

SC

Low impedance · High Ripple Series

- Endurance: 105°C 1000~3000 hours
- Recommended Applications : Applicable for switching regulator of computer , especially for high frequency
- Corresponding product to RoHS

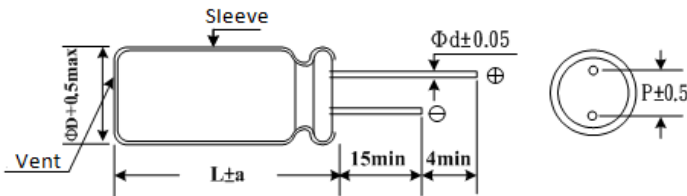
SY
↑ Long Life
SC



■ SPECIFICATIONS

Item	Characteristics								
Category Temperature Range	-40 ~ +105°C								
Rated Voltage Range	6.3 ~ 100VDC								
Rated Capacitance Range	4.7 ~ 15000 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)	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
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)	WV	6.3	10	16	25	35	50	63	100
	Z(120Hz)	4	3	3	3	3	2	2	2
	Z-25°C / Z+20°C	8	6	4	4	4	4	4	4
Endurance	After applying rated voltage with ripple current for 1000~3000 hours at 105°C, the capacitors shall meet the following requirements.								
	Capacitance change	Within ± 20% of initial value							
	D.F. (tan δ)	Not more than 200% of specified value							
	Leakage current	Not more than the specified value							
	Case size (Φ)	5 x 11 ~ 10 x 12.5	10 x 15higher						
Life time (hours)	2000	3000							
*If dimension is down size, Endurance will be less 1000hrs than standard.									
Shelf Life	After placed at 105°C without voltage applied for 1000 hours, the capacitors shall meet the same requirement as Endurance.								

■ Dimensions [mm]



ΦD	5	6.3	8	10	13	16	18	22
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10.0
Φd	0.50	0.5	0.6	0.6	0.6	0.8	0.8	0.8
a	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0

■ Multiplier for Ripple Current

Cap (µ F) \ Freq. (Hz)	50	120	300	1K	10K	100K
≤ 4.7 µ F	0.30	0.40	0.50	0.70	0.80	1.00
5.6 ~ 33 µ F	0.40	0.50	0.60	0.80	0.90	1.00
34 ~ 330 µ F	0.60	0.70	0.80	0.90	0.95	1.00
331 ~ 1000 µ F	0.65	0.90	0.90	0.98	1.00	1.00
1200 µ F Above	0.85	0.90	0.95	0.98	1.00	1.00

■ STANDARD RATINGS

Rated Voltage (Surge Voltage) (V)	Cap (μ F)	Case size Φ DxL(mm)	Ripple current (mA/rms105°C) (100KHz)	Impedance (Ω ,20°C) (100KHz)	Rated Voltage (Surge Voltage) (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	200	0.420	16V (20)	220	8x11	550	0.140
	220	6.3x11	250	0.320		330	8x11	550	0.120
	270	6.3x11	250	0.220			8x15	750	0.100
	330	6.3x11	250	0.230		10x12.5	688	0.080	
		8x11	400	0.180		470	8x15	730	0.093
	470	*6.3x11	440	0.180			10x12.5	800	0.085
		8x11	550	0.140		680	10x16	1050	0.064
	680	*8x11	580	0.120		820	10x20	1100	0.044
		8x15	700	0.100		1000	*10x16	1140	0.043
	820	8x20	750	0.085			10x20	1250	0.039
	1000	*8x11	580	0.150		1200	*10x25	1310	0.042
		8x15	700	0.085			13x20	1450	0.038
		8x20	800	0.069		1500	*10x20	1200	0.045
		10x12.5	690	0.080			13x20	1600	0.034
	1200	10x16	1000	0.064		2200	*10x30	1780	0.032
	1500	*8x15	980	0.085			*13x20	1720	0.033
		8x20	800	0.051			13x25	2000	0.028
		*10x16	1070	0.055		*13x40	2200	0.026	
		10x20	1250	0.044		16x25	2200	0.024	
	2200	*10x20	1220	0.051		4700	16x36	2550	0.019
*10x25		1310	0.048	6800	18x36	2800	0.019		
13x20		1450	0.043	25V (32)	10	5x11	50	0.550	
3300		*10x25	1400		0.043	47	5x11	150	0.450
	13x25	1700	0.035		56	5x11	150	0.420	
3900	13x25	1750	0.032		68	6.3x11	200	0.370	
4700	*13x30	1570	0.033		100	6.3x11	250	0.220	
	*13x25	1520	0.032		120	8x11	300	0.200	
6800	16x25	1800	0.028		150	8x11	550	0.140	
	16x32	2000	0.024		220	8x11	550	0.120	
8200	16x32	2350	0.019			8x15	750	0.100	
10000	16x36	2550	0.019		330	*8x15	660	0.100	
15000	18x36	3000	0.019			8x20	800	0.069	
10V (13)	100	5x11	150		0.420	10x16	900	0.086	
	120	5x11	200		0.370	470	8x20	800	0.067
	150	6.3x11	250		0.320		10x12.5	760	0.086
	220	6.3x11	300		0.220	10x16	1050	0.064	
	330	8x11	550		0.140	680	10x20	1100	0.039
	470	8x11	550		0.120	820	10x20	1250	0.039
		8x15	750		0.100	1000	*10x20	1160	0.047
	680	*8x11	640		0.110		*10x25	1310	0.042
		10x12.5	800		0.085	13x20	1450	0.038	
	820	10x16	1050	0.064	1200	13x25	1600	0.035	
	1000	8x20	1080	0.065	1500	*13x30	1750	0.032	
		*10x12.5	930	0.075		16x25	2000	0.028	
		10x16	990	0.085	2200	*13x30	1810	0.029	
		10x20	1100	0.050		*16x25	1660	0.032	
	1200	10x20	1250	0.044	16x32	2200	0.024		
	1500	10x20	1450	0.039	3300	*16x36	2540	0.019	
	2200	*10x20	1330	0.047		18x36	2550	0.019	
		*10x25	1450	0.039	4700	18x36	2800	0.019	
	13x20	1600	0.038	6800	18x36	2800	0.019		
	3300	*10x30	1740	0.032	35V (44)	4.7	5x11	115	1.200
13x25		2000	0.028	6.8		5x11	120	1.000	
4700	*13x25	1860	0.028	10		5x11	140	0.900	
	16x25	2200	0.024	15		5x11	170	0.690	
6800	16x36	2550	0.019	22		5x11	190	0.600	
8200	18x36	2800	0.019	33		5x11	200	0.580	
16V (20)	56	5x11	100	0.630		47	6.3x11	250	0.390
	68	5x11	150	0.420		68	6.3x11	300	0.220
	100	5x11	200	0.370		100	6.3x11	350	0.180
	120	6.3x11	250	0.320			8x11	450	0.140
	150	6.3x11	300	0.220		120	8x11	550	0.130

