

# RADIAL TYPE

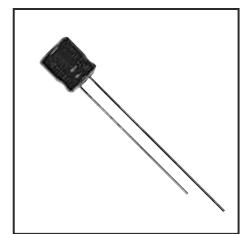
**SV**

Series

5mmL 85°C, Ultra-Miniature

JAMICON®

- For general purposes series with 5mm height

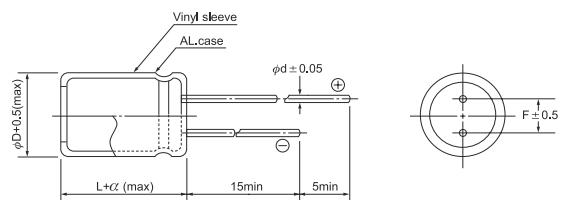


## SPECIFICATION

| Item   | Characteristic   |   |      |      |      |      |  |      |
|--|--|---|------|------|------|------|--|------|
| Operation Temperature Range                          | -40 ~ +85°C  |   |      |      |      |      |  |      |
| Rated Working Voltage                                | 4 ~ 50VDC  |   |      |      |      |      |  |      |
| Capacitance Tolerance (120Hz 20°C)                   | $\pm 20\%$ (M)   |   |      |      |      |      |  |      |
| Leakage Current<br>(20°C)                            | $I \leq 0.01CV$ or $3 (\mu A)$   |   |      |      |      |      | $I$ : Leakage Current<br>( $\mu A$ )   |      |
|  | *Whichever is greater after 2 minutes  |   |      |      |      |      | $C$ : Rated Capacitance<br>( $\mu F$ ) |      |
| Surge Voltage<br>(20°C)                              | W.V.   | 4                                       | 6.3  | 10   | 16   | 25   | 35                                     | 50   |
|  | S.V.   | 5                                       | 8    | 13   | 20   | 32   | 44                                     | 63   |
| Dissipation Factor ( $\tan \delta$ )<br>(120Hz 20°C) | W.V.   | 4                                       | 6.3  | 10   | 16   | 25   | 35                                     | 50   |
|  | $\tan \delta$  | 0.35                                    | 0.24 | 0.20 | 0.16 | 0.14 | 0.12                                   | 0.10 |
| Low Temperature Stability                            | Impedance ratio at 120Hz   |   |      |      |      |      |  |      |
|  | Rated Voltage (V)  | 4                                       | 6.3  | 10   | 16   | 25   | 35                                     | 50   |
|  | -25°C / +20°C  | 7                                       | 4    | 3    | 2    | 2    | 2                                      | 2    |
|  | -40°C / +20°C  | 15                                      | 8    | 6    | 4    | 4    | 3                                      | 3    |
| Load Life  | After 1000 hours application of W.V. and +85°C ripple current value, the capacitor shall meet the following limits. (DC + ripple peak voltage $\leq$ rate working voltage) |   |      |      |      |      |  |      |
|  | Capacitance Change   | $\leq \pm 20\%$ of initial value        |      |      |      |      |  |      |
|  | Dissipation Factor   | $\leq 200\%$ of initial specified value |      |      |      |      |  |      |
| Shelf Life   | Leakage current  | $\leq$ initial specified value          |      |      |      |      |  |      |
|  | At + 85°C no voltage application after 1000 hours the capacitor shall meet the limits for load life characteristics. (with voltage treatment)                              |   |      |      |      |      |  |      |

## DIMENSIONS (mm)

| $\phi D$ | 4    | 5    | 6.3  | 8    |
|----------|------|------|------|------|
| F        | 1.5  | 2.0  | 2.5  | 2.5  |
| d        | 0.45 | 0.45 | 0.45 | 0.45 |
| $\alpha$ | 1.0  | 1.0  | 1.0  | 1.0  |



