

TA

Low impedance · Long life Series

- Endurance: 105°C 4000~10000hours
- Recommended Applications : Applicable for SMPS, Adaptor,Charger,Monitor/Computer
- Corresponding product to RoHS

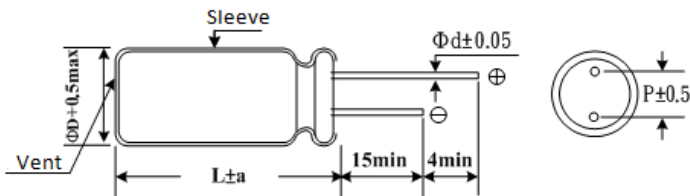
TA
↑
SY Long Life



■ SPECIFICATIONS

Item	Characteristics																																				
Category Temperature Range	-40 ~ +105°C																																				
Rated Voltage Range	6.3~100VDC																																				
Rated Capacitance Range	22 ~ 8200 µF																																				
Capacitance Tolerance	± 20 % (120Hz , 20°C)																																				
Leakage Current (20°C)	I=0.01CV or 3 µ A whichever is greater. (After rated voltage applied for 2 minutes) I : Max. leakage current (µ A), C : Nominal capacitance (µ F), V : Rated voltage (V)																																				
Dissipation Factor(MAX) (tan δ) (120Hz , 20°C)	<table border="1"> <tr> <td>WV</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</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> </tr> </table>	WV	6.3	10	16	25	35	50	63	100	tan δ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08																		
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tan δ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08																													
When nominal capacitance is over 1000 µ F, tan δ shall be added 0.02 to the listed value with increase of every 1000 µ F.																																					
Low Temperature Stability Impedance Ratio (MAX)	<table border="1"> <tr> <td>WV</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>Z((120HZ)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <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> </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> </tr> </table>	WV	6.3	10	16	25	35	50	63	100	Z((120HZ)									Z-25°C / Z+20°C	4	3	2	2	2	2	2	2	Z-40°C / Z+20°C	8	6	4	3	3	3	3	3
	WV	6.3	10	16	25	35	50	63	100																												
	Z((120HZ)																																				
Z-25°C / Z+20°C	4	3	2	2	2	2	2	2																													
Z-40°C / Z+20°C	8	6	4	3	3	3	3	3																													
Endurance	After applying rated voltage with rated ripple current for 4000~10000hours at 105°C, the capacitors shall meet the following requirements.																																				
	<table border="1"> <tr> <td>Capacitance change</td> <td>Within ± 25% of initial value</td> </tr> <tr> <td>D.F. (tan δ)</td> <td>Not more than 200% of specified value</td> </tr> <tr> <td>Leakage current</td> <td>initial specified value or less</td> </tr> </table>	Capacitance change	Within ± 25% of initial value	D.F. (tan δ)	Not more than 200% of specified value	Leakage current	initial specified value or less																														
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<table border="1"> <tr> <td>ΦD</td> <td>5~6.3Φ</td> <td>8~10Φ</td> <td>12.5~18Φ</td> </tr> <tr> <td>6.3~10(V)</td> <td>4000hrs</td> <td>6000hrs</td> <td>8000hrs</td> </tr> <tr> <td>16~100(V)</td> <td>5000hrs</td> <td>7000hrs</td> <td>10000hrs</td> </tr> </table>	ΦD	5~6.3Φ	8~10Φ	12.5~18Φ	6.3~10(V)	4000hrs	6000hrs	8000hrs	16~100(V)	5000hrs	7000hrs	10000hrs																									
ΦD	5~6.3Φ	8~10Φ	12.5~18Φ																																		
6.3~10(V)	4000hrs	6000hrs	8000hrs																																		
16~100(V)	5000hrs	7000hrs	10000hrs																																		
Shelf Life	After placed at 105°C without voltage applied for 1000 hours, the capacitors shall meet the same requirement as load life.																																				

