

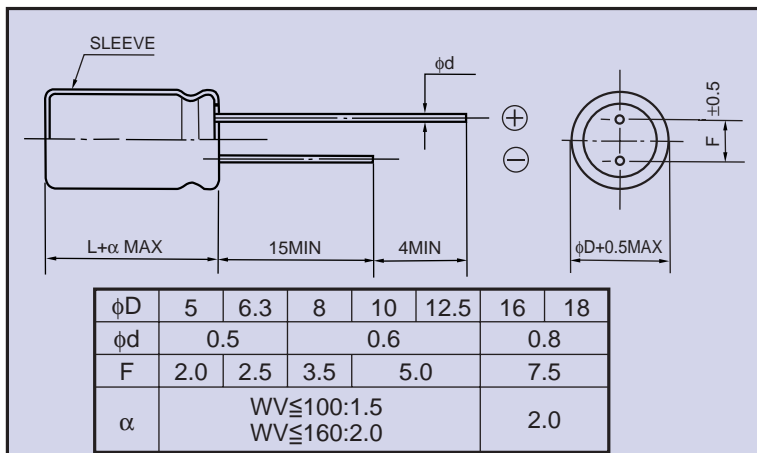
**YXA SERIES**
**105°C Miniaturized**
**YXA**

Low Impedance →

**YXF**
**YXG**
**JXA**
**JXB**

**◆ SPECIFICATIONS**

Items	Characteristics																																																										
Operating 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																																																									
	I=0.01CV or 3µA whichever is greater. (After 2 minutes application of rated voltage)	CV≤1000 I=0.1CV+40µA (1minute) I=0.03CV+15µA (5minutes)	CV>1000 I=0.04CV+100µA (1minute) I=0.02CV+25µA (5minutes)																																																								
	I=Leakage Current(µA)	C=Nominal Capacitance(µF)	V=Rated Voltage(V)																																																								
Dissipation Factor(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> <th>350</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>tanδ</td> <td>0.26</td> <td>0.22</td> <td>0.18</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> <td>0.24</td> <td>0.24</td> <td>0.24</td> </tr> </tbody> </table>													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	(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 nominal capacitance is over 1000µF, tanδ shall be added 0.02 to the listed value with increase of every 1000µF.																																																											
Load Life	After life test with max ripple current at conditions stated in the table below, the capacitors shall meet the following requirements.																																																										
	Capacitance Change	Within ±25% of the initial value.										Case Dia	Life Time (hrs)																																														
	Dissipation Factor	Not more than 200% of the specified value.										φD≤8	1000																																														
	Leakage Current	Not more than the specified value.										φD=10	2000																																														
												φD≥12.5	3000																																														
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> <th>350</th> <th>400</th> <th>450</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> <td>6</td> <td>6</td> <td>6</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> <td>—</td> </tr> </tbody> </table>													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	—	—	—	—	—	—	(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)

