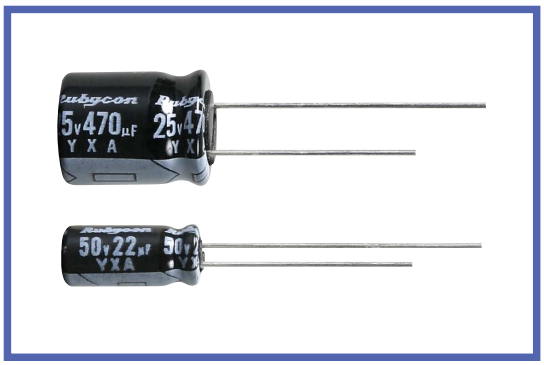
YXA SERIES

105˚C Standard

◆FEATURES

- RoHS compliance.



◆SPECIFICATIONS

Items	Characteristics		
Category Temperature Range	−55～+105˚C	−40～+105˚C	−25～+105˚C
Rated Voltage Range	6.3～100V.DC	160～250V.DC	350～450V.DC
Capacitance Tolerance	±20%(20˚C, 120Hz)		
Leakage Current(MAX)	6.3～100V.DC	160～450V.DC	
		CV≦1000	CV＞1000
	I=0.01CV or 3 μA whichever is greater. (After 2 minutes application of rated voltage)	I=0.1CV+40μA (1minute) I=0.03CV+15μA (5minutes)	I=0.04CV+100μA (1minute) I=0.02CV+25μA (5minutes)
	I=Leakage Current(μA) C=Rated Capacitance(μF) V=Rated Voltage(V)		

Dissipation Factor(MAX) (tanδ) (20˚C, 120Hz)

Rated Voltage (V)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
tanδ	0.26	0.22	0.18	0.16	0.14	0.12	0.10	0.08	0.20	0.20	0.20	0.24	0.24	0.24

When rated capacitance is over 1000μF, tan δ shall be added 0.02 to the listed value with increase of every 1000μF.

Endurance

After life test with rated ripple current at conditions stated in the table below, the capacitors shall meet the following requirements.

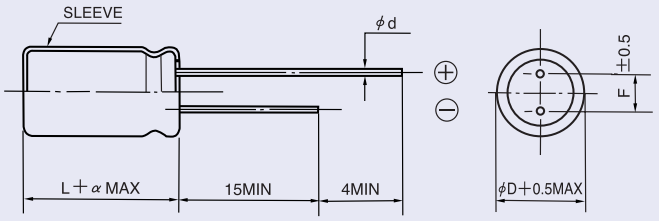
Capacitance Change	Within ±25% of the initial value.
Dissipation Factor	Not more than 200% of the specified value.
Leakage Current	Not more than the specified value.

Case Dia	Life Time (hrs)
φD≦8	1000
φD=10	2000
φD≧12.5	3000

Low Temperature Stability Impedance Ratio(MAX) (120Hz)

Rated Voltage (V)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
Z(−25˚C)/Z(20˚C)	4	3	2	2	2	2	2	2	3	3	3	6	6	6
Z(−40˚C)/Z(20˚C)	8	6	4	4	3	3	3	3	—	—	—	—	—	—

◆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	WV≦100:1.5 WV≧160:2.0					2.0	

◆MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

Frequency (Hz)		60(50)	120	500	1k	10k≦
Coefficient	0.1～1 μF	0.50	1.00	1.20	1.30	1.50
	2.2～4.7 μF	0.65	1.00	1.20	1.30	1.50
	10～47 μF	0.80	1.00	1.20	1.30	1.50
	100～1000 μF	0.80	1.00	1.10	1.15	1.20
	2200～22000 μF	0.80	1.00	1.05	1.10	1.15

◆PART NUMBER

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

◆STANDARD SIZE, RATED RIPPLE CURRENT

Size φD×L(mm), Ripple Current (mA r.m.s./105℃, 120Hz)

WV(V.DC) / Cap(μF)	6.3 (0J)		10 (1A)		16 (1C)		25 (1E)		35 (1V)		50 (1H)		63 (1J)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1											5×11	1		
0.15											5×11	1.5		
0.22											5×11	2.5		
0.33											5×11	4		
0.47											5×11	7		
1											5×11	13		
2.2											5×11	20		
3.3											5×11	25		
4.7											5×11	32		
10											5×11	47	5×11	48
22									5×11	64	5×11	70	5×11	80
33							5×11	69	5×11	77	5×11	94	6.3×11	100
47					5×11	80	5×11	84	5×11	100	6.3×11	115	6.3×11	140
100	5×11	96	5×11	105	5×11	130	6.3×11	140	6.3×11	170	8×11.5	200	10×12.5	230
220	5×11	160	6.3×11	175	6.3×11	220	8×11.5	240	10×12.5	300	10×12.5	360	10×16	390
330	6.3×11	210	6.3×11	235	8×11.5	270	10×12.5	335	10×12.5	400	10×16	470	10×20	540
470	6.3×11	275	8×11.5	295	8×11.5	375	10×12.5	440	10×16	525	10×20	600	12.5×20	700
1000	8×11.5	460	10×12.5	540	10×16	640	10×20	740	12.5×20	865	12.5×25	1060	16×25	1200
2200	10×20	775	10×20	860	12.5×20	1050	12.5×25	1230	16×25	1370	16×35.5	1600	18×35.5	1650
3300	10×20	985	12.5×20	1100	12.5×25	1300	16×25	1500	16×35.5	1680	18×35.5	1780		
4700	12.5×20	1150	12.5×25	1350	16×25	1650	16×31.5	1800	18×35.5	1920				
6800	12.5×25	1480	16×25	1700	16×31.5	1900	18×35.5	2050						
10000	16×25	1700	16×35.5	1950	18×35.5	2070								
15000	16×35.5	2090	18×35.5	2180										
22000	18×40	2350												

WV(V.DC) / Cap(μF)	100 (2A)		160 (2C)		200 (2D)		250 (2E)		350 (2V)		400 (2G)		450 (2W)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.47	5×11	8					6.3×11	8	6.3×11	8				
1	5×11	15					6.3×11	16	6.3×11	16	6.3×11	16	8×11.5	15
2.2	5×11	21					6.3×11	30	8×11.5	31	10×12.5	31	10×12.5	25
3.3	5×11	30			6.3×11	36	8×11.5	43	10×12.5	45	10×12.5	41	10×16	33
4.7	5×11	35	6.3×11	43	8×11.5	50	8×11.5	53	10×12.5	55	10×16	55	10×20	42
10	5×11	60	8×11.5	77	10×12.5	80	10×16	90	10×20	95	12.5×20	85	12.5×20	67
22	6.3×11	98	10×16	125	10×20	135	12.5×20	150	12.5×25	175	12.5×25	170	16×25	115
33	8×11.5	140	10×20	170	12.5×20	200	12.5×20	200	16×25	220	16×25	220	16×31.5	155
47	10×12.5	185	12.5×20	210	12.5×20	220	12.5×25	240	16×31.5	260	16×31.5	275	16×35.5	185
100	10×20	290	12.5×25	320	16×25	340	16×31.5	400	18×40	415	18×40	415		
220	12.5×25	560	16×35.5	580	18×35.5	580								
330	12.5×25	690	18×35.5	700										
470	16×25	880												
1000	18×40	985												