# SZV SERIES

## 105℃ Low Impedance, Lead Free Reflow Soldering.

## ◆FEATURES

- Load Life : 105℃ 1000 hours.
- Lead free reflow soldering is available.
- Available for high density mounting.
- Low impedance at 100kHz with selected materials.
- RoHS compliance.

## ◆SPECIFICATIONS

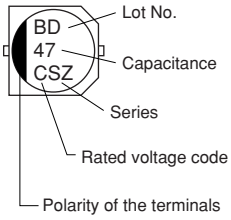
| Items | Characteristics |
|---|---|
| Category Temperature Range | −55～+105℃ |
| Rated Voltage Range | 6.3～35V.DC |
| Capacitance Tolerance | ±20%（20℃，120Hz） |
| Leakage Current(MAX) | I=0.01CV or 3 μA whichever is greater. (After 2 minutes application of rated voltage)<br>I=Leakage Current(μA) C=Rated Capacitance(μF) V=Rated Voltage(V) |
| Dissipation Factor(MAX) (tan δ) | Rated Voltage (V): 6.3 / 10 / 16 / 25 / 35<br>tan δ: 0.26 / 0.19 / 0.16 / 0.14 / 0.12<br>（20℃，120Hz） |
| Endurance | After applying rated voltage with rated ripple current for 1000 hrs at 105℃, the capacitors shall meet the following requirements.<br>Capacitance Change: Within ±25% of the initial value.<br>Dissipation Factor: Not more than 200% of the specified value.<br>Leakage Current: Not more than the specified value. |
| Low Temperature Stability Impedance Ratio(MAX) | Rated Voltage (V): 6.3 / 10 / 16 / 25 / 35<br>Z(−25℃)/Z(20℃): 2 / 2 / 2 / 2 / 2<br>Z(−55℃)/Z(20℃): 5 / 4 / 4 / 3 / 3<br>（120Hz） |

## ◆MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

| Frequency (Hz) | | 120 | 1k | 10k | 100k≦ |
|---|---|---|---|---|---|
| Coefficient | 1 μF | 0.30 | 0.60 | 0.80 | 1.00 |
| | 2.2～4.7 μF | 0.42 | 0.60 | 0.80 | 1.00 |
| | 10～33 μF | 0.55 | 0.75 | 0.90 | 1.00 |
| | 47～100 μF | 0.70 | 0.85 | 0.95 | 1.00 |

## ◆MARKING



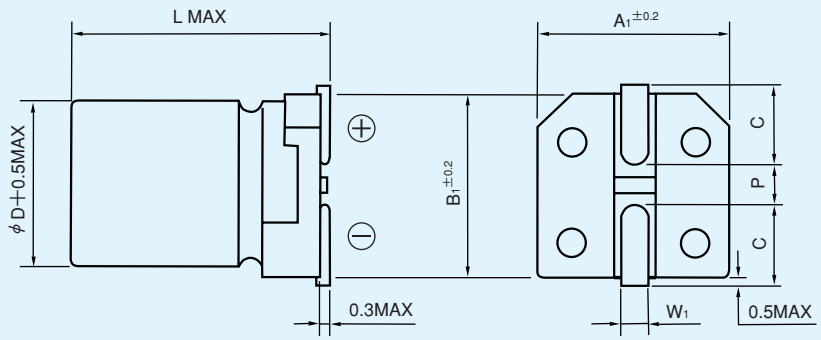

| Rated Voltage (V) | 6.3 | 10 | 16 | 25 | 35 |
|---|---|---|---|---|---|
| Rated Voltage code | j | A | C | E | V |

## ◆PART NUMBER

□□□ Rated Voltage / SZV Series / □□□□□ Rated Capacitance / □ Capacitance Tolerance / □□□ Option / D×L Case Size

## ◆DIMENSIONS

(mm)




| φD | L | A1 | B1 | C | W1 | P |
|---|---|---|---|---|---|---|
| 4 | 5.5 | 4.3 | 4.3 | 1.8 | 0.5～0.8 | 1.0 |
| 5 | 5.5 | 5.3 | 5.3 | 2.2 | 0.5～0.8 | 1.3 |
| 6.3 | 5.5 | 6.6 | 6.6 | 2.7 | 0.5～0.8 | 1.8 |

## ◆STANDARD SIZE

Size φD(mm), Ripple Current (mA r.m.s./105℃, 100kHz), Impedance(Ω MAX/20℃, 100kHz)

| WV (V.DC) / Cap(μF) | 6.3 (0J) | | | 10 (1A) | | | 16 (1C) | | | 25 (1E) | | | 35 (1V) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Size | Ripple | Z | Size | Ripple | Z | Size | Ripple | Z | Size | Ripple | Z | Size | Ripple | Z |
| 1 | | | | | | | | | | | | | 4 | 60 | 3.9 |
| 2.2 | | | | | | | | | | | | | 4 | 60 | 3.7 |
| 3.3 | | | | | | | | | | | | | 4 | 60 | 3.6 |
| 4.7 | | | | | | | | | | 4 | 60 | 3.6 | 4 | 60 | 3.6 |
| 10 | | | | | | | 4 | 60 | 3.0 | | | | 5 | 95 | 2.0 |
| 22 | 4 | 60 | 3.0 | | | | 5 | 95 | 1.8 | | | | 6.3 | 140 | 1.0 |
| 33 | | | | 5 | 95 | 1.8 | 6.3 | 140 | 1.0 | 6.3 | 140 | 1.0 | | | |
| 47 | 5 | 95 | 1.8 | | | | 6.3 | 140 | 1.0 | | | | | | |
| 100 | 6.3 | 140 | 1.0 | | | | | | | | | | | | |