



STK Chip, General Purpose, 105°C



Features

- 105°C 1000~2000 hours assured.
- Lead free reflow soldering is available.

Specifications

Item	Performance Characteristics															
Operating Temperature Range	-40°C to +105°C															
Capacitance Tolerance	±20% (at 120Hz, 20°C)															
Surge Voltage(V)(20°C)	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°C)	4~100V	4~10φ	I=0.01CV or 3μA, whichever is greater, after 2 minutes at +20°C													
		12.5~16φ	I=0.03CV or 4μA, whichever is greater, after 1 minutes at +20°C													
	160~450V	12.5~16φ	I=0.04cv +100μA after 1 minutes at +20°C													
Where I=leakage current, C=rated capacitance inμF, V=rated DC working voltage in V																
Dissipation Factor (Tan δ at 120Hz, 20°C)	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°C) /Z(+20°C)	4~10φ	7	4	3	2	2	2	2	2	3	-	-		
			12.5~16φ	-	5	4	3	2	2	2	2	2	3	6		
		Z (-40°C) /Z(+20°C)	4~10φ	15	12	8	6	4	3	3	3	4	-	-		
12.5~16φ			-	10	8	6	4	3	3	3	3	6	10			
Load Life Test	Test Time	1000~2000 Hrs														
	Case code	4~6.3φ						8~16φ								
	Capacitance Change	Within ±25% of initial value						Within ±20% of initial value								
	Dissipation Factor	Less than 200% of specified value						Less than 200% of specified value								
	Leakage Current	Within specified value						Within specified value								
	*The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied with rated ripple current for 2000 hours at 105°C															
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

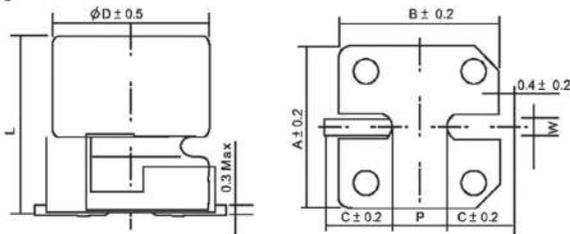
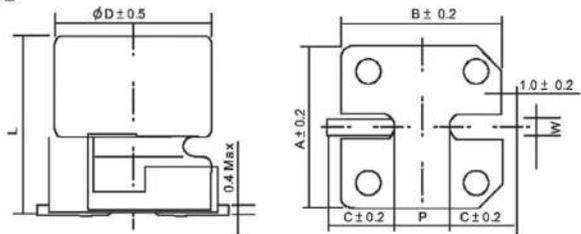


Fig 2



φD	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



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Multiplier For Ripple Current VS. Frequency

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

Case Size

WV	Cap (μF)	Size (mm) φDxL	Tol (%)	DF (%) (max) 120Hz, 20°C	R.C. (mA, rms) (max) 120Hz, 105°C
4	22	4x5.4	±20	0.35	20
	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	68
6.3	22	4x5.4	±20	0.35	29
	33	4x5.4	±20	0.35	43
	47	5x5.4	±20	0.35	46
	100	6.3x5.4	±20	0.35	71
	220	6.3x7.7	±20	0.35	120
		8x6.2	±20	0.35	130
	330	8x10.2	±20	0.35	230
	470	8x10.2	±20	0.35	250
		10x10.2	±20	0.35	260
	1000	10x10.2	±20	0.35	380
	2200	12.5x13.5	±20	0.40	680
3300	12.5x16	±20	0.40	850	
4700	16x16.5	±20	0.40	1000	
6800	16x16.5	±20	0.40	1000	
10	22	4x5.4	±20	0.30	25
	33	4x5.4	±20	0.30	40
	47	6.3x5.4	±20	0.30	50
	100	6.3x5.4	±20	0.30	70
		8x6.2	±20	0.30	75
	220	6.3x7.7	±20	0.30	120
		8x10.2	±20	0.26	125
	330	8x10.2	±20	0.26	230
		10x10.2	±20	0.26	240
	470	8x10.2	±20	0.26	260
		10x10.2	±20	0.26	300
	1000	10x10.2	±20	0.26	390
	2200	12.5x16	±20	0.38	750
	3300	16x16.5	±20	0.38	1000
4700	16x16.5	±20	0.38	1000	
16	10	4x5.4	±20	0.22	17
	22	5x5.4	±20	0.22	30
	33	6.3x5.4	±20	0.22	45
	47	6.3x5.4	±20	0.22	48
	100	6.3x5.4	±20	0.22	69
		6.3x7.7	±20	0.22	74
		8x6.2	±20	0.22	80
		8x10.2	±20	0.22	85
	220	6.3x7.7	±20	0.22	170
		10x10.2	±20	0.22	210
	330	8x10.2	±20	0.22	240
		10x10.2	±20	0.22	245
	470	8x10.2	±20	0.22	280
		10x10.2	±20	0.22	320
	1000	12.5x13.5	±20	0.34	550
2200	16x16.5	±20	0.34	950	
3300	16x16.5	±20	0.34	950	

