# NG [ For Low Voltage, Large Capacity ]

Low Leakage Current, Small Size and High Ripple Current

# Screw Type Aluminum Electrolytic Capacitors

## ELECTRICAL CHARACTERISTICS

| | |
|---|---|
| Operating Temperature Range | -40 to +85°C |
| Rated Voltage Range | 10 ~ 100V |
| Rated Capacitance Range | 2200 ~ 1000000μF |
| Capacitance Tolerance | ±20% (120Hz, 20°C) |
| Leakage Current | D = 35mm I ≤ 0.02CV (μA) or 4mA<br>(at 20°C, after 2 minutes, whichever is smaller.)<br>D ≥ 51mm I ≤ 0.03CV (μA) or 6mA<br>(at 20°C, after 2 minutes, whichever is smaller.) |
| Endurance | After the rated voltage has been applied at 85°C for 2000 hours and then has resumed its original condition for 16 hours.<br>(a) Capacitance Change: ±15% Initial Measured Value<br>(b) Dissipation Factor: ≤ 2 Times Initial Specified Value<br>(c) Leakage Current: ≤ Initial Specified Value |
| Shelf Life | After having been stored for 1000 hours at 85°C and then has resumed its original condition for 16 hours.<br>(a) Capacitance Change: ±15% Initial Measured Value<br>(b) Dissipation Factor: ≤ 2 Times Initial Specified Value<br>(c) Leakage Current: ≤ Initial Specified Value |

## DESCRIPTION

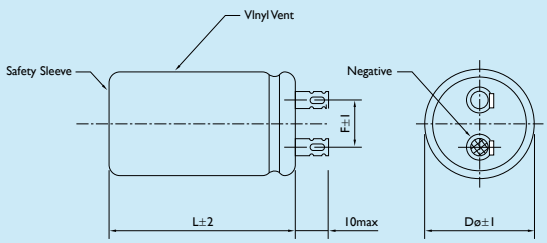
Endurance : 85°C 2000 Hours

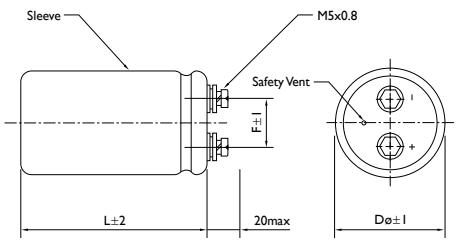
Low Voltage (≤ 100V), Large Capacitance, Lug or Screw Type, Low Dissipation Factor

## DIAGRAM OF DIMENSIONS

Unit: mm

| Dø | F | L |
|---|---|---|
| 35 | 12 | 50, 60, 80, 100, 120 |
| 51 | 22 | 80, 100, 120 |
| 63.5 | 28 | 100, 120, 140 |
| 76 | 32 | 100, 120, 140 |
| 89 | 32 | 140 |



## CASE SIZE & PERMISSIBLE RIPPLE CURRENT OF STANDARD PRODUCTS

D x L: mm

| CAP. (μF) | RATED VOLTAGE W V (SURGE VOLTAGE W V) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 6.3 (8) | | | 10 (13) | | | 16 (20) | | |
| | SIZE | RIPPLE CURRENT | DISSIPATION FACTOR | SIZE | RIPPLE CURRENT | DISSIPATION FACTOR | SIZE | RIPPLE CURRENT | DISSIPATION FACTOR |
| 22000 | | | | | | | 35 x 50 | 4.50 | 0.50 |
| 33000 | | | | 35 x 50 | 4.20 | 0.75 | 35 x 80 | 6.40 | 0.50 |
| 47000 | | | | 35 x 80 | 6.20 | 0.75 | 35 x 100 | 8.20 | 0.50 |
| 68000 | | | | 35 x 100 | 8.00 | 0.75 | 35 x 120 | 10.50 | 0.50 |
| 100000 | | | | 35 x 120 | 10.40 | 0.75 | 51 x 80 | 10.70 | 0.75 |
| 150000 | | | | 51 x 80 | 11.30 | 1.00 | 51 x 120 | 14.80 | 0.75 |
| 220000 | | | | 51 x 120 | 15.50 | 1.00 | 63.5 x 120 | 17.00 | 1.00 |
| 330000 | | | | 63.5 x 120 | 17.00 | 1.50 | 76 x 120 | 14.80 | 1.50 |
| 470000 | | | | 76 x 120 | 21.90 | 2.00 | | | |
| 1000000 | 63.5 x 140 | 40.00 | 1.50 | 63.5 x 140 | 35.00 | 1.50 | 76 x 140 | 30.00 | 1.50 |

