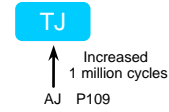


# TJ SERIES

- Special Design
- Heavy charge and discharge
- RoHS

- All-welded construction ensures reliable electrical contact
- Special design for heavy charge and discharge
- 1000000 cycles of charge and discharge (0.8 second charge 1 ms discharge)
- Applications: Electric welding machine



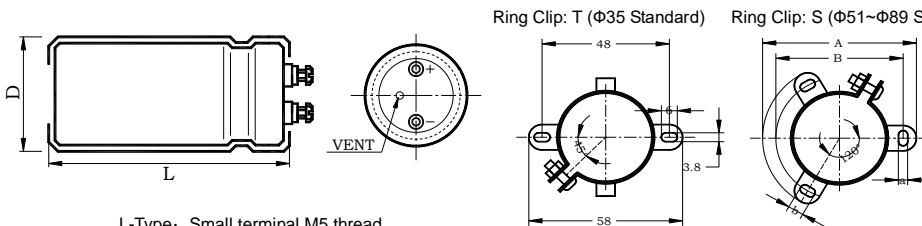
### SPECIFICATIONS

| Items                                   | Characteristics   |                    |     |     |     |      |      |  |  |
|---|---|--------------------|-----|-----|-----|------|------|--|--|
| Operating Temperature Range             | -25~+70°C   |                    |     |     |     |      |      |  |  |
| Rated Working Voltage Range             | 315~475V  |                    |     |     |     |      |      |  |  |
| Capacitance Range                       | 100~2200μ F   |                    |     |     |     |      |      |  |  |
| Capacitance Tolerance                   | -10~+50% (20°C, 120Hz)  |                    |     |     |     |      |      |  |  |
| Dissipation Factor (MAX)<br>20°C, 120Hz | <table border="1"> <tr> <td>U<sub>R</sub>(V)</td> <td>315</td> <td>450</td> <td>475</td> </tr> <tr> <td>tanδ</td> <td colspan="3">0.10</td> </tr> </table>  | U <sub>R</sub> (V) | 315 | 450 | 475 | tanδ | 0.10 |  |  |
| U <sub>R</sub> (V)                      | 315   | 450                | 475 |     |     |      |      |  |  |
| tanδ                                    | 0.10  |                    |     |     |     |      |      |  |  |
| Leakage Current (MAX)                   | I=0.03C <sub>R</sub> U <sub>R</sub> or 5mA whichever is minimum. (at 20°C, After 5 minutes application of rated voltage)<br>I=Leakage Current (μA) U <sub>R</sub> =Rated Voltage (V) C <sub>R</sub> =Rated Capacitance (μF) |                    |     |     |     |      |      |  |  |

| Heavy Charge and Discharge   |   |
|--|---|
| Life Time  | 1000000 cycles  |
| Leakage Current  | ≤200% of Specified value  |
| tanδ Change  | ≤200% of specified value  |
| Capacitance Change   | Within±20% of initial value   |
| Condition<br>Applied Voltage<br>Duration of Charge<br>Duration of Discharge<br>Applied Temperature<br>Failure Rate Level | U <sub>R</sub><br>0.8 seconds<br>Time constant (τ) = 1 ms<br>40°C<br>0% |

### Dimensions

#### Terminal Code



L-Type: Small terminal M5 thread  
 S-Type: Large terminal M6 thread

#### Ring Clip Dimensions:

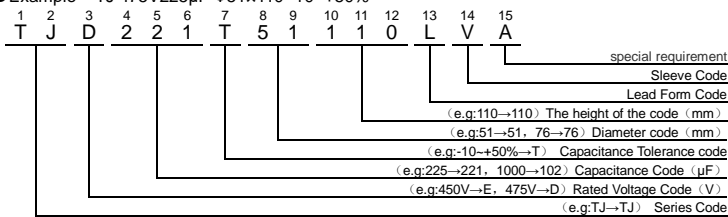
| ΦD | A     | B     | a   | b |
|----|-------|-------|-----|---|
| 51 | 73.0  | 63.5  | 4.5 | 7 |
| 64 | 85.1  | 76.2  | 4.5 | 7 |
| 76 | 98.4  | 88.9  | 4.5 | 7 |
| 89 | 111.1 | 101.6 | 4.5 | 7 |

For detailed dimension & tolerance, please refer to P90

- Please consult to us for the terminal type not displayed in content.

### PART NUMBER SYSTEM

Example TJ 475V225μF Φ51×110 -10~+50%



# TJ SERIES

◆ Standard Ratings

| WV <sub>DC</sub><br>(Surge Voltage)<br>(V) | Cap<br>( $\mu$ F) | Size<br>D×L<br>(mm) | tan $\delta$<br>20℃120Hz | Catalog Part Number | WV <sub>DC</sub><br>(Surge Voltage)<br>(V) | Cap<br>( $\mu$ F) | Size<br>D×L<br>(mm) | tan $\delta$<br>20℃120Hz | Catalog Part Number |
|--|-------------------|---------------------|--------------------------|---------------------|--|-------------------|---------------------|--------------------------|---------------------|
| 315<br>(360)                               | 330               | 35×100              | 0.10                     | TJI331T35100□VA     | 450(500)                                   | 330               | 51×100              | 0.10                     | TJE331T51100□VA     |
|  | 470               | 51×100              | 0.10                     | TJI471T51100□VA     | 100  | 35×100            | 0.10                | TJD101T35100□VA          |                     |
|  | 1000              | 64×140              | 0.10                     | TJI102T64140□VA     | 475<br>(530)                               | 225               | 51×110              | 0.10                     | TJD221T51110□VA     |
|  | 1500              | 76×120              | 0.10                     | TJI152T76120□VA     | 470  | 76×120            | 0.10                | TJD471T76120□VA          |                     |
|  | 2200              | 76×160              | 0.10                     | TJI222T76160□VA     | 1000                                       | 76×145            | 0.10                | TJD102T76145□VA          |                     |

\*□Enter the appropriate terminal code

\*Please ask for advice for other sizes.

\*Aluminum electrolytic capacitor will emit heat when ripple current is applied, the performance will deteriorate when temp. rises. the useful life will be half of original life when temp rises every 5℃. Please reduce the ripple current when using capacitor.