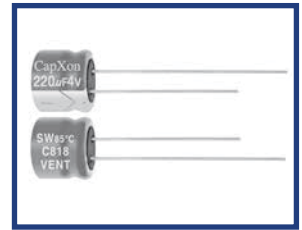


SW Series 5mm 85°C

Features

- ◆ Design for audio equipment.
- ◆ RoHS Compliant



Specifications

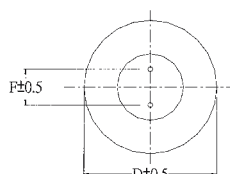
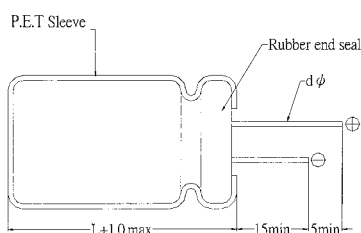
| Item | Performance Characteristics | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|----------------------|-----|-----|----|----|----|----|----|-----------------|----|----|----|----|----|----|----|-----------------|----|---|---|---|---|---|---|
| Operating Temperature Range | -40~+85°C | | | | | | | | | | | | | | | | | | | | | | | | |
| Rated Voltage Range | 4~50 VDC | | | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Range | 0.1 to 470 µF | | | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance | ±20%(120Hz,+20°C) | | | | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current (+20°C,max.) | I=0.01 CV or 3 (µA) (After 2 minute with rated working voltage applied.) | | | | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor (tan δ , at 20°C , 120Hz) | <table border="1"> <tr> <td>Working Voltage(VDC)</td> <td>4</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>35</td> <td>24</td> <td>20</td> <td>16</td> <td>14</td> <td>12</td> <td>10</td> </tr> </table> | Working Voltage(VDC) | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | D.F.(%)max. | 35 | 24 | 20 | 16 | 14 | 12 | 10 | | | | | | | | |
| | Working Voltage(VDC) | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | | | |
| D.F.(%)max. | 35 | 24 | 20 | 16 | 14 | 12 | 10 | | | | | | | | | | | | | | | | | | |
| Low Temperature Characteristics (at 120Hz) | Impedance ratio max | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <tr> <td>Working voltage(VDC)</td> <td>4</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>7</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>15</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> </tr> </table> | Working voltage(VDC) | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | Z-25°C / Z+20°C | 7 | 4 | 3 | 2 | 2 | 2 | 2 | Z-40°C / Z+20°C | 15 | 8 | 6 | 4 | 4 | 3 | 3 |
| | Working voltage(VDC) | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | | | |
| Z-25°C / Z+20°C | 7 | 4 | 3 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | |
| Z-40°C / Z+20°C | 15 | 8 | 6 | 4 | 4 | 3 | 3 | | | | | | | | | | | | | | | | | | |
| Endurance | Test condition Duration time :1000 Hrs Ambient temperature :+85°C Applied voltage :Rated DC working voltage After test requirement at +20°C Capacitance change : ≤ ±20% of the initial measured value Dissipation factor : ≤ 200% of the initial specified value Leakage current : ≤ The initial specified value | | | | | | | | | | | | | | | | | | | | | | | | |
| Shelf Life | Test condition Duration time :1000 Hrs Ambient temperature :+85°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. | | | | | | | | | | | | | | | | | | | | | | | | |

For Audio Equipment

Multiplier for Ripple Current vs. Frequency

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

Diagram of Dimension:(unit:mm)



| D φ | 4 | 5 | 6.3 | 8 |
|-----|------|-----|-----|------|
| F | 1.5 | 2.0 | 2.5 | 3.5 |
| d φ | 0.45 | | | 0.50 |

Case Size

φ D×L(mm)

| Cap(μF) | WV | 4 | | 6.3 | | 10 | | 16 | | 25 | | 35 | | 50 | |
|---------|----|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|
| | | 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°C 120Hz