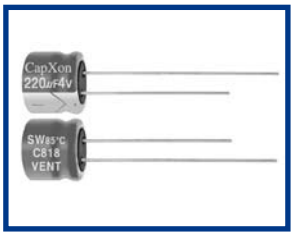
# SW Series 5mm 85℃




## Features

- ◆ Design for audio equipment.
- ◆ For detail specifications, please refer to Engineering Bulletin NO.E152
- ◆ RoHS Compliant

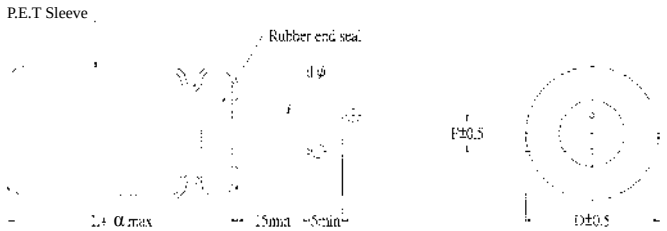
## Specifications

| Item | Performance Characteristics |
|---|---|
| Operating Temperature Range | -40~+85℃ |
| Rated Voltage Range | 4~50 VDC |
| Capacitance Range | 0.1 to 470 μF |
| Capacitance Tolerance | ±20%(120Hz,+20℃) |
| Leakage Current (+20℃,max.) | I=0.01 CV or 3 (μA) (After 2 minute with rated working voltage applied.) |
| Dissipation Factor (tan δ ，at 20℃，120Hz) | Working Voltage(VDC): 4 / 6.3 / 10 / 16 / 25 / 35 / 50<br>D.F.(%)max.: 35 / 24 / 20 / 16 / 14 / 12 / 10 |
| Low Temperature Characteristics (at 120Hz) | Impedance ratio max<br>Working voltage(VDC): 4 / 6.3 / 10 / 16 / 25 / 35 / 50<br>Z-25℃ / Z+20℃: 7 / 4 / 3 / 2 / 2 / 2 / 2<br>Z-40℃ / Z+20℃: 15 / 8 / 6 / 4 / 4 / 3 / 3 |
| Load Life | Test condition<br>Duration time :1000 Hrs<br>Ambient temperature :+85℃<br>Applied voltage :Rated DC working voltage<br>After test requirement at +20℃<br>Capacitance change : ≦±20% of the initial measured value<br>Dissipation factor : ≦200% of the initial specified value<br>Leakage current : ≦The initial specified value |
| Shelf Life | Test condition<br>Duration time :1000 Hrs<br>Ambient temperature :+85℃<br>Applied voltage :None<br>After test requirement at +20℃ :Same limits as Load life.<br>Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes. |

## Multiplier for Ripple Current vs. Frequency

| CAP(μF)＼Frequency(Hz) | 50 | 120 | 300 | 1K | 10K |
|---|---|---|---|---|---|
| Multiplier | 0.70 | 1.00 | 1.17 | 1.36 | 1.50 |

## Diagram of Dimension:(unit:mm)




| Dφ | 4 | 5 | 6.3 | 8 |
|---|---|---|---|---|
| F | 1.5 | 2.0 | 2.5 | 3.5 |
| dφ | 0.45 | | | 0.50 |

## Case Size

φDxL(mm)

| WV(SV) / Cap(μF) | 4 (5) | | 6.3 (8) | | 10 (13) | | 16 (20) | | 25 (32) | | 35 (44) | | 50 (63) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple |
| 0.1 | | | | | | | | | | | | | 4×5 | 1.2 |
| 0.22 | | | | | | | | | | | | | 4×5 | 2.3 |
| 0.33 | | | | | | | | | | | | | 4×5 | 3.0 |
| 0.47 | | | | | | | | | | | | | 4×5 | 3.9 |
| 1 | | | | | | | | | | | | | 4×5 | 7.3 |
| 2.2 | | | | | | | | | | | | | 4×5 | 11 |
| 3.3 | | | | | | | | | | | 4×5 | 13 | 4×5 | 15 |
| 4.7 | | | | | | | | | 4×5 | 15 | 4×5 | 18 | 5×5 | 20 |
| 10 | | | | | | | 4×5 | 21 | 5×5 | 27 | 5×5 | 29 | 6.3×5 | 31 |
| 22 | | | 4×5 | 26 | 5×5 | 33 | 5×5 | 36 | 6.3×5 | 43 | 6.3×5 | 46 | 8×5 | 52 |
| 33 | 4×5 | 30 | 5×5 | 37 | 5×5 | 40 | 6.3×5 | 47 | 6.3×5 | 52 | 8×5 | 62 | 8×5 | 70 |
| 47 | 4×5 | 33 | 5×5 | 42 | 6.3×5 | 49 | 6.3×5 | 58 | 8×5 | 70 | 8×5 | 81 | | |
| 100 | 5×5 | 54 | 6.3×5 | 67 | 8×5 | 80 | 8×5 | 92 | 8×5 | 109 | | | | |
| 220 | 6.3×5 | 87 | 8×5 | 112 | 8×5 | 136 | | | | | | | | |
| 330 | 8×5 | 143 | 8×5 | 170 | | | | | | | | | | |
| 470 | 8×5 | 185 | | | | | | | | | | | | |

Ripple Current ( mA, rms ) at 85℃ 120Hz