" * " is down size , Ripple Life is less 1000 hrs than standard

■ STANDARD RATINGS

Rated Voltage (SurageVoltage) (V)	Cap (μ F)	Case size Φ D \times L(mm)	Ripple current (mA/rms105°C) (100KHz)	Impedance (Ω ,20°C) (100KHz)	Rated Voltage (SurageVoltage) (V)	Cap (μ F)	Case size Φ D \times L(mm)	Ripple current (mA/rms105°C) (100KHz)	Impedance (Ω ,20°C) (100KHz)	
35V (44)	150	8x15	650	0.100	50V (63)	1000	16x25	1900	0.039	
	220	8x15	650	0.100		1200	16x32	2100	0.025	
		10x12.5	800	0.069		1500	16x36	2550	0.025	
		*10x16	900	0.052		2200	18x40	2800	0.025	
	50V (63)	330	10x20	1050	0.044	63V (79)	10	5x11	140	1.850
		470	10x20	1300	0.039		15	5x11	200	1.700
		680	13x20	1400	0.038		22	6.3x11	250	1.200
		820	13x20	1550	0.034		33	6.3x11	300	0.900
		1000	13x25	1700	0.029		47	8x11	450	0.700
		1200	16x25	1900	0.028		68	8x11	550	0.520
		1500	16x25	2100	0.024		100	8x20	650	0.350
		2200	*16x32	2300	0.021		120	10x16	800	0.300
			16x36	2550	0.019		150	10x16	1050	0.200
18x36			2880	0.019	220		10x20	1300	0.150	
50V (63)	4.7	5x11	115	2.000	330		13x20	1400	0.100	
	6.8	5x11	120	1.850	470		13x25	1550	0.064	
	10	5x11	140	1.700	680		16x25	1700	0.052	
	15	5x11	180	1.200	820		16x32	1900	0.048	
	22	5x11	200	0.700	1000		16x32	2100	0.042	
	33	6.3x11	250	0.600	1200	16x36	2550	0.036		
	47	6.3x11	300	0.520	1500	18x36	2800	0.033		
	68	8x11	450	0.350	100V (125)	10	6.3x11	200	1.500	
	100	8x11	450	0.290		15	6.3x11	250	1.200	
		8x15	550	0.250		22	8x11	300	0.790	
	120	8x20	650	0.210		33	8x15	450	0.590	
	150	10x12.5	800	0.160		47	10x16	550	0.350	
	220	*10x16	1050	0.100		68	10x20	650	0.240	
		10x25	1050	0.068		100	13x20	800	0.180	
	330	10x20	1300	0.072		120	13x25	1050	0.150	
	470	*10x20	1390	0.075		150	13x25	1300	0.110	
		13x20	1400	0.060		220	16x25	1400	0.071	
	680	13x25	1550	0.050		330	16x32	1550	0.049	
	820	16x25	1700	0.040		470	18x36	1770	0.038	

" * " is down size , Ripple Life is less 1000 hrs than standard