

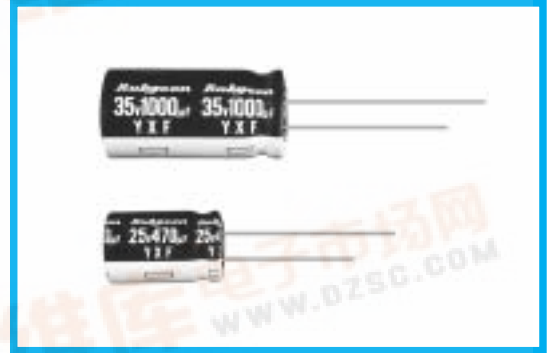
Rubycon MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS **YXF**

YXF SERIES

105°C Long Life. Low impedance.
(Rated Voltage 6.3~250V.DC)

◆ **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)																																				
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> <th>160</th> <th>200</th> <th>250</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> <td>0.12</td> <td>0.12</td> <td>0.12</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	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													
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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 rowspan="2">Capacitance Change</th> <th rowspan="2">Within ±25% of the initial value.(160wv to 250wv:±20%)</th> <th colspan="3">Life Time (hrs)</th> </tr> <tr> <th>6.3~10WV</th> <th>16~100WV</th> <th>160~250WV</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>4000</td> <td>5000</td> <td>—</td> </tr> <tr> <td rowspan="3">Leakage Current</td> <td rowspan="3">Not more than the specified value.</td> <td>φ D=8</td> <td>6000</td> <td>7000</td> <td>—</td> </tr> <tr> <td>φ D=10</td> <td>6000</td> <td>7000</td> <td>2000</td> </tr> <tr> <td>φ D≥12.5</td> <td>8000</td> <td>10000</td> <td>2000</td> </tr> </tbody> </table>		Capacitance Change	Within ±25% of the initial value.(160wv to 250wv:±20%)	Life Time (hrs)			6.3~10WV	16~100WV	160~250WV	Dissipation Factor	Not more than 200% of the specified value.	φ D≤6.3	4000	5000	—	Leakage Current	Not more than the specified value.	φ D=8	6000	7000	—	φ D=10	6000	7000	2000	φ D≥12.5	8000	10000	2000								
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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> <th>160</th> <th>200</th> <th>250</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> <td>3</td> <td>3</td> <td>3</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> <td>4</td> <td>4</td> <td>4</td> </tr> </tbody> </table> (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	
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≤
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)

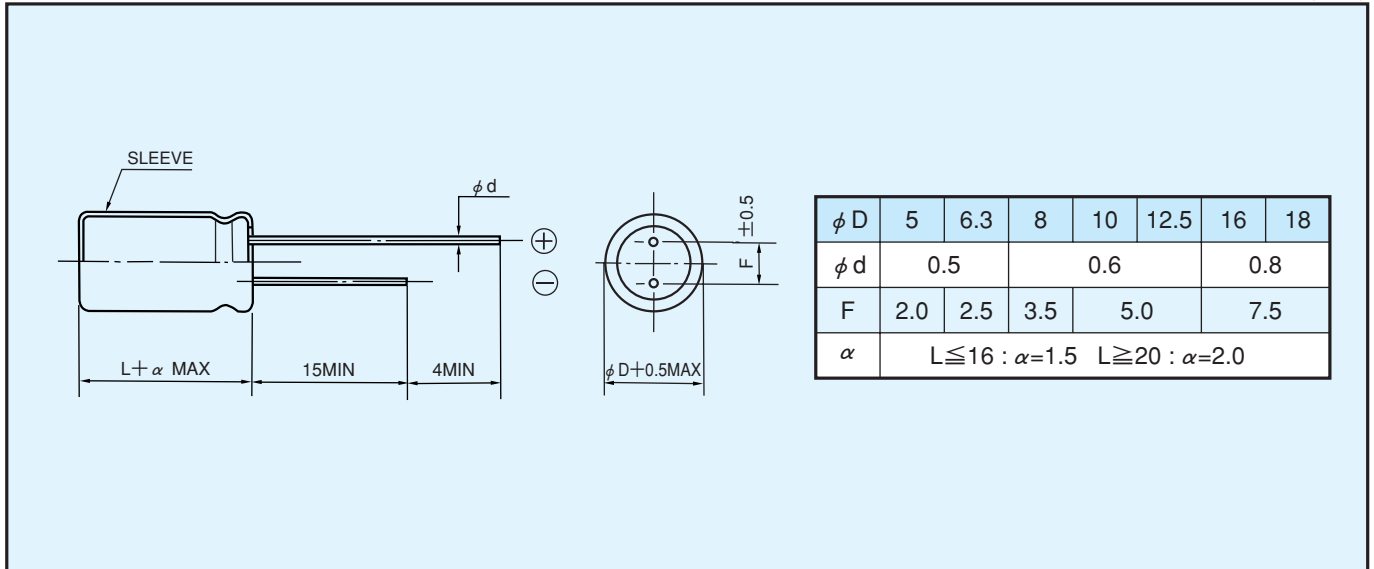
Frequency (Hz)	60(50)	120	1k	10k	100k≤
Coefficient	0.40	0.50	0.75	0.90	1.00

