

# RADIAL TYPE

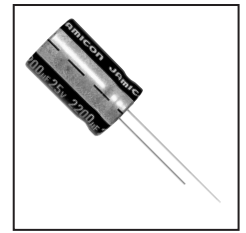
# TB

Series

Long Life, Low Impedance, High Reliability

JAMICON®

- Low impedance and long life withstanding 10000 hours load life
- Suitable for electronic ballast, adaptor and switching power



## ● SPECIFICATION

| Item   | Characteristic   |   |      |                                 |      |                                 |        |                                |      |                                 |  |                                  |
|--|--|---|------|---------------------------------|------|---------------------------------|--------|--------------------------------|------|---------------------------------|--|----------------------------------|
| Operation Temperature Range                        | -40 ~ +105°C   |   |      |                                 |      |                                 |        |                                |      |                                 |  |                                  |
| Rated Working Voltage                              | 6.3 ~ 100VDC   |   |      |                                 |      |                                 |        |                                |      |                                 |  |                                  |
| Capacitance Tolerance (120Hz 20°C)                 | ±20%(M)  |   |      |                                 |      |                                 |        |                                |      |                                 |  |                                  |
| Leakage Current<br>(20°C)                          | $I \leq 0.01CV$ or $3 \mu A$<br>*Whichever is greater after 3 minutes<br>I : Leakage Current ( $\mu A$ )<br>C : Rated Capacitance ( $\mu F$ )<br>V : Working Voltage (V) |   |      |                                 |      |                                 |        |                                |      |                                 |  |                                  |
| Surge Voltage<br>(20°C)                            | W.V.   | 6.3                                     | 10   | 16                              | 25   | 35                              | 50     | 63                             | 100  |                                 |  |                                  |
|  | S.V.   | 8                                       | 13   | 20                              | 32   | 44                              | 63     | 79                             | 125  |                                 |  |                                  |
| Dissipation Factor (tan $\delta$ )<br>(120Hz 20°C) | Add 0.02 per 1000 $\mu F$ for more than 1000 $\mu F$   |   |      |                                 |      |                                 |        |                                |      |                                 |  |                                  |
|  | W.V.   | 6.3                                     | 10   | 16                              | 25   | 35                              | 50     | 63                             | 100  |                                 |  |                                  |
|  | tan $\delta$   | 0.22                                    | 0.19 | 0.16                            | 0.14 | 0.12                            | 0.10   | 0.09                           | 0.08 |                                 |  |                                  |
| Low Temperature Stability                          | Impedance ratio at 120Hz   |   |      |                                 |      |                                 |        |                                |      |                                 |  |                                  |
|  | Rated Voltage (V)  | 6.3                                     | 10   | 16                              | 25   | 35                              | 50     | 63                             | 100  |                                 |  |                                  |
|  | -25°C / +20°C  | 4                                       | 3    | 2                               | 2    | 2                               | 2      | 2                              | 2    | 2                               |  |                                  |
|  | -40°C / +20°C  | 8                                       | 6    | 4                               | 3    | 3                               | 3      | 3                              | 3    | 3                               |  |                                  |
| Load Life  | After application of W.V. and +105°C ripple current value, the capacitor shall meet the following limits.<br>(DC + ripple peak voltage $\leq$ rate working voltage)      |   |      |                                 |      |                                 |        |                                |      |                                 |  |                                  |
|  | Rated Voltage (V)  | 6.3~10                                  |      |                                 |      |                                 | 16~100 |                                |      |                                 |  |                                  |
|  | Life Time  | $\phi D \leq 6.3mm$ 4000 hours          |      | $\phi D 8 \sim 10mm$ 6000 hours |      | $\phi D \geq 12.5mm$ 8000 hours |        | $\phi D \leq 6.3mm$ 5000 hours |      | $\phi D 8 \sim 10mm$ 7000 hours |  | $\phi D \geq 12.5mm$ 10000 hours |
|  | Capacitance Change   | $\leq \pm 25\%$ of initial value        |      |                                 |      |                                 |        |                                |      |                                 |  |                                  |
|  | Dissipation Factor   | $\leq 200\%$ of initial specified value |      |                                 |      |                                 |        |                                |      |                                 |  |                                  |
|  | Leakage current  | $\leq$ initial specified value          |      |                                 |      |                                 |        |                                |      |                                 |  |                                  |
| Shelf Life   | At +105°C, no voltage application after 1000 hours, the capacitor shall meet the limits for load life characteristics. (with voltage treatment)                          |   |      |                                 |      |                                 |        |                                |      |                                 |  |                                  |

## ● DIMENSIONS (mm)

| $\phi D$ | 5   | 6.3 | 8   | 10  | 12.5 | 16  | 18  |
|----------|-----|-----|-----|-----|------|-----|-----|
| F        | 2.0 | 2.5 | 3.5 | 5.0 | 5.0  | 7.5 | 7.5 |
| d        | 0.5 | 0.5 | 0.6 | 0.6 | 0.6  | 0.8 | 0.8 |
| $\alpha$ | 1.5 | 1.5 | 1.5 | 1.5 | 1.5  | 1.5 | 1.5 |

## ● RIPPLE CURRENT COEFFICIENTS

| Temperature(°C) | $\leq 65$ | 85   | 105  |
|-----------------|-----------|------|------|
| Multiplier      | 2.12      | 1.69 | 1.00 |

| Frequency(Hz) |                    | 120  | 1k   | 10k  | $\geq 100k$ |
|---------------|--------------------|------|------|------|-------------|
| Coefficient   | 0.47~10 $\mu F$    | 0.42 | 0.60 | 0.80 | 1.00        |
|               | 22~33 $\mu F$      | 0.55 | 0.75 | 0.90 | 1.00        |
|               | 47~330 $\mu F$     | 0.70 | 0.85 | 0.95 | 1.00        |
|               | 470~1000 $\mu F$   | 0.75 | 0.90 | 0.98 | 1.00        |
|               | 2200~15000 $\mu F$ | 0.80 | 0.95 | 1.00 | 1.00        |

