

## SG Series 7~9mm Long life



### Features

- ◆ Operating temperature -40~105°C.
- ◆ 105°C 4000Hours assured.
- ◆ 7~9mm Height

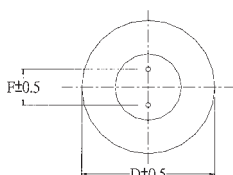
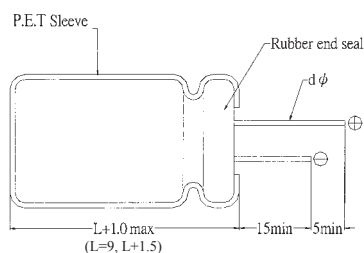
### Specifications

Item	Performance Characteristics																					
Operating Temperature Range	-40 to +105°C																					
Rated Voltage Range	6.3 to 50 VDC																					
Capacitance Range	0.1 to 470 µ F																					
Capacitance Tolerance	±20%(120Hz,+20°C)																					
Leakage Current (+20°C,max.)	$I \leq 0.01 CV$ or $3 (\mu A)$ After 2 minute with rated working voltage applied.																					
Dissipation Factor ( $\tan \delta$ , at 20°C , 120Hz)	<table border="1"> <tr> <td>Working Voltage(VDC)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>D.F.(%)max.</td> <td>24</td> <td>20</td> <td>17</td> <td>15</td> <td>13</td> <td>12</td> </tr> </table>	Working Voltage(VDC)	6.3	10	16	25	35	50	D.F.(%)max.	24	20	17	15	13	12							
	Working Voltage(VDC)	6.3	10	16	25	35	50															
D.F.(%)max.	24	20	17	15	13	12																
Low Temperature Characteristics (at 120Hz)	Impedance ratio max																					
	<table border="1"> <tr> <td>Working Voltage(VDC)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</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> </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> </tr> </table>	Working Voltage(VDC)	6.3	10	16	25	35	50	Z-25°C / Z+20°C	4	3	2	2	2	2	Z-40°C / Z+20°C	8	6	4	3	3	3
	Working Voltage(VDC)	6.3	10	16	25	35	50															
Z-25°C / Z+20°C	4	3	2	2	2	2																
Z-40°C / Z+20°C	8	6	4	3	3	3																
Endurance	Test condition Duration time :4000Hrs Ambient temperature :+105°C Applied voltage :Rated DC working voltage After test requirement at +20°C Capacitance change : within±30% of the initial measured value Dissipation factor : ≤300% of the initial specified value Leakage current : ≤ The initial specified value																					
Shelf Life	Test condition Duration time :1000Hrs Ambient temperature :+105°C Applied voltage :None After test requirement at +20°C:Same limits as Endurance. Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes.																					

### Multiplier for Ripple Current vs. Frequency

CAP(µ F)\Frequency(Hz)	50(60)	120	1K	50-100K
Multiplier	0.65	1.00	1.35	1.5

### Diagram of Dimensions:(unit:mm)



D φ	4	5	6.3	8	10
F	1.5	2.0	2.5	3.5	5.0
d φ	0.45		0.50	0.50	0.6

## Case Size

WV (Vdc)	Cap (µF)	Size (mm)	Rated Ripple current (mA rms/105°C /120Hz)
6.3	22	4x7	35
6.3	33	5x7	43
6.3	47	5x7	50
6.3	100	6.3x7	76
6.3	220	8x7	131
6.3	330	8x9	145
6.3	470	8x9	145
10	22	5x7	42
10	33	5x7	50
10	47	6.3x7	60
10	100	8x7	96
10	220	8x9	145
10	330	8x9	145
10	470	8x9	145
10	470	10x9	165
16	10	4x7	29
16	10	5x7	29
16	22	5x7	46
16	33	6.3x7	58
16	47	6.3x7	70
16	100	6.3x7	95
16	100	8x7	110
16	220	8x9	145
16	330	8x9	145
16	330	10x9	165
16	470	10x9	165

WV (Vdc)	Cap (µF)	Size (mm)	Rated Ripple current (mA rms/105°C /120Hz)
25	10	5x7	36
25	22	6.3x7	52
25	33	6.3x7	65
25	47	6.3x7	70
25	47	8x7	80
25	100	8x7	100
25	100	8x9	145
25	150	8x9	145
25	220	10x9	165
35	10	4x7	26
35	22	6.3x7	60
35	33	8x7	75
35	47	8x9	89
35	100	10x9	165
50	0.1	4x7	2
50	0.22	4x7	3
50	0.33	4x7	4
50	0.47	4x7	5
50	1	4x7	12
50	2.2	4x7	21
50	3.3	4x7	26
50	4.7	5x7	31
50	10	6.3x7	46
50	22	8x7	67
50	33	8x9	89
50	47	8x9	89
50	100	10x9	165