



# ELECTROLYTIC CAPACITOR

## - STG Series

### Features

- 85 2000 hours assured.
- Lead free reflow soldering is available.



### Specifications

Item	Performance															
Operating Temperature Range	-40 to +85															
Capacitance Tolerance	±20% (at 120Hz, 20 )															
Surge Voltage(V) (20 )	WV	4	6.3	10	16	25	35	50	63	100	160	200	250	400	450	
	SV	5	8	13	20	32	44	63	79	125	200	250	300	450	500	
Leakage Current (at 20 )	4~100V	4~10Ø		I=0.01CV or 3 µA, whichever is greater, after 2												
		12.5~16Ø		I=0.03CV or 4 µA, whichever is greater, after 1												
	160~450V	12.5~16Ø		I=0.04cv +100 µA after 1 minutes at +20												
Where I=leakage current, C=rated capacitance in µF, V=rated DC working voltage in V																
Dissipation Factor (Tan δ at 120Hz, 20 )	Shown in the table of standard rating															
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below.															
	Rated Voltage(v)		4	6.3	10	16	25	35	50	63	100	160~250	400~450			
	Impedance Ratio	Z (-25 )	4~10Ø	7	4	3	2	2	2	2	2	3	-	-		
		Z(+20 )	12.5~16Ø	-	5	4	3	2	2	2	2	2	3	6		
		Z (-40 )	ØD 10	15	12	8	6	4	3	3	3	4	-	-		
Z(+20 )		ØD 10	-	10	8	6	4	3	3	3	3	6	10			
Load Life Test	Test Time		2000 Hrs													
	Case code		4~6.3Ø						8~16Ø							
	Capacitance Change		Within ±25% of initial						Within ±20% of initial							
	Dissipation Factor		Less than 200% of						Less than 200% of							
	Leakage Current		Within specified value						Within specified value							
	* The above specifications shall be satisfied when the capacitors are restored to 20 after the rated voltage applied with rated ripple current for 2000hours at85															
Shelf Life Test	Without Voltage Test time:1000 hrs; other items are the same as those for the load life test.															

**Diagram of Dimensions: (Unit: mm)**

Fig 1

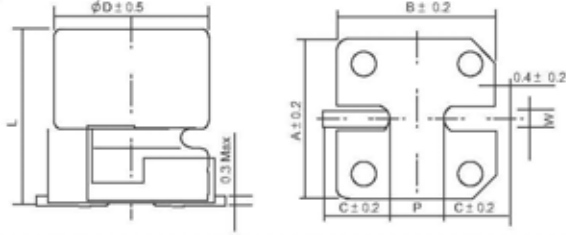
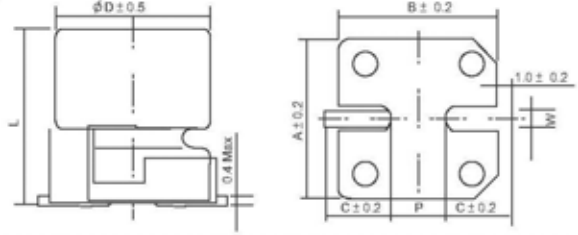


Fig 2



ØD	L	A	B	C	W	P	Fig No.
4	5.4 ± 0.3	4.3	4.3	2.0	0.5~0.8	1.0	1
5	5.4 ± 0.3	5.3	5.3	2.3	0.5~0.8	1.5	1
6.3	5.4 ± 0.3	6.6	6.6	2.7	0.5~0.8	2.0	1
6.3	7.7 ± 0.3	6.6	6.6	2.7	0.5~0.8	2.0	1
8	6.2 ± 0.5	8.3	8.3	3.4	0.5~0.8	2.2	1
8	10.2 ± 0.5	8.3	8.3	3.4	0.7~1.1	3.1	1
10	10.2 ± 0.5	10.4	10.4	3.3	0.7~1.1	4.6	1
12.5	13.5 ± 0.5	12.8	12.8	4.9	1.1~1.4	4.6	2
12.5	16 ± 0.5	12.8	12.8	4.9	1.1~1.4	4.6	2
16	16.5 ± 0.5	16.3	16.3	5.8	1.8~2.2	6.0	2