■ Dimensions [mm]



ΦD	5	6.3	8	10	13	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
Φd	0.5	0.5	0.6	0.6	0.6	0.8	0.8
a	1.5	1.5	1.5	1.5	2.0	2.0	2.0

■ Multiplier for Ripple Current

Freq. (Hz)	120	1K	10K	100K
22 ~ 180	0.40	0.75	0.90	1.00
220 ~ 560	0.50	0.85	0.94	1.00
680 ~ 1800	0.60	0.87	0.95	1.00
2200 ~ 3900	0.75	0.90	0.95	1.00
4700 µ F Higher	0.85	0.95	0.98	1.00

■STANDARD RATINGS

Rated Voltage (SurageVoltage) (V)	Cap (μ F)	Case size Φ DxL(mm)	Ripple current (mA/rms105°C) (100KHz)	Impedance (Ω,20°C) (100KHz)	Rated Voltage (SurageVoltage) (V)	Cap (μ F)	Case size Φ DxL(mm)	Ripple current (mA/rms105°C) (100KHz)	Impedance (Ω,20°C) (100KHz)	
6.3V (8)	150	5x11	210	0.580	16V (20)	2700	16x20	2530	0.027	
	330	6.3x11	340	0.220		3300	13x35	2880	0.020	
	680	8x11	640	0.130		3900	13x40	3350	0.017	
	820	10x12.5	865	0.080			16x25	2930	0.021	
	1000	8x15	840	0.087			18x20	2860	0.026	
	1200	8x20	1050	0.069		4700	16x32	3450	0.017	
			1210	0.060			18x25	3140	0.019	
		1500	10x20	1400		0.046	5600	16x36	3610	0.015
		1800	13x16	1450		0.049		18x32	4170	0.015
		2200	10x25	1650		0.042	6800	16x40	4080	0.013
		2700	10x30	1910		0.031		18x20	2860	0.026
		3300	13x20	1900		0.035	8200	18x36	4220	0.014
		3900	13x25	2230		0.027		47	5x11	210
		4700	13x30	2650		0.024	100	6.3x11	340	0.220
		5600	13x35	2880		0.020	220	6.3x12	400	0.220
	16x20		2530	0.027		8x11		640	0.13	
6800	13x40	3350	0.017	330	8x15	840	0.087			
		2930	0.021		10x12.5	865	0.080			
	16x25	2930	0.021	470	8x20	1050	0.069			
	18x20	2860	0.026		10x12.5	865	0.080			
	16x32	3450	0.017	10x15	1210	0.060				
	100	5x11	210	0.580	25V (32)	680	10x20	1400	0.046	
220	6.3x11	340	0.220	820		13x16	1450	0.049		
470	6.3x12	450	0.220	1000		10x25	1650	0.042		
	8x11	640	0.130			10x20	1400	0.046		
680	8x15	840	0.087	1500		10x30	1910	0.031		
	10x12.5	865	0.080			13x20	1900	0.035		
1000	8x16	840	0.087	1800		13x25	2230	0.027		
	10x12.5	865	0.080			13x30	2650	0.024		
	8x20	1050	0.069	2200		16x20	2530	0.027		
	10x15	1210	0.060			13x25	2230	0.027		
1200	10x20	1400	0.046	2700		13x35	2880	0.020		
1500	10x25	1650	0.042			18x20	2860	0.026		
	13x16	1450	0.049	3300		13x40	3350	0.017		
2200	10x30	1910	0.031			16x25	2930	0.021		
	13x20	1900	0.035	3900		16x32	3450	0.017		
3300	13x25	2230	0.027			18x25	3140	0.019		
3900	13x30	2650	0.024	4700		16x36	3610	0.015		
4700	16x20	2530	0.027			18x32	4170	0.015		
	13x35	2880	0.020	5600		16x40	4080	0.013		
5600	13x40	3350	0.017			18x36	4220	0.014		
	16x25	2930	0.021	6800	18x40	4280	0.012			
18x20	2860	0.026	33		5x11	210	0.580			
6800	16x32	3450	0.017	56	6.3x11	340	0.220			
	18x25	3140	0.019	100	6.3x11	340	0.220			
8200	16x36	3610	0.015	150	8x11	580	0.150			
	18x32	4170	0.015		8x11	640	0.130			
16V (20)	56	5x11	210	0.580	35V (44)	220	8x12	640	0.130	
	100	5x11	210	0.580		270	8x15	840	0.087	
	120	6.3x11	340	0.220			330	10x12.5	865	0.080
	220	6.3x11	340	0.220		470		8x20	1050	0.069
	330	8x11	640	0.130			10x15	1210	0.060	
	470	8x15	840	0.087		560	10x16	1210	0.060	
		10x12.5	865	0.080			10x20	1400	0.046	
	680	8x20	1050	0.069		680	13x16	1450	0.049	
		10x15	1210	0.060			10x25	1650	0.042	
	1000	10x20	1400	0.046		1000	10x30	1910	0.031	
		13x16	1450	0.049			13x20	1900	0.035	
	1200	10x25	1650	0.042		1200	13x20	1900	0.035	
		10x30	1910	0.031			13x25	2230	0.027	
	1500	13x20	1900	0.035		1500	13x30	2650	0.024	
		13x25	2230	0.027			16x20	2530	0.027	
	2200	13x25	2230	0.027		1800	13x35	2880	0.020	
	2700	13x30	2650	0.024		1800	13x40	3350	0.017	

