



Aluminum Electrolytic Capacitors

XR Series

Features

- Low Impedance, High Ripple Current
- Load Life of 2000 Hours at 105°C

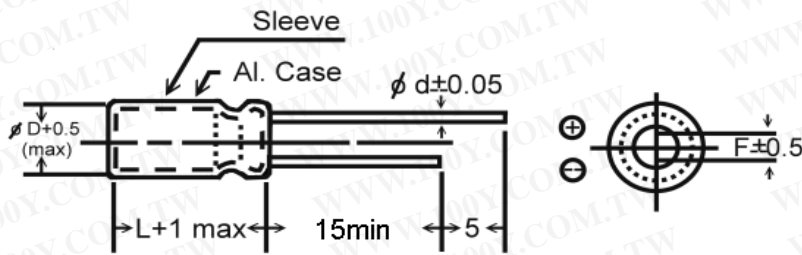
勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-34970699
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Specification

Items	Performance																														
Capacitance Tolerance	±20% (at 120Hz, 25°C)																														
Rated Voltage Range	6.3 to 100 VDC																														
Capacitance Range	22 to 4700 uF																														
Operating Temperature Range	-40 to + 105°C																														
Leakage Current (at 25°C)	$I \leq 0.01 CV$ or 3 (uA), whichever is greater.																														
	After 2 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%; text-align: center;"> <tr> <td>Rate Voltage</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>Tan δ (max)</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.1</td> <td>0.1</td> <td>0.10</td> </tr> </table>	Rate Voltage	6.3	10	16	25	35	50	63	100	Tan δ (max)	0.22	0.19	0.16	0.14	0.12	0.1	0.1	0.10												
	Rate Voltage	6.3	10	16	25	35	50	63	100																						
Tan δ (max)	0.22	0.19	0.16	0.14	0.12	0.1	0.1	0.10																							
For capacitance > 1000uF, add 0.02 per 1000uF increase.																															
Low Temperature characteristics (at 120Hz)	Impedance ration max.																														
	<table border="1" style="width: 100%; text-align: center;"> <tr> <td>Rate Voltage</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>-25°C/25°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> </tr> <tr> <td>-40°C/25°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> </tr> </table>	Rate Voltage	6.3	10	16	25	35	50	63	100	-25°C/25°C	4	3	2	2	2	2	2	2	-40°C/25°C	8	6	4	4	3	3	3	3			
Rate Voltage	6.3	10	16	25	35	50	63	100																							
-25°C/25°C	4	3	2	2	2	2	2	2																							
-40°C/25°C	8	6	4	4	3	3	3	3																							
Load Life	Application of W.V. at +105°C, the capacitor shall meet the following limits. Capacitance change : $\leq \pm 25\%$ of initial value Dissipation factor : $\leq 200\%$ of initial specified value Leakage Current : \leq Initial specified value Life Time : 2000 hours for $\phi D \geq 8$																														
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%; text-align: center;"> <tr> <td style="text-align: left;">Freq.(Hz) Cap.(uF)</td> <td>60(50)</td> <td>120</td> <td>1K</td> <td>10K</td> <td>100K</td> </tr> <tr> <td>Under 33</td> <td>0.45</td> <td>0.55</td> <td>0.75</td> <td>0.90</td> <td>1.00</td> </tr> <tr> <td>47 to 330</td> <td>0.60</td> <td>0.70</td> <td>0.85</td> <td>0.95</td> <td>1.00</td> </tr> <tr> <td>470 to 1000</td> <td>0.65</td> <td>0.75</td> <td>0.90</td> <td>0.98</td> <td>1.00</td> </tr> <tr> <td>1200 up above</td> <td>0.75</td> <td>0.80</td> <td>0.95</td> <td>1.00</td> <td>1.00</td> </tr> </table>	Freq.(Hz) Cap.(uF)	60(50)	120	1K	10K	100K	Under 33	0.45	0.55	0.75	0.90	1.00	47 to 330	0.60	0.70	0.85	0.95	1.00	470 to 1000	0.65	0.75	0.90	0.98	1.00	1200 up above	0.75	0.80	0.95	1.00	1.00
Freq.(Hz) Cap.(uF)	60(50)	120	1K	10K	100K																										
Under 33	0.45	0.55	0.75	0.90	1.00																										
47 to 330	0.60	0.70	0.85	0.95	1.00																										
470 to 1000	0.65	0.75	0.90	0.98	1.00																										
1200 up above	0.75	0.80	0.95	1.00	1.00																										
Ripple Current & Temperature Multipliers	<table border="1" style="width: 100%; text-align: center;"> <tr> <td>Temperature (°C)</td> <td>85</td> <td>105</td> </tr> <tr> <td>Multiplier</td> <td>1.70</td> <td>1.00</td> </tr> </table>	Temperature (°C)	85	105	Multiplier	1.70	1.00																								
Temperature (°C)	85	105																													
Multiplier	1.70	1.00																													

Aluminum Electrolytic Capacitors

XR Series



D	8	10	13
P	3.5	5.0	5.0
d	0.5	0.6	

DIMENSION & PERMISSIBLE RIPPLE CURRENT

VDC uF	6.3V			VDC uF	10V		
	ϕ DxL (mm)	Ripple Current (mA/rms,105°C)	Impedance (Ω) 25°C,100KHz		ϕ DxL (mm)	Ripple Current (mA/rms,105°C)	Impedance (Ω) 25°C,100KHz
1000	8x12	500	0.090	330	8x12	490	0.200
	8x14	600	0.090	470	8x14	500	0.100
1200	8x20	600	0.100	1000	8x14	800	0.070
	10x16	1000	0.060		10x16	1000	0.060
1500	8x20	800	0.070	1200	10x16	1000	0.060
	10x16	1000	0.060		10x20	1200	0.045
	10x20	1100	0.045	1500	10x20	1200	0.045
2200	10x20	1100	0.045		10x25	1500	0.040
	10x25	1600	0.040	2200	10x25	1500	0.040
3300	10x25	1500	0.045		13x21	1800	0.035
4700	13x21	2400	0.030	3300	10x25	1800	0.035
					13x26	1800	0.030

VDC uF	16V			VDC uF	25V		
	ϕ DxL (mm)	Ripple Current (mA/rms,105°C)	Impedance (Ω max.) 25°C,100KHz		ϕ DxL (mm)	Ripple Current (mA/rms,105°C)	Impedance (Ω max.) 25°C,100KHz
220	8x12	400	0.350	220	8x14	600	0.085
330	8x14	400	0.300		8x14	600	0.090
470	8x14	600	0.100	330	10x13	720	0.090
	10x13	750	0.095		470	10x16	1000
680	10x16	1000	0.075	680	10x20	1200	0.045
1000	10x20	1250	0.060		10x20	1800	0.045
	1500	10x20	1800	0.035	1000	13x21	1800
13x21		1800	0.035	1500		13x26	2100
2200	10x25	2000	0.040	2200	13x26	2600	0.030
	13x26	2000	0.040				

VDC uF	35V			VDC uF	50V		
	ϕ DxL (mm)	Ripple Current (mA/rms,105°C)	Impedance (Ω max.) 25°C,100KHz		ϕ DxL (mm)	Ripple Current (mA/rms,105°C)	Impedance (Ω max.) 25°C,100KHz
100	8x12	450	0.130	47	8x12	200	0.400
220	10x13	700	0.090	100	8x14	440	0.140
330	10x16	1000	0.060	220	10x20	850	0.140
470	10x20	1500	0.045	330	10x25	1100	0.055
1000	13x26	2100	0.035	470	13x21	1500	0.045
				1000	16x26	2200	0.040