**Multiplier For Ripple Current VS, Frequency**

CAP	Freq. (Hz)					
	50(60)	120	500	1K	10K	UP
Multiplier	0.1~47µF	0.8	1.0	1.20	1.30	1.50
	68~1000µF	0.8	1.0	1.10	1.15	1.20

**Case Size**

WV	Cap (µF)	Size (mm) φ DxL	Tol (%)	DF (%) (max) 120Hz, 20	R.C. (mA, rms) (max) 120Hz, 85
4	22	4x5.4	±20	0.35	19
	33	4x5.4	±20	0.35	26
	47	4x5.4	±20	0.35	34
	100	5x5.4	±20	0.35	61
	220	6.3x5.4	±20	0.35	82
6.3	22	4x5.4	±20	0.35	20
	33	4x5.4	±20	0.35	28
		5x5.4	±20	0.35	33
	47	4x5.4	±20	0.35	36
		5x5.4	±20	0.35	46
	100	5x5.4	±20	0.35	65
		6.3x5.4	±20	0.35	71
		6.3x5.4	±20	0.35	110
	220	6.3x7.7	±20	0.35	130
		8x6.2	±20	0.35	230
	330	6.3x7.7	±20	0.35	270
		8x6.2	±20	0.35	300
	470	8x10.2	±20	0.35	380
		8x10.2	±20	0.35	500
	1000	8x10.2	±20	0.35	700
10x10.2		±20	0.35	700	
22	4x5.4	±20	0.30	28	
	4x5.4	±20	0.30	29	

		5x5.4	±20	0.30	43
	47	5x5.4	±20	0.30	43
	100	6.3x5.4	±20	0.26	70
		8x6.2	±20	0.26	76
	220	6.3x7.7	±20	0.26	173
		8x6.2	±20	0.26	250
	330	8x10.2	±20	0.26	320
	470	8x10.2	±20	0.26	390
		10x10.2	±20	0.26	400
	1000	10x10.2	±20	0.26	710
16	4.7	4x5.4	±20	0.24	20
	10	4x5.4	±20	0.24	22
	22	4x5.4	±20	0.24	31
		5x5.4	±20	0.24	39
	33	5x5.4	±20	0.24	45
		6.3x5.4	±20	0.24	63
	47	5x5.4	±20	0.24	58
		6.3x5.4	±20	0.24	70
	100	6.3x5.4	±20	0.24	80
		8x6.2	±20	0.24	90
	220	6.3x7.7	±20	0.24	180
		8x10.2	±20	0.24	220
	330	8x10.2	±20	0.24	320
		10x10.2	±20	0.24	340
	470	8x10.2	±20	0.24	400
		10x10.2	±20	0.24	420