SMD

604
053
7756
7392
0571



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SMD

WV	Cap (μF)	Size (mm) φDxL	Tol (%)	DF (%) (max) 120Hz, 20°C	R.C. (mA, rms) (max) 120Hz, 105°C
25	4.7	4x5.4	±20	0.16	13
	10	5x5.4	±20	0.16	23
	22	6.3x5.4	±20	0.16	38
	33	6.3x5.4	±20	0.16	50
	47	6.3x5.4	±20	0.16	60
		6.3x7.7	±20	0.16	65
		8x6.2	±20	0.16	67
	100	6.3x7.7	±20	0.16	100
		8x10.2	±20	0.16	105
	220	8x10.2	±20	0.16	230
		10x10.2	±20	0.16	273
	330	10x10.2	±20	0.16	340
	470	10x10.2	±20	0.16	470
	1000	12.5x16	±20	0.26	550
2200	16x16.5	±20	0.26	820	
35	4.7	4x5.4	±20	0.14	16
	10	5x5.4	±20	0.14	27
	22	6.3x5.4	±20	0.14	44
	33	6.3x5.4	±20	0.14	54
		6.3x7.7	±20	0.14	57
		8x6.2	±20	0.14	60
	47	8x10.2	±20	0.14	80
		10x10.2	±20	0.14	88
	100	8x10.2	±20	0.14	140
		10x10.2	±20	0.14	190
	220	10x10.2	±20	0.14	360
	330	10x10.2	±20	0.14	450
	470	12.5x13.5	±20	0.22	520
	1000	16x16.5	±20	0.22	750
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	16
	3.3	4x5.4	±20	0.12	16
	4.7	5x5.4	±20	0.12	20
	10	6.3x5.4	±20	0.12	32
	22	6.3x5.4	±20	0.12	40
		6.3x7.7	±20	0.12	47
		8x6.2	±20	0.12	52
	33	6.3x7.7	±20	0.12	65
		8x10.2	±20	0.12	70
	47	8x10.2	±20	0.12	80
		10x10.2	±20	0.12	100
	100	8x10.2	±20	0.12	210
		10x10.2	±20	0.12	230
220	10x10.2	±20	0.14	375	
330	12.5x13.5	±20	0.14	500	
470	12.5x16	±20	0.14	550	



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SMD

WV	Cap (µF)	Size (mm) φDxL	Tol (%)	DF (%) (max) 120Hz, 20°C	R.C. (mA, rms) (max) 120Hz, 105°C
63	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	6.3x5.4	±20	0.12	22
	10	6.3x5.4	±20	0.12	32
	22	6.3x7.7	±20	0.12	58
		8x10.2	±20	0.12	60
	33	8x10.2	±20	0.12	100
		10x10.2	±20	0.12	130
	47	8x10.2	±20	0.12	140
		10x10.2	±20	0.12	170
	100	10x10.2	±20	0.12	310
	220	12.5x13.5	±20	0.14	470
330	16x16.5	±20	0.14	700	
470	16x16.5	±20	0.14	700	
100	10	8x10.2	±20	0.12	55
	22	8x10.2	±20	0.12	90
		10x10.2	±20	0.12	100
	33	10x10.2	±20	0.12	150
	47	12.5x13.5	±20	0.14	250
	100	12.5x13.5	±20	0.14	380
220	16x16.5	±20	0.14	450	
160	33	12.5x13.5	±20	0.20	95
	47	12.5x16	±20	0.20	110
	100	16x16.5	±20	0.20	190
200	10	12.5x13.5	±20	0.20	80
	22	12.5x13.5	±20	0.20	90
	33	12.5x16	±20	0.20	110
	47	16x16.5	±20	0.20	220
250	3.3	12.5x13.5	±20	0.20	65
	4.7	12.5x13.5	±20	0.20	68
	10	12.5x13.5	±20	0.20	72
	22	12.5x13.5	±20	0.20	90
	33	16x16.5	±20	0.20	150
	47	16x16.5	±20	0.20	180
400	4.7	12.5x13.5	±20	0.25	50
	10	12.5x13.5	±20	0.25	65
	22	16x16.5	±20	0.25	85
450	3.3	12.5x13.5	±20	0.25	40
	4.7	12.5x13.5	±20	0.25	50
	10	12.5x16	±20	0.25	55
	22	16x16.5	±20	0.25	85