找PDF PART NUMBER
YXF
Rated Voltage Series □□□□□ □ □□□ □□ DXL

Rated Capacitance Capacitance Tolerance Option Lead Forming Case Size

◆ DIMENSIONS

(mm)


◆ 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
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

Rated voltage 10V(1A)				
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
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



MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

YXF

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
47	5 \times 11	150	0.90	3.6
100	6.3 \times 11	250	0.40	1.6
220	8 \times 11.5	400	0.25	1.0
330	8 \times 11.5	400	0.25	1.0
470	10 \times 12.5	580	0.16	0.65
1000	10 \times 20	1050	0.078	0.30
2200	12.5 \times 25	1650	0.048	0.16
3300	16 \times 25	1850	0.034	0.096
4700	16 \times 31.5	2000	0.029	0.087
6800	18 \times 35.5	2200	0.025	0.058

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
33	5 \times 11	150	0.90	3.6
47	5 \times 11	150	0.90	3.6
100	6.3 \times 11	250	0.40	1.6
220	8 \times 11.5	400	0.25	1.0
330	10 \times 12.5	580	0.16	0.65
470	10 \times 16	770	0.12	0.46
1000	12.5 \times 20	1300	0.062	0.21
2200	16 \times 25	1850	0.034	0.096
3300	16 \times 31.5	2000	0.029	0.087
4700	18 \times 35.5	2200	0.025	0.058

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	150	0.90	3.6
47	6.3 \times 11	250	0.40	1.6
100	8 \times 11.5	400	0.25	1.0
220	10 \times 12.5	580	0.16	0.65
330	10 \times 16	770	0.12	0.46
470	10 \times 20	1050	0.078	0.30
1000	12.5 \times 25	1650	0.048	0.16
2200	16 \times 31.5	2000	0.029	0.087
3300	18 \times 35.5	2200	0.025	0.058



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YXF

Rated voltage 50V(1H)				
Rated capacitance (μ F)	Size ϕ D×L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)	
			20°C, 100kHz	-10°C, 100kHz
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

Rated voltage 63V(1J)				
Rated capacitance (μ F)	Size ϕ D×L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)	
			20°C, 100kHz	-10°C, 100kHz
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

Rated voltage 100V(2A)				
Rated capacitance (μ F)	Size ϕ D×L(mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)	
			20°C, 100kHz	-10°C, 100kHz
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



MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

YXF

Rated voltage 160V(2C)			
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
22	10 \times 20	350	1.0
33	12.5 \times 20	450	0.70
47	12.5 \times 25	600	0.45
68	12.5 \times 25	600	0.45
100	16 \times 25	950	0.24
150	16 \times 31.5	1200	0.17
220	18 \times 35.5	1400	0.14

