

SS 105℃ Series

Features

- Mini-size with 7mm Height
- Applicable Standard

 JIS C 5102 & JIS C 5141



■ Rated Working Voltage Range & Operation Temperature Range

4 to 50 v DC/-40 to +105°C

■This series is compliant with the requirement of RoHS and widely used for electronic products, such as VCD/DVD's, Car HiFi, Adapter, Electronic Instruments, Electronic Medical Apparatus, etc.

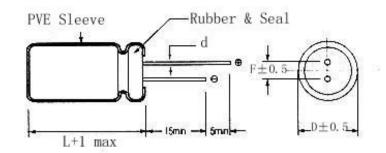
■ Specifications

| Item | Performance Characteristics | | | | | | |
|-----------------------------|---|------|------|------|------|--|--|
| Rated Working Voltage Range | 4 to 50v DC | | | | | | |
| Operating Temperature Range | -40 to +105°C | | | | | | |
| Nominal Capacitance Range | 0.1 to 470uF | | | | | | |
| Capacitance Tolerance | ±20%(120Hz, +20°C) | | | | | | |
| Leakage Current | $I_L \le 0.01 CV$ or $3(\mu A)$ Whichever is bigger measured after 1 minute application of rated working voltage at $+20 ^{\circ} \! \text{C}$ | | | | | | |
| | Working Voltage (v) | 4 | 6.3 | 10 | 16 | | |
| | tg δ (max.) | 0.35 | 0.24 | 0.20 | 0.16 | | |
| tg δ (120Hz,+20℃) | Working Voltage (v) | 25 | 35 | 50 | | | |
| | tg δ (max.) | 0.14 | 0.12 | 0.10 | | | |

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| Frequency Coefficient of Rated | | | | | | | | |
|--------------------------------|--|-------|-------|------|-------|--|--|--|
| Ripple Current | Frequency 60Hz | 120Hz | 300Hz | 1KHz | 10KHz | | | |
| | Coefficient 0.70 | 1.00 | 1.17 | 1.36 | 1.50 | | | |
| | Impedance radio max. at 120Hz | | | | | | | |
| | Working Voltage (v) | 4 | 6.3 | 10 | 16 | | | |
| Stability at Low Temperature | -25°C/+20°C | 7 | 4 | 3 | 2 | | | |
| | -40°C/+20°C | 15 | 8 | 6 | 4 | | | |
| | Working Voltage (v) | 25 | 35 | 50 | | | | |
| | -25°C/+20°C | 2 | 2 | 2 | | | | |
| | -40°C/+20°C | 4 | 3 | 3 | | | | |
| High Temperature Loading | Test conditions: Duration: 3000 hours Ambient temperature: $+105^{\circ}$ C Applied: DC voltage with maximum permissible ripple current should be equal to rated working voltage. Pos test requirement at $+20^{\circ}$ C Leakage current: \leq Initial specified value. Capacitance change: $\leq \pm 20$ of initial measured value. tg δ : \leq 200% of initial measured value. | | | | | | | |
| Shelf Life | Test conditions: Duration: 3000 hours Ambient temperature: $+105^{\circ}$ C Applied: (None) Post test requirement at $+20^{\circ}$ C Leakage current: \leq Initial specified value. Capacitance change: \leq \pm 20 of initial measured value. tg δ : \leq 200% of initial measured value. | | | | | | | |

■ Diagram of Dimension (Unit: mm)



| ФД | 3 | 4 | 5 | 6 | 8 | |
|----|--------------|---------------|--------------|-------------|-------------|--|
| F | 1.0 ± 0.3 | 1.5 ± 0.5 | 2.0 ± 0.5 | 2.5 ± 0.5 | 3.5 ± 0.5 | |
| фd | 0. 4 | 0. 45 | 0. 45 | 0. 45 | 0. 5 | |

■ Dimensions (D×L mm)

| μ F WV(SV) | 4 | 6. 3 | 10 | 16 | 25 | 35 | 50 |
|------------|------------|------------|------------|------------|------------|------------|------|
| μF | (5) | (8) | (13) | (20) | (32) | (44) | (63) |
| 0.1 | | | | | | | 4×7 |
| 0. 22 | | | | | | | 4×7 |
| 0.33 | | | | | | | 4×7 |
| 0.47 | | | | | | | 4×7 |
| 1.0 | | | | | | | 4×7 |
| 2.2 | | | | | | | 4×7 |
| 3. 3 | | | | | | | 4×7 |
| 4. 7 | | | | | | 4×7 | 4×7 |
| 10 | | | | 4×7 | 4×7 | 4×7 | 5×7 |
| 22 | | 4×7 | 4×7 | 4×7 | 4×7 | 5×7 | 5×7 |
| 33 | 4×7 | 4×7 | 4×7 | 5×7 | 5×7 | 6×7 | 6×7 |
| 47 | 4×7 | 4×7 | 4×7 | 5×7 | 6×7 | 6×7 | |
| 100 | 4×7 | 5×7 | 5×7 | 6×7 | 8×7 | 8×9 | |
| 220 | 5×7 | 5×7 | 6×7 | 6×7 | 8×9 | | |
| 330 | 5×7 | 5×7 | 6×7 | 8×7 | | | |
| 470 | 6×7 | 6×7 | 8×7 | 8×9 | | | |

^{*} The sizes of e-cap. will be changed as a result of the raw materials being continuously developed and improved. The sizes of e-cap. are subject to change without notice, and so the sizes are based on our offering samples.

■ Maximum Ripple Current

At 105°C/120Hz (Unit: mA)

| ν μF | 4 | 6. 3 | 10 | 16 | 25 | 35 | 50 |
|---------|---|------|----|----|----|----|-----|
| 0.1 | | | | | | | 1.0 |
| 0.22 | | | | | | | 2.3 |
| 0.33 | | | | | | | 3.5 |
| 0.47 | | | | | | | 5.0 |
| 1.0 | | | | | | | 10 |
| 2.2 | | | | | | | 19 |
| 3.3 | | | | | | | 24 |
| 4.7 | | | | | | 24 | 28 |

| ν μF | 4 | 6. 3 | 10 | 16 | 25 | 35 | 50 |
|---------|-----|------|-----|-----|-----|----|----|
| 10 | | | | 28 | 28 | 31 | 38 |
| 22 | | 34 | 35 | 44 | 49 | 52 | 58 |
| 33 | 33 | 42 | 43 | 57 | 62 | 65 | 75 |
| 47 | 39 | 50 | 59 | 68 | 71 | 85 | |
| 100 | 65 | 77 | 87 | 107 | 115 | | |
| 220 | 110 | 130 | 145 | 150 | | | |
| 330 | 165 | 180 | | | | | |
| 470 | 240 | | | | | · | · |