## ● CASE SIZE &amp; MAX RIPPLE CURRENT

Case size : D x L (mm)  
 Max ripple current : mA(rms) 85°C 120Hz

| $\mu\text{F}$ | V(Code) | 4 (0G) |      | 6.3 (0J) |        | 10 (1A)    |         | 16 (1C)    |          | 25 (1E)    |        | 35 (1V)    |        | 50 (1H)    |        |    |
|---------------|---------|--------|------|----------|--------|------------|---------|------------|----------|------------|--------|------------|--------|------------|--------|----|
|               |         | Code   | Item | DxL      | R.C.   | DxL        | R.C.    | DxL        | R.C.     | DxL        | R.C.   | DxL        | R.C.   | DxL        | R.C.   |    |
| 0.1           | 0R1     |        |      |          |        |            |         |            |          |            |        | →          | 4x5    | 3          |        |    |
| 0.15          | R15     |        |      |          |        |            |         |            |          |            |        | →          | 4x5    | 4          |        |    |
| 0.22          | R22     |        |      |          |        |            |         |            |          |            |        | →          | 4x5    | 4          |        |    |
| 0.33          | R33     |        |      |          |        |            |         |            |          |            |        | →          | 4x5    | 5          |        |    |
| 0.47          | R47     |        |      |          |        |            |         |            |          |            |        | →          | 4x5    | 6          |        |    |
| 0.68          | R68     |        |      |          |        |            |         |            |          |            |        | →          | 4x5    | 8          |        |    |
| 1.0           | 010     |        |      |          |        |            |         |            |          |            |        | →          | 4x5    | 9          |        |    |
| 1.5           | 1R5     |        |      |          |        |            |         |            |          |            |        | →          | 4x5    | 12         |        |    |
| 2.2           | 2R2     |        |      |          |        |            |         |            |          |            | →      | 4x5        | 13     | 4x5        | 14     |    |
| 3.3           | 3R3     |        |      |          |        |            |         |            |          | →          | 4x5    | 14         | 4x5    | 16         | 4x5    | 17 |
| 4.7           | 4R7     |        |      |          |        |            |         | →          | 4x5      | 16         | 4x5    | 17         | 4x5    | 19         | 4x5    | 20 |
| 6.8           | 6R8     |        |      |          | →      | 4x5        | 17      | 4x5        | 19       | 4x5        | 21     | 5x5        | 26     | 6.3x5      | 32     |    |
| 10            | 100     |        | →    | 4x5      | 19     | 4x5        | 21      | 4x5        | 24       | 4x5        | 25     | 5x5        | 31     | 6.3x5      | 39     |    |
| 15            | 150     |        | →    | 4x5      | 24     | 4x5        | 26      | 5x5        | 33       | 5x5        | 35     | 6.3x5      | 44     | 6.3x5      | 48     |    |
| 22            | 220     | 4x5    | 24   | 4x5      | 29     | 4x5(5x5)   | 31(36)  | 5x5        | 40       | 5x5(6.3x5) | 43(49) | 6.3x5      | 55     | 6.3x5(8x5) | 60(70) |    |
| 33            | 330     | 4x5    | 29   | 4x5(5x5) | 35(40) | 4x5(5x5)   | 38(44)  | 5x5(6.3x5) | 49(55)   | 6.3x5      | 60     | 6.3x5(8x5) | 65(75) | 8x5        | 85     |    |
| 47            | 470     | 4x5    | 35   | 5x5      | 48     | 5x5(6.3x5) | 50(60)  | 6.3x5      | 65       | 6.3x5(8x5) | 70(85) | 8x5        | 90     |            |        |    |
| 68            | 680     | 5x5    | 47   | 6.3x5    | 65     | 6.3x5      | 70      | 6.3x5      | 80       | 8x5        | 100    |            |        |            |        |    |
| 100           | 101     | 6.3x5  | 65   | 6.3x5    | 80     | 6.3x5(8x5) | 90(100) | 6.3x5(8x5) | 100(110) | 8x5        | 120    |            |        |            |        |    |
| 220           | 221     | 6.3x5  | 100  | 8x5      | 140    | 8x5        | 150     |            |          |            |        |            |        |            |        |    |
| 330           | 331     | 8x5    | 140  | 8x5      | 170    |            |         |            |          |            |        |            |        |            |        |    |

All blank voltage on sleeve marking is the same voltage as " → " point to.