

SV General Purpose Series

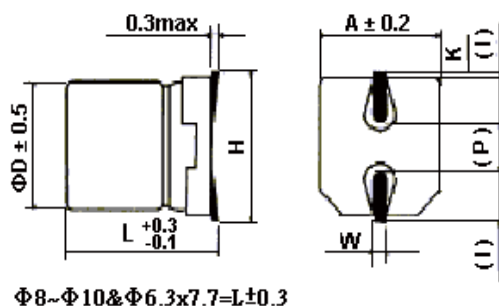
- Features : 105°C 1000 hours , Higher temperature range Than GV, Low profile vertical chip
- Recommended Applications: Suitable for AV(TV,Video,Audio),Monitor/Computer, OA/HA/Communication
- Corresponding product to RoHS



Specifications

Item	Characteristics									
Operating Temperature Range	-40 ~ +105℃									
Rated Voltage Range (WV)	4 ~ 100VDC									
Capacitance Range	0.1 ~ 1000 μ F									
Capacitance Tolerance	± 20 % at 120Hz , 20℃									
Leakage Current (MAX) (20℃)	I ≤0.01CV or 3(μ A) , whichever is greater. (After rated voltage applied for 2 minutes) I= Leakage Current (μ A) C= Nominal Capacitance (μ F) V= Rated Voltage (V)									
Dissipation Factor (MAX) (tan δ) (120Hz ,20℃)	Shown in the table of standard rating									
Low Temperature Stability Impedance Ratio (MAX)	<div><div></div><div>WV</div><div>Z(120HZ)</div></div>	4	6.3	10	16	25	35	50	63	100
	Z(-25℃) / Z(20℃)	7	4	3	2	2	2	2	2	2
	Z(-40℃) / Z(20℃)	15	8	6	4	4	3	3	3	3
Endurance	After applying rated voltage for 1000hrs at 105℃ , the capacitors shall meet the following requirements.									
	Capacitance Change		Within ±20% of the initial value							
	Dissipation Factor		Not more than 200% of the specified value							
	Leakage Current		Not more than the specified value							
Shelf Life	After placed at 105℃ without voltage applied for 1000 hours, the capacitor shall meet the same requirement as Endurance.									

Diagram of Dimensions(mm)



() : Reference size

ϕD	L	A	H	I	W	P	K
4.0	5.4	4.3	5.5 Max	1.8	0.65 \pm 0.1	1.0 \pm 0.2	0.35 +0.15 -0.20
5.0	5.4	5.3	6.5 Max	2.2	0.65 \pm 0.1	1.5 \pm 0.2	0.35 +0.15 -0.20
6.3	5.4	6.6	7.8 Max	2.6	0.65 \pm 0.1	1.8 \pm 0.2	0.35 +0.15 -0.20
6.3	7.7	6.6	7.8 Max	2.6	0.65 \pm 0.1	1.8 \pm 0.2	0.35 +0.15 -0.20
8.0	6.2	8.3	9.5 Max	3.4	0.65 \pm 0.1	2.2 \pm 0.2	0.35 +0.15 -0.20
8.0	10.2	8.3	10.0 Max	3.4	0.90 \pm 0.2	3.1 \pm 0.2	0.70 \pm 0.20
10.0	10.2	10.3	12.0 Max	3.5	0.90 \pm 0.2	4.6 \pm 0.2	0.70 \pm 0.20

Multiplier for Ripple Current

Frequency coefficient

Frequency (Hz)	60	120	1K	10K
Coefficient	0.85	1.00	1.15	1.25

Temperature coefficient

Ambient Temperature (°C)	≤ 50	70	85	105
Coefficient	1.90	1.75	1.40	1.00

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■ Dimensions, Max Dissipation Factor, Max Permissible Ripple Current, Max Equivalent Series Resistance

