



Aluminum Electrolytic Capacitors

XE Series

Features

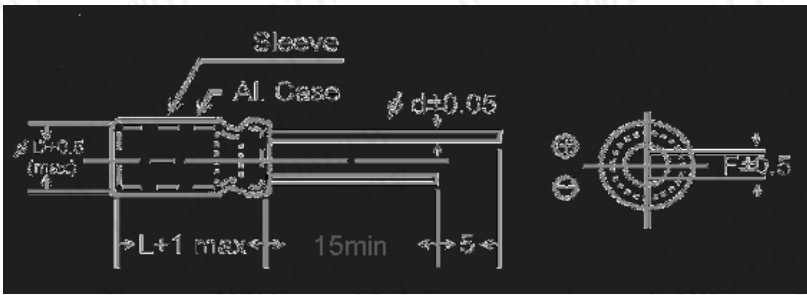
- 105°C, high reliability and long life.

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Specification

Items	Performance																																																										
Capacitance Tolerance	±20% (at 120Hz, 25°C)																																																										
Rated Voltage Range	6.3 to 100 VDC					160 to 250 VDC					350 to 450 VDC																																																
Capacitance Range	1 to 15000 uF					1 to 220 uF					1 to 47 uF																																																
Operating Temperature Range	-40 to +105°C					-40 to 105°C					-25 to 105°C																																																
Leakage Current (at 25°C)	I ≤ 0.01 CV or 3 (uA), whichever is greater.					I ≤ 0.01 CV + 10 (uA), whichever is greater.																																																					
	After 3 minutes application of working voltage. I = Leakage current (uA), C = Rated capacitance (uF), V = Rated voltage (V)																																																										
Dissipation Factor (Tan δ at 120Hz, 25°C)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="font-size: small;">Rate Voltage</th> <th style="font-size: small;">6.3</th> <th style="font-size: small;">10</th> <th style="font-size: small;">16</th> <th style="font-size: small;">25</th> <th style="font-size: small;">35</th> <th style="font-size: small;">50</th> <th style="font-size: small;">63</th> <th style="font-size: small;">100</th> <th style="font-size: small;">160</th> <th style="font-size: small;">200</th> <th style="font-size: small;">250</th> <th style="font-size: small;">350</th> <th style="font-size: small;">400</th> <th style="font-size: small;">450</th> </tr> </thead> <tbody> <tr> <td style="font-size: small;">Tan δ (max)</td> <td style="font-size: small;">0.24</td> <td style="font-size: small;">0.20</td> <td style="font-size: small;">0.17</td> <td style="font-size: small;">0.15</td> <td style="font-size: small;">0.12</td> <td style="font-size: small;">0.10</td> <td style="font-size: small;">0.09</td> <td style="font-size: small;">0.08</td> <td style="font-size: small;">0.15</td> <td style="font-size: small;">0.15</td> <td style="font-size: small;">0.15</td> <td style="font-size: small;">0.20</td> <td style="font-size: small;">0.20</td> <td style="font-size: small;">0.20</td> </tr> </tbody> </table>														Rate Voltage	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	Tan δ (max)	0.24	0.20	0.17	0.15	0.12	0.10	0.09	0.08	0.15	0.15	0.15	0.20	0.20	0.20															
	Rate Voltage	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450																																												
	Tan δ (max)	0.24	0.20	0.17	0.15	0.12	0.10	0.09	0.08	0.15	0.15	0.15	0.20	0.20	0.20																																												
For capacitance > 1000 uF, add 0.02 per 1000 uF increase.																																																											
Low Temperature characteristics (at 120Hz)	Impedance ration max.																																																										
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="font-size: small;">Rate Voltage</th> <th style="font-size: small;">6.3</th> <th style="font-size: small;">10</th> <th style="font-size: small;">16</th> <th style="font-size: small;">25</th> <th style="font-size: small;">35</th> <th style="font-size: small;">50</th> <th style="font-size: small;">63</th> <th style="font-size: small;">100</th> <th style="font-size: small;">160</th> <th style="font-size: small;">200</th> <th style="font-size: small;">250</th> <th style="font-size: small;">350</th> <th style="font-size: small;">400</th> <th style="font-size: small;">450</th> </tr> </thead> <tbody> <tr> <td style="font-size: small;">-25°C/25°C</td> <td style="font-size: small;">4</td> <td style="font-size: small;">3</td> <td style="font-size: small;">3</td> <td style="font-size: small;">2</td> <td style="font-size: small;">2</td> <td style="font-size: small;">2</td> <td style="font-size: small;">2</td> <td style="font-size: small;">2</td> <td style="font-size: small;">4</td> <td style="font-size: small;">4</td> <td style="font-size: small;">4</td> <td style="font-size: small;">8</td> <td style="font-size: small;">8</td> <td style="font-size: small;">15</td> </tr> <tr> <td style="font-size: small;">-40°C/25°C</td> <td style="font-size: small;">8</td> <td style="font-size: small;">6</td> <td style="font-size: small;">6</td> <td style="font-size: small;">4</td> <td style="font-size: small;">4</td> <td style="font-size: small;">4</td> <td style="font-size: small;">4</td> <td style="font-size: small;">4</td> <td style="font-size: small;">6</td> <td style="font-size: small;">6</td> <td style="font-size: small;">6</td> <td style="font-size: small;">-</td> <td style="font-size: small;">-</td> <td style="font-size: small;">-</td> </tr> </tbody> </table>														Rate Voltage	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	-25°C/25°C	4	3	3	2	2	2	2	2	4	4	4	8	8	15	-40°C/25°C	8	6	6	4	4	4	4	4	6	6	6	-	-	-
	Rate Voltage	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450																																												
-25°C/25°C	4	3	3	2	2	2	2	2	4	4	4	8	8	15																																													
-40°C/25°C	8	6	6	4	4	4	4	4	6	6	6	-	-	-																																													
1000 hours with application of W.V. at +105°C.																																																											
Load Life	Capacitance change : ≤ ±25% of initial value																																																										
	Dissipation factor : ≤ 200% of initial specified value																																																										
	Leakage Current : ≤ Initial specified value																																																										
Shelf Life	After storage for 500 hours at 105°C, with no voltage applied and being stabilixed at +25°C, Capacitor shall meet the limit specified in load life.																																																										
Ripple Current & Frequency Multipliers	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="font-size: small;">Freq.(Hz)</th> <th style="font-size: small;">60</th> <th style="font-size: small;">120</th> <th style="font-size: small;">1K</th> <th style="font-size: small;">10K</th> </tr> </thead> <tbody> <tr> <td style="font-size: small;">Cap.(uF)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="font-size: small;">Under 100</td> <td style="font-size: small;">0.60</td> <td style="font-size: small;">0.90</td> <td style="font-size: small;">1.00</td> <td style="font-size: small;">1.10</td> </tr> <tr> <td style="font-size: small;">100 to 4700</td> <td style="font-size: small;">0.65</td> <td style="font-size: small;">0.90</td> <td style="font-size: small;">1.00</td> <td style="font-size: small;">1.00</td> </tr> <tr> <td style="font-size: small;">4700 up</td> <td style="font-size: small;">0.70</td> <td style="font-size: small;">0.90</td> <td style="font-size: small;">1.00</td> <td style="font-size: small;">1.00</td> </tr> <tr> <td style="font-size: small;">≥ 160V, 1-220</td> <td style="font-size: small;">0.70</td> <td style="font-size: small;">0.90</td> <td style="font-size: small;">1.00</td> <td style="font-size: small;">1.00</td> </tr> </tbody> </table>														Freq.(Hz)	60	120	1K	10K	Cap.(uF)					Under 100	0.60	0.90	1.00	1.10	100 to 4700	0.65	0.90	1.00	1.00	4700 up	0.70	0.90	1.00	1.00	≥ 160V, 1-220	0.70	0.90	1.00	1.00															
	Freq.(Hz)	60	120	1K	10K																																																						
	Cap.(uF)																																																										
	Under 100	0.60	0.90	1.00	1.10																																																						
	100 to 4700	0.65	0.90	1.00	1.00																																																						
4700 up	0.70	0.90	1.00	1.00																																																							
≥ 160V, 1-220	0.70	0.90	1.00	1.00																																																							
Ripple Current & Temperature Multipliers	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="font-size: small;">Temperature (°C)</th> <th style="font-size: small;">65</th> <th style="font-size: small;">85</th> <th style="font-size: small;">105</th> </tr> </thead> <tbody> <tr> <td style="font-size: small;">Multiplier</td> <td style="font-size: small;">1.3</td> <td style="font-size: small;">1.1</td> <td style="font-size: small;">0.9</td> </tr> </tbody> </table>														Temperature (°C)	65	85	105	Multiplier	1.3	1.1	0.9																																					
	Temperature (°C)	65	85	105																																																							
Multiplier	1.3	1.1	0.9																																																								
Standards	Satisfied Characteristic W of JIS C																																																										