WV	Cap (μF)	Size (mm) φ DxL	Tol (%)	DF (%) (max) 120Hz, 20	R.C. (mA, rms) (max) 120Hz, 85	
25	4.7	4x5.4	±20	0.16	22	
	10	4x5.4	±20	0.16	22	
		5x5.4	±20	0.16	28	
	22	5x5.4	±20	0.16	35	
		6.3x5.4	±20	0.16	55	
	33	5x5.4	±20	0.16	42	
		6.3x5.4	±20	0.16	65	
	47	6.3x5.4	±20	0.16	70	
		8x6.2	±20	0.16	89	
	100	6.3x7.7	±20	0.16	120	
		8x6.2	±20	0.16	135	
		8x10.2	±20	0.16	170	
	220	8x10.2	±20	0.16	230	
		10x10.2	±20	0.16	310	
330	8x10.2	±20	0.16	320		
	10x10.2	±20	0.16	360		
470	10x10.2	±20	0.16	450		
35	2.2	4x5.4	±20	0.14	8	
	3.3	4x5.4	±20	0.14	10	
	4.7	4x5.4	±20	0.14	22	
	10	4x5.4	±20	0.14	22	
		5x5.4	±20	0.14	30	
	22	6.3x5.4	±20	0.14	60	
		6.3x5.4	±20	0.14	60	
	33	8x6.2	±20	0.14	70	
		6.3x7.7	±20	0.14	90	
	47	8x6.2	±20	0.14	103	
		100	6.3x7.7	±20	0.14	132
			8x10.2	±20	0.14	170
	220	10x10.2	±20	0.14	190	
		8x10.2	±20	0.14	340	
	10x10.2	±20	0.14	410		
50	0.1	4x5.4	±20	0.12	1	
	0.22	4x5.4	±20	0.12	2	
	0.33	4x5.4	±20	0.12	3	
	0.47	4x5.4	±20	0.12	5	
	1	4x5.4	±20	0.12	10	
	2.2	4x5.4	±20	0.12	14	
	3.3	4x5.4	±20	0.12	16	
	4.7	4x5.4	±20	0.12	18	
		5x5.4	±20	0.12	23	
	10	5x5.4	±20	0.12	27	
		6.3x5.4	±20	0.12	35	
	22	6.3x5.4	±20	0.12	50	
		6.3x7.7	±20	0.12	60	
		8x6.2	±20	0.12	65	
	33	6.3x7.7	±20	0.12	65	
		8x6.2	±20	0.12	70	
		8x10.2	±20	0.12	80	
	47	6.3x7.7	±20	0.12	105	
		8x6.2	±20	0.12	110	
		8x10.2	±20	0.12	120	
		10x10.2	±20	0.12	130	
	100	8x10.2	±20	0.12	220	
		10x10.2	±20	0.12	240	
	220	10x10.2	±20	0.12	450	

WV	Cap (μF)	Size (mm) φ DxL	Tol (%)	DF (%) (max) 120Hz, 20	R.C. (mA, rms) (max) 120Hz, 85
63	0.1	4x5.4	±20	0.12	1.3
	0.22	4x5.4	±20	0.12	3
	0.33	4x5.4	±20	0.12	4
	0.47	4x5.4	±20	0.12	5
	1	4x5.4	±20	0.12	8
	2.2	4x5.4	±20	0.12	12
	3.3	4x5.4	±20	0.12	17
	4.7	5x5.4	±20	0.12	20
		6.3x5.4	±20	0.12	27
	10	6.3x5.4	±20	0.12	38
		8x6.2	±20	0.12	56
	22	6.3x7.7	±20	0.12	60
		8x10.2	±20	0.12	65
	33	6.3x7.7	±20	0.12	70
		8x10.2	±20	0.12	100
	47	8x10.2	±20	0.12	145
	68	10x10.2	±20	0.12	190
	100	10x10.2	±20	0.12	260
12.5x13.5		±20	0.14	300	
220	12.5x13.5	±20	0.14	500	
330	12.5x16	±20	0.14	680	
470	16x16.5	±20	0.14	850	
100	3.3	8x10.2	±20	0.12	30
	4.7	8x10.2	±20	0.12	50
	10	8x10.2	±20	0.12	55
	22	8x10.2	±20	0.12	90
		10x10.2	±20	0.12	90
	33	10x10.2	±20	0.12	120
	47	10x10.2	±20	0.12	200
	68	12.5x13.5	±20	0.12	280
	100	12.5x13.5	±20	0.12	380
220	16x16.5	±20	0.12	500	
160	33	12.5x13.5	±20	0.20	240
	47	12.5x16	±20	0.20	300
	68	16x16.5	±20	0.20	400
200	22	12.5x13.5	±20	0.20	220
	33	12.5x16	±20	0.20	300
	47	16x16.5	±20	0.20	320
	68	16x16.5	±20	0.20	340
250	10	12.5x13.5	±20	0.20	105
	22	12.5x13.5	±20	0.20	150
	33	12.5x16	±20	0.20	240
	47	16x16.5	±20	0.20	330
400	4.7	12.5x13.5	±20	0.25	90
	10	12.5x13.5	±20	0.25	110
	22	16x16.5	±20	0.25	120
	33	16x16.5	±20	0.25	140
450	4.7	12.5x13.5	±20	0.25	120
	10	12.5x16	±20	0.25	130
	22	16x16.5	±20	0.25	140