■ STANDARD RATINGS

Rated Voltage (SurageVoltage) (V)	Cap (μF)	Case size Φ DxL(mm)	Ripple current (mA/rms105°C) (100KHz)	Impedance (Ω,20°C) (100KHz)	Rated Voltage (SurageVoltage) (V)	Cap (μF)	Case size Φ DxL(mm)	Ripple current (mA/rms105°C) (100KHz)	Impedance (Ω,20°C) (100KHz)
35V (44)	1800	16x25	2930	0.021	63V (79)	120	8x20	362	0.330
		18x20	2860	0.026			10x16	357	0.310
	2200	16x25	2930	0.021		180	10x20	466	0.210
		16x32	3450	0.017			13x16	466	0.230
		18x25	3140	0.019		220	10x25	531	0.200
	2700	16x36	3610	0.015		270	10x30	663	0.150
		18x32	4170	0.015			13x20	690	0.160
	3300	16x40	4080	0.013			16x16	795	0.140
		18x36	4220	0.014		330	13x25	784	0.120
	3900	18x40	4280	0.012		470	18x16	920	0.120
50V (63)	10	5x11	100	1.200	63V (79)	470	13x30	905	0.100
	22	5x11	180	0.700			16x20	1040	0.091
	33	6.3x11	245	0.490		560	13x35	1050	0.083
	47	6.3x11	300	0.520			16x25	1250	0.073
	56	6.3x11	295	0.300		680	13x40	1180	0.071
	100	8x11	555	0.170			18x20	1240	0.080
	120	8x15	730	0.120		820	16x32	1570	0.054
	150	10x12.5	760	0.120			18x25	1490	0.057
	180	8x20	910	0.091		1000	16x36	1790	0.045
	220	8x20	910	0.091			18x32	1630	0.047
		10x16	1050	0.084	1200	16x40	2020	0.040	
	270	10x20	1220	0.060	100V (125)	15	6.3x11	115	1.200
		13x16	1260	0.061		27	8x12	232	0.630
	330	10x20	1400	0.058		39	8x15	300	0.450
		10x25	1440	0.055		47	10x12.5	288	0.430
	470	10x30	1690	0.043		56	8x20	362	0.330
		13x20	1660	0.045		68	10x16	357	0.310
		16x16	1690	0.055		82	10x20	466	0.210
	560	13x25	1950	0.034			13x16	466	0.230
		18x16	1930	0.054		100	10x25	531	0.200
	680	13x30	2310	0.030		120	10x30	663	0.150
	820	13x35	2510	0.025			13x20	690	0.160
		16x20	2210	0.034		150	16x16	795	0.140
	1000	13x40	2920	0.021		180	13x25	784	0.120
		16x25	2555	0.025			18x16	920	0.120
		18x20	2490	0.036		220	13x30	905	0.100
		16x32	3010	0.022			16x20	1040	0.091
	1200	18x25	2740	0.026		270	13x35	1050	0.083
		16x36	3150	0.019			16x25	1250	0.073
	1800	16x40	3710	0.016		330	13x40	1180	0.071
18x32		3635	0.021	18x20			1240	0.080	
2200	18x36	3680	0.017	390	16x32	1570	0.054		
	18x40	3800	0.014		18x25	1490	0.057		
63V (79)	15	5x11	55	2.300	470	16x36	1790	0.045	
	33	6.3x11	115	1.200		18x32	1630	0.047	
	56	8x12	232	0.630	560	16x40	2020	0.040	
	82	8x15	300	0.450	680	18x36	1790	0.040	
		10x12.5	288	0.430	820	18x40	2330	0.036	