Aluminum Electrolytic Capacitors **XE** Series



D	5	6.3	8	10	13	16	18
F	2.0	2.5	3.5	5.0	7.5		
d	0.5			0.6		0.8	

Dimension : $\phi D \times L$ (mm)

Ripple Current : mA/rms at 100KHz, 105°C

DIMENSION & PERMISSIBLE RIPPLE CURRENT

VDC uF	6.3V		10V		16V		25V		35V		50V		63V	
	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA
33											8x12	90	8x12	100
47									8x12	110	8x12	110	8x14	135
100							8x12	170	8x12	170	8x14	190	10x17	210
220					8x12	210	8x14	270	10x13	300	10x17	320	10x20	390
330	8x12	220	8x12	250	8x12	280	8x14	310	10x17	390	10x20	500	13x21	500
470	8x12	270	8x12	300	10x13	350	10x20	400	13x21	500	13x21	550	13x26	650
1000	8x14	400	8x14	500	10x20	600	13x21	700	13x26	850	16x26	850	16x32	900
2200	10x20	700	13x21	770	13x26	900	16x26	1000	16x32	1100	18x36	1400		
3300	13x21	850	13x26	1000	16x26	1000	16x32	1200	18x36	1500	18x40	1750		
4700	13x26	1100	16x26	1100	16x32	1180	18x36	1450	18x40	1850				
6800	16x26	1150	16x32	1200	18x36	1450	18x40	1750						
10000	16x32	1450	18x36	1700	18x40	1800								
15000	18x36	1500	18x40	1850										

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Aluminum Electrolytic Capacitors

XE Series

Dimension : ϕ D x L (mm)

Ripple Current : mA/rms at 100KHz, 105°C

DIMENSION & PERMISSIBLE RIPPLE CURRENT

VDC uF	100V		160V		200V		250V		350V		400V		450V	
	ϕ DxL	mA	ϕ DxL	mA	ϕ DxL	mA	ϕ DxL	mA	ϕ DxL	mA	ϕ DxL	mA	ϕ DxL	mA
1							8x12	20	10x13	13	10x13	13	10x16	15
2.2							8x12	25	10x16	20	10x13	25	13x21	25
3.3			8x12	28	8x12	28	10x13	40	10x20	38	13x21	40	13x26	38
4.7			8x12	33	10x13	40	10x13	45	13x21	45	13x21	50	16x26	50
10			10x13	65	10x16	70	10x20	85	13x26	80	13x26	85	16x32	87
22	8x12	100	10x20	110	10x20	120	13x21	130	16x32	140	16x32	140	16x36	105
33	10x13	130	13x21	150	13x26	170	13x26	185	18x36	180	18x36	185	18x40	165
47	10x16	170	13x26	200	13x26	210	16x26	230	18x40	240	18x40	250		
100	13x21	270	16x26	280	16x32	350	16x36	390						
220	16x26	480	18x36	540	18x40	600								
330	16x26	580												
470	16x32	760												

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)