**◆ MULTIPLIER FOR RIPPLE CURRENT**

(1) Frequency coefficient

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

(2) Temperature coefficient

Ambient Temperature (°C)	105	85	65≥
Coefficient	1.0	1.7	2.1

### ◆ STANDARD SIZE, MAX. PERMISSIBLE RIPPLE CURRENT

Size φDxL(mm), Ripple Current (mA r.m.s./105°C, 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											5x11	1			
0.15											5x11	1.5			
0.22											5x11	2.5			
0.33											5x11	4			
0.47											5x11	7			
1											5x11	13			
2.2											5x11	20			
3.3											5x11	25			
4.7											5x11	32			
10											5x11	47	5x11	48	
22										5x11	64	5x11	70	5x11	80
33								5x11	69	5x11	77	5x11	94	6.3x11	100
47					5x11	80	5x11	84	5x11	100	6.3x11	115	6.3x11	140	
100	5x11	96	5x11	105	5x11	130	(5x11) 6.3x11	(140) 140	6.3x11	170	8x11.5	200	(8x11.5) 10x12.5	(230) 230	
220	5x11	160	(5x11) 6.3x11	(170) 175	6.3x11	220	(6.3x11) 8x11.5	(240) 240	(8x11.5) 10x12.5	(300) 300	10x12.5	360	10x16	390	
330	6.3x11	210	6.3x11	235	(6.3x11) 8x11.5	(270) 270	(8x11.5) 10x12.5	(335) 335	10x12.5	400	10x16	470	10x20	540	
470	6.3x11	275	(6.3x11) 8x11.5	(295) 295	8x11.5	375	10x12.5	440	10x16	525	10x20	600	12.5x20	700	
1000	8x11.5	460	10x12.5	540	10x16	640	10x20	740	12.5x20	865	12.5x25	1060	16x25	1200	
2200	(10x16) 10x20	(775) 775	10x20	860	12.5x20	1050	12.5x25	1230	16x25	1370	(16x31.5) 16x35.5	(1600) 1600	18x35.5	1650	
3300	10x20	985	12.5x20	1100	12.5x25	1300	16x25	1500	(16x31.5) 16x35.5	(1680) 1680	18x35.5	1780			
4700	12.5x20	1150	12.5x25	1350	16x25	1650	16x31.5	1800	(18x31.5) 18x35.5	(1870) 1920					
6800	12.5x25	1480	16x25	1700	16x31.5	1900	◦(16x35.5) 18x35.5	(1910) 2050							
10000	16x25	1700	(16x31.5) 16x35.5	(1950) 1950	◦(16x35.5) 18x35.5	(1950) 2070									
15000	(16x31.5) 16x35.5	(2090) 2090	(18x31.5) 18x35.5	(2090) 2180											
22000	(18x35.5) 18x40	(2350) 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	5x11	9					6.3x11	12	6.3x11	12				
1	5x11	15					6.3x11	17	6.3x11	18	6.3x11	18	(6.3x11) 8x11.5	(15) 15
2.2	5x11	21					6.3x11	30	(6.3x11) 8x11.5	(31) 31	(8x11.5) 10x12.5	(31) 31	10x12.5	25
3.3	5x11	30			6.3x11	36	(6.3x11) 8x11.5	(43) 43	(8x11.5) 10x12.5	(45) 45	10x12.5	41	(10x12.5) 10x16	(33) 33
4.7	5x11	35	6.3x11	43	(6.3x11) 8x11.5	(50) 50	8x11.5	53	10x12.5	55	10x16	55	(10x16) 10x20	(42) 42
10	5x11	60	8x11.5	77	10x12.5	80	(10x12.5) 10x16	(90) 90	10x20	95	(10x20) 12.5x20	(85) 85	12.5x20	67
22	6.3x11	98	10x16	125	10x20	135	(10x20) 12.5x20	(150) 150	(12.5x20) 12.5x25	(175) 175	12.5x25	170	16x25	115
33	8x11.5	140	10x20	170	(10x20) 12.5x20	(200) 200	12.5x20	200	16x25	220	16x25	220	16x31.5	155
47	(8x11.5) 10x12.5	(185) 185	(10x20) 12.5x20	(210) 210	12.5x20	220	12.5x25	240	(16x25) 16x31.5	(260) 260	16x31.5	275	16x35.5	185
100	(10x16) 10x20	(290) 290	12.5x25	320	16x25	340	16x31.5	400	(18x35.5) 18x40	(415) 415	18x40	415		
220	(12.5x20) 12.5x25	(560) 560	(16x31.5) 16x35.5	(580) 580	◦(16x35.5) 18x35.5	(580) 580								
330	12.5x25	690	18x35.5	700										
470	16x25	880												
1000	(18x35.5) 18x40	(985) 985												

18x31.5 is available for marked ◦ when specified.

( ) shows compact size.

We would like to recommend compact sizes in above table for new design.