

# ALUMINUM ELECTROLYTIC CAPACITOR

Suntan®

FOR ENERGY LAMP

# TS13D CD11G

## FEATURES

- 105°C 3000hour



## ◆ Specifications

| ITEMS                       |  | PERFORMANCE CHARACTERISTICS                                       |      |      |  |      |  |
|-----------------------------|--|---|------|------|--|------|--|
| Rated Voltage               | DC160~450V   |   |      |      |  |      |  |
| Capacitance                 | ±20%   |   |      |      |  |      |  |
| Dissipation Factor          | Rated Voltage (V)  | 200   | 250  | 350  | 400  | 450  |  |
|                             | Tan δ  | 0.06  | 0.06 | 0.08 | 0.08                                       | 0.12 |  |
| Leakage Current             | Rated Voltage (V)  | 200~250V  |      |      | 350~450V                                   |      |  |
|                             | Leakage Current  | 0.01CV or 3 μA whichever is greater<br>(at 20°C, after 2 minutes) |      |      | 0.06CV+10 μA<br>(at 20°C, after 2 minutes) |      |  |
| Load Life (+130°C or 105°C) | After application of the voltage plus the rated ripple current at 105°C, the capacitors shall meet the below requirement                             |   |      |      |  |      |  |
|                             | Time   | 3000hours   |      |      |  |      |  |
|                             | Leakage Current  | Not more than the specified value.                                |      |      |  |      |  |
|                             | Capacitance Change   | Within±30% of the initial value                                   |      |      |  |      |  |
| Shelf Life (105°C)          | After leaving capacitors under no load at 105°C for 1000 hours, capacitors shall meet the specified value for load life characteristics listed above |   |      |      |  |      |  |
|                             | Dissipation Factor   | Not more than 300% of the specified value.                        |      |      |  |      |  |

## ◆ Dimensions

mm

| ΦD | 6   | 8   | 10  | 12  | 16  | 18  |
|----|-----|-----|-----|-----|-----|-----|
| Φd | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 0.8 |
| F  | 2.5 | 3.5 | 5.0 | 5.0 | 7.5 | 7.5 |

| a Max | D<18      |           | D=18   |        |
|-------|-----------|-----------|--------|--------|
|       | +1.5 -1.0 | +1.5 -1.0 | L<35.5 | L>35.5 |
| β Max | D<18      |           | 0.5    |        |
|       | D≥18      |           | 1.0    |        |

## ◆ Multiplier for ripple current

Frequency coefficient factor for ripple current

| Frequency | 120Hz | 1KHz | 10KHz | 100KHz |
|-----------|-------|------|-------|--------|
| Cap (uF)  |       |      |       |        |
| 2.2-47    | 0.85  | 0.9  | 1     | 1.1    |
| 68 - 330  | 0.9   | 0.95 | 1     | 1.1    |

## ◆ Case Size DxL (mm) Ripple Current (mA, 105°C/120Hz)

| Cap/ μF | 160    |        | 200    |        | 250    |        | 350   |        | 400   |        | 450   |        |
|---------|--------|--------|--------|--------|--------|--------|-------|--------|-------|--------|-------|--------|
|         | Size   | Ripple | Size   | Ripple | Size   | Ripple | Size  | Ripple | Size  | Ripple | Size  | Ripple |
| 1.0     | 6.3x11 | 30     | 6.3x11 | 30     | 6.3x11 | 30     | 8x12  | 35     | 8x12  | 35     | 8x12  | 35     |
| 2.2     | 6.3x11 | 35     | 6.3x11 | 35     | 8x12   | 35     | 8x16  | 40     | 8x16  | 40     | 8x16  | 45     |
| 3.3     | 8x12   | 40     | 8x12   | 40     | 10x14  | 40     | 10x17 | 50     | 10x17 | 50     | 10x17 | 50     |
| 4.7     | 8x12   | 50     | 8x12   | 50     | 8x12   | 50     | 10x17 | 60     | 10x20 | 60     | 13x20 | 60     |
| 6.8     | 8x16   | 65     | 8x16   | 65     | 8x16   | 70     | 10x17 | 80     | 10x20 | 80     | 10x20 | 60     |
| 10      | 8x16   | 85     | 10x17  | 95     | 10x20  | 100    | 13x20 | 110    | 13x20 | 110    | 13x20 | 120    |
| 22      | 10x20  | 150    | 10x20  | 170    | 13x20  | 230    | 13x25 | 230    | 16x25 | 160    | 16x25 | 210    |
| 33      | 13x20  | 190    | 13x20  | 230    | 13x25  | 240    | 16x25 | 190    | 16x30 | 240    | 16x30 | 260    |
| 47      | 13x25  | 230    | 13x25  | 250    | 16x25  | 270    | 16x30 | 250    | 16x35 | 320    | 18x31 | 330    |
| 68      | 13x25  | 270    | 16x25  | 290    | 16x30  | 340    | 16x35 | 320    | 18x35 | 380    | --    | --     |
| 100     | 16x25  | 380    | 16x30  | 420    | 18x30  | 450    | --    | --     | --    | --     | --    | --     |
| 150     | 18x30  | 450    | 18x35  | 500    | --     | --     | --    | --     | --    | --     | --    | --     |
| 220     | 18x35  | 550    | 18x40  | 650    | --     | --     | --    | --     | --    | --     | --    | --     |

Note: Specification are subject to change without notice. For more detail and update, please visit our website.