Note: 1. Ripple Current: (A/rms) 85°C, 120Hz
2. Dissipation Factor: 120Hz / 20°C

## CASE SIZE & PERMISSIBLE RIPPLE CURRENT OF STANDARD PRODUCTS

D x L: mm

| CAP. (μF) | RATED VOLTAGE W V (SURGE VOLTAGE W V) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 25 (32) SIZE | RIPPLE CURRENT | DISSIPATION FACTOR | 35 (44) SIZE | RIPPLE CURRENT | DISSIPATION FACTOR | 50 (63) SIZE | RIPPLE CURRENT | DISSIPATION FACTOR |
| 6800 | | | | | | | 35 x 50 | 3.60 | 0.25 |
| 10000 | | | | 35 x 50 | 4.30 | 0.25 | 35 x 60 | 4.70 | 0.25 |
| 15000 | 35 x 50 | 4.40 | 0.35 | 35 x 80 | 6.20 | 0.25 | 35 x 80 | 6.20 | 0.25 |
| 22000 | 35 x 80 | 6.30 | 0.35 | 35 x 100 | 8.00 | 0.25 | 51 x 80 | 7.30 | 0.35 |
| 33000 | 35 x 100 | 8.30 | 0.35 | 51 x 80 | 9.00 | 0.35 | 51 x 80 | 9.00 | 0.35 |
| 47000 | 51 x 80 | 8.90 | 0.50 | 51 x 100 | 11.50 | 0.35 | 51 x 100 | 11.50 | 0.35 |
| 68000 | 51 x 80 | 10.80 | 0.50 | 51 x 120 | 14.60 | 0.35 | 63.5 x 100 | 12.70 | 0.50 |
| 100000 | 51 x 120 | 14.80 | 0.50 | 63.5 x 100 | 15.40 | 0.50 | 76 x 100 | 16.60 | 0.50 |
| 150000 | 63.5 x 120 | 16.20 | 0.75 | 76 x 120 | 21.40 | 0.50 | | | |
| 220000 | 76 x 120 | 21.20 | 0.75 | | | | | | |
| 1000000 | 89 x 140 | 28.00 | 0.75 | | | | | | |

Note: 1. Ripple Current: (A/rms) 85°C, 120Hz
2. Dissipation Factor: 120Hz / 20°C

## CASE SIZE & PERMISSIBLE RIPPLE CURRENT OF STANDARD PRODUCTS

D x L: mm

| CAP. (μF) | RATED VOLTAGE WV (SURGE VOLTAGE WV) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 63 (79) | | | 80 (100) | | | 100 (125) | | |
| | SIZE | RIPPLE CURRENT | DISSIPATION FACTOR | SIZE | RIPPLE CURRENT | DISSIPATION FACTOR | SIZE | RIPPLE CURRENT | DISSIPATION FACTOR |
| 2200 | | | | | | | 35 x 50 | 2.10 | 0.25 |
| 3300 | | | | | | | 35 x 80 | 3.00 | 0.25 |
| 4700 | 35 x 50 | 3.00 | 0.25 | 35 x 80 | 3.40 | 0.25 | 35 x 100 | 3.90 | 0.25 |
| 6800 | 35 x 60 | 3.90 | 0.25 | 35 x 80 | 4.30 | 0.25 | 35 x 120 | 4.90 | 0.25 |
| 10000 | 35 x 80 | 5.10 | 0.25 | 35 x 100 | 4.20 | 0.25 | 51 x 80 | 6.00 | 0.25 |
| | | | | 51 x 80 | 6.00 | 0.30 | | | |
| 15000 | 51 x 80 | 6.70 | 0.35 | 51 x 100 | 7.00 | 0.30 | 51 x 120 | 8.30 | 0.25 |
| 22000 | 51 x 80 | 7.40 | 0.35 | 63.5 x 100 | 7.80 | 0.35 | 63.5 x 120 | 9.10 | 0.35 |
| 33000 | 51 x 100 | 9.70 | 0.35 | 76 x 100 | 10.50 | 0.40 | 76 x 120 | 12.00 | 0.35 |
| 47000 | 63.5 x 100 | 10.50 | 0.50 | 76 x 120 | 13.50 | 0.40 | | | |
| 100000 | 63.5 x 120 | 13.4 | 0.50 | | | | | | |

Note: 1. Ripple Current: (A/rms) 85°C, 120Hz
2. Dissipation Factor: 120Hz / 20°C