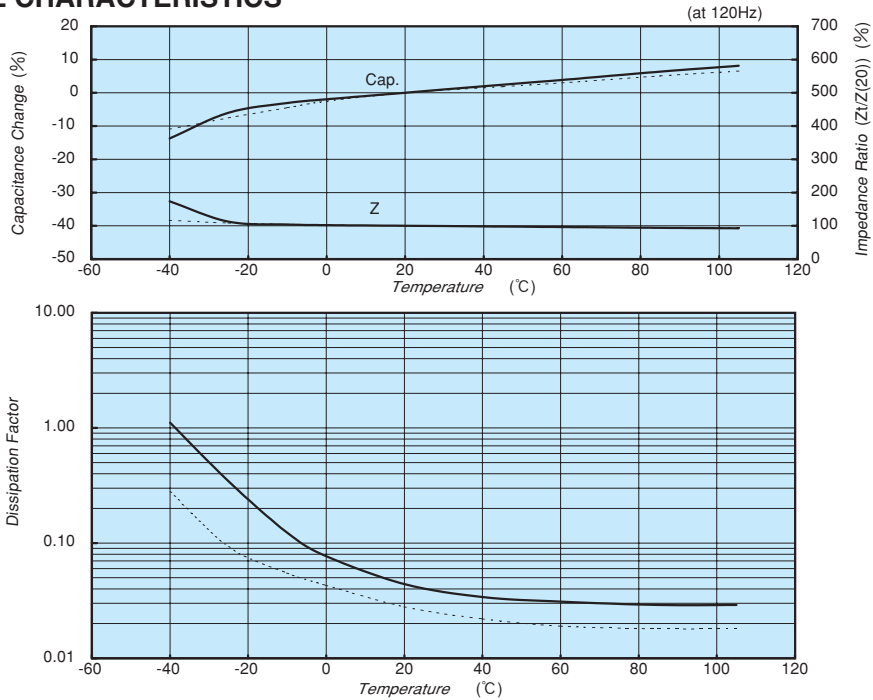
Rated voltage 200V(2D)			
Rated capacitance (μ F)	Size ϕ D \times L (mm)	Rated ripple current (mA r.m.s./105°C, 100kHz)	Impedance (Ω MAX)
			20°C, 100kHz
22	10 \times 20	350	1.0
33	12.5 \times 25	550	0.55
47	12.5 \times 25	600	0.44
68	16 \times 25	950	0.24
100	16 \times 31.5	1200	0.17
150	16 \times 35.5	1280	0.16
220	18 \times 35.5	1400	0.14

Rated voltage 250V(2E)			
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
22	10 \times 20	300	1.4
33	12.5 \times 25	450	0.70
47	16 \times 25	850	0.31
68	16 \times 31.5	1050	0.22
100	18 \times 35.5	1200	0.18

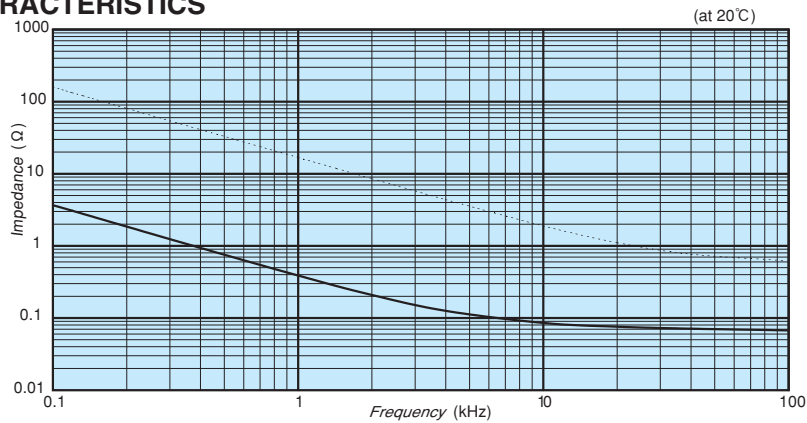
◆ **CHARACTERISTIC DATA**

————— 35 YXF 470 M 10×20
 - - - - - 50 YXF 10 M 5×11

· **TEMPERATURE CHARACTERISTICS**



· **FREQUENCY CHARACTERISTICS**



· **ENDURANCE**

