

## SP Series 5 mm, Non-polar 85°C



### Features

- ◆ Non-polarized with 5 mm for crossover networks of height-pitched, mean and low pitched sounds in high-fidelity sound systems.
- ◆ The series offers excellent frequency characteristics and minimal capacitance deviation with frequency.
- ◆ RoHS Compliant

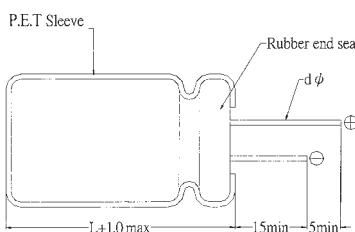
### Specifications

Item	Performance Characteristics						
Operating Temperature Range	-40 to +85°C						
Rated Voltage Range	6.3 to 50 VDC						
Capacitance Range	0.1 to 47 μF						
Capacitance Tolerance	±20% (120Hz, +20°C)						
Leakage Current(+20°C, max)	I≤0.05 CV or 10 (μA) After 2 minute, whichever is greater measured with rated working voltage applied.						
Dissipation Factor (tan δ , at 20°C , 120Hz)	Rated Voltage(VDC)	6.3	10	16	25	35	50
	D.F. (%)max.	24	20	17	17	15	15
Low Temperature Characteristics (at 120Hz)	Impedance ratio max						
	Rated Voltage(VDC)	6.3	10	16	25	35	50
	Z-25°C / Z+20°C	4	3	2	2	2	2
Endurance	Z-40°C / Z+20°C	8	6	4	4	3	3
	Test conditions						
	Duration time	:1000 Hrs					
	Ambient temperature	:+85°C					
	Applied voltage	:Rated DC working voltage to each polarity for 500Hrs					
	After test requirement at +20°C	:≤ ±20% of the initial measured value (4V : ≤±30%)					
Shelf Life	Capacitance change	:≤ 200% of the initial specified value					
	Dissipation factor	:≤ The initial specified value					
	Leakage current						
	Test conditions						
	Duration time	:1000 Hrs					
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.	Ambient temperature	:+85°C					
	Applied voltage	:None					

### Multiplier for Ripple Current vs. Frequency

Frequency(Hz) \ CAP( μ F)	50(60)	120	400	1K	10K	50K-100K
CAP≤10	0.80	1.00	1.30	1.45	1.65	1.7
10 < CAP≤100	0.80	1.00	1.23	1.36	1.48	1.53
100 < CAP≤1000	0.80	1.00	1.16	1.25	1.35	1.38

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



D φ	4	5	6.3
F	1.5±0.5	2.0±0.5	2.5±0.5
d φ	0.45		

Radial

## Case Size

WV (Vdc)	Cap (uF)	Size (mm)	Rated Ripple current (mA rms/85°C /120Hz)
6.3	10	4x5	15
6.3	22	5x5	27
6.3	33	6.3x5	35
6.3	47	6.3x5	44
10	10	4x5	16
10	10	5x5	18
10	22	6.3x5	32
10	33	6.3x5	40
16	3.3	4x5	10
16	4.7	4x5	12
16	10	5x5	23
16	22	6.3x5	36
16	33	6.3x5	47
25	3.3	5x5	13
25	4.7	5x5	15
25	10	6.3x5	25
35	2.2	4x5	9
35	3.3	5x5	14
35	4.7	5x5	16
35	10	6.3x5	28
50	0.1	4x5	1
50	0.22	4x5	2
50	0.33	4x5	3
50	0.47	4x5	4
50	1	4x5	8
50	2.2	5x5	13
50	3.3	5x5	15
50	4.7	6.3x5	18