	16×25	1850	0.034	0.096
	3300	16×31.5	2000	0.029	0.087
	4700	18×35.5	2200	0.025	0.058
35 (1V)	33	5×11	150	0.90	3.6
	47	6.3×11	250	0.40	1.6
	100	8×11.5	400	0.25	1.0
	220	10×12.5	580	0.16	0.65
	330	10×16	770	0.12	0.46
	470	10×20	1050	0.078	0.30
	1000	12.5×25	1650	0.048	0.16
	2200	16×31.5	2000	0.029	0.087
	3300	18×35.5	2200	0.025	0.058

Rated Voltage (V·DC)	Rated capacitance (μF)	Size φ D×L(mm)	Rated ripple current (mA r.m.s./105℃, 100kHz)	Impedance(Ω MAX)	
				20℃, 100kHz	−10℃, 100kHz
50 (1H)	0.47	5×11	17	5.5	12.0
	1	5×11	30	4.0	8.0
	2.2	5×11	43	2.5	6.0
	3.3	5×11	53	2.2	5.6
	4.7	5×11	88	1.9	5.0
	10	5×11	100	1.5	4.0
	22	5×11	150	0.90	3.6
	33	6.3×11	250	0.40	1.6
	47	6.3×11	250	0.40	1.6
	100	8×11.5	400	0.25	1.0
	220	10×16	770	0.12	0.46
	330	10×20	1050	0.078	0.30
	470	12.5×20	1300	0.062	0.21
	1000	16×25	1850	0.034	0.096
	2200	18×35.5	2200	0.025	0.058
63 (1J)	10	5×11	87	2.3	9.3
	22	6.3×11	140	1.3	5.2
	33	6.3×11	140	1.2	5.0
	47	8×11.5	210	0.63	2.8
	100	10×12.5	300	0.43	1.8
	220	10×20	520	0.21	0.84
	330	12.5×20	660	0.16	0.64
	470	12.5×25	750	0.12	0.45
	1000	16×31.5	1390	0.054	0.20
100 (2A)	0.47	5×11	15	6.0	17.0
	1	5×11	20	4.5	15.0
	2.2	5×11	30	3.0	13.0
	3.3	5×11	40	2.7	11.0
	4.7	5×11	65	2.5	10.0
	10	6.3×11	140	1.2	5.0
	22	8×11.5	160	0.63	2.8
	33	10×12.5	230	0.43	1.8
	47	10×16	290	0.31	1.5
	100	12.5×20	430	0.16	0.64
	220	16×25	900	0.073	0.27
	330	16×25	900	0.073	0.27

◆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(Ω MAX) 20°C, 100kHz
160 (2C)	22	10×20	350	1.0
	33	12.5×20	450	0.70
	47	12.5×25	600	0.45
	68	12.5×25	600	0.45
	100	16×25	950	0.24
	150	16×31.5	1200	0.17
	220	18×35.5	1400	0.14
200 (2D)	22	10×20	350	1.0
	33	12.5×25	550	0.55
	47	12.5×25	600	0.44
	68	16×25	950	0.24
	100	16×31.5	1200	0.17
	150	16×35.5	1280	0.16
	220	18×35.5	1400	0.14
250 (2E)	22	10×20	300	1.4
	33	12.5×25	450	0.70
	47	16×25	850	0.31
	68	16×31.5	1050	0.22
	100	18×35.5	1200	0.18