Capacitance (μ F)	Rated (Surge) Voltage															
	4(5)				6.3(8)				10(13)				16(20)			
	Size	$\tan \delta$	Ripple	ESR	Size	$\tan \delta$	Ripple	ESR	Size	$\tan \delta$	Ripple	ESR	Size	$\tan \delta$	Ripple	ESR
4.7													4x5.4	0.16	20	45.1
10									4x5.4	0.30	24	39.7	4x5.4	0.16	28	21.2
22	4x5.4	0.35	20	21.1	4x5.4	0.30	29	18.0	4x5.4	0.30	36	18.0	5x5.4	0.16	39	9.64
33	4x5.4	0.35	26	14.0	4x5.4	0.30	43	12.0	4x5.4	0.30	45	12.0	6.3x5.4	0.20	65	8.03
47	4x5.4	0.35	34	9.87	5x5.4	0.30	46	8.46	6.3x5.4	0.30	70	8.46	6.3x5.4	0.20	70	5.64
													6.3x7.7	0.20	125	2.39
100	5x5.4	0.35	61	4.64	6.3x5.4	0.35	71	4.64	8x6.2	0.30	110	3.97	8x6.2	0.20	130	2.65
220	6.3x5.4	0.35	82	2.11	6.3x7.7	0.35	120	2.11	6.3x7.7	0.30	115	1.80	6.3x7.7	0.20	100	1.08
					8x6.2	0.35	130	2.11	8x10.2	0.26	160	1.80	10x10.2	0.20	210	1.20
330					6.3x7.7	0.35	175	1.40	10x10.2	0.26	230	1.04	10x10.2	0.20	230	0.80
					8x10.2	0.35	230	1.40								
470					10x10.2	0.35	260	0.99	10x10.2	0.26	270	0.73	10x10.2	0.20	275	0.56
1000					10x10.2	0.35	380	0.46	10x10.2	0.26	390	0.34				

Capacitance (μ F)	Rated (Surge) Voltage											
	25(32)				35(44)				50(63)			
	Size	$\tan \delta$	Ripple	ESR	Size	$\tan \delta$	Ripple	ESR	Size	$\tan \delta$	Ripple	ESR
0.1									4x5.4	0.12	1	1593
0.22									4x5.4	0.12	2	723
0.33									4x5.4	0.12	3	482
0.47									4x5.4	0.12	5	338
1									4x5.4	0.12	10	159
2.2					4x5.4	0.12	15	72.3	4x5.4	0.12	16	72.3
3.3					4x5.4	0.12	18	48.2	4x5.4	0.12	16	48.2
4.7	4x5.4	0.14	22	39.5	4x5.4	0.12	22	33.8	5x5.4	0.12	23	33.8
10	5x5.4	0.14	28	18.5	5x5.4	0.12	30	15.9	6.3x5.4	0.12	35	15.9
22	6.3x5.4	0.14	55	8.44	6.3x5.4	0.14	60	8.44	6.3x7.7	0.12	65	7.23
									8x6.2	0.12	70	7.23
33	6.3x5.4	0.16	65	6.43	8x6.2	0.14	84	5.62	6.3x7.7	0.12	70	4.82
									8x10.2	0.12	91	4.82
47	8x6.2	0.16	91	4.51	8x10.2	0.14	98	3.95	6.3x7.7	0.12	65	3.38
									10x10.2	0.12	100	3.38
100	6.3x7.7	0.16	95	2.12	6.3x7.7	0.14	105	1.85	10x10.2	0.12	145	1.59
	8x10.2	0.16	130	2.12	10x10.2	0.14	160	1.85				
220	10x10.2	0.16	273	0.96	10x10.2	0.14	240	0.84				

Capacitance (μ F)	Rated (Surge) Voltage							
	63(79)				100(125)			
	Size	$\tan \delta$	Ripple	ESR	Size	$\tan \delta$	Ripple	ESR
3.3					8x10.2	0.18	30	72.3
4.7	6.3x5.4	0.18	20	50.8	8x10.2	0.18	50	50.8
10	6.3x5.4	0.18	20	23.8	8x10.2	0.18	55	23.8
22	8x10.2	0.18	30	10.8	10x10.2	0.18	60	10.8
33	8x10.2	0.18	30	7.23	10x10.2	0.18	65	7.23
47	8x10.2	0.18	30	5.08				
100	10x10.2	0.18	60	2.38				

☆Size: D ϕ x L (mm). ☆ $\tan \delta$: 20°C, 120Hz. ☆Ripple Current: 105°C, 120Hz, (mA/rms) ☆ESR: 20°C, 120Hz, (Ω).