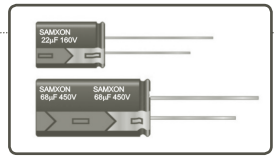
## FEATURES

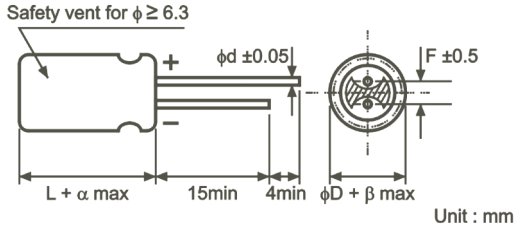


- High ripple current at high frequency, load life of 8,000~10,000 hours at 105˚C.
- For electronic ballast, power supply input circuit.

## SPECIFICATIONS

| Item | Performance Characteristics | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Operating Temperature Range | -40 to +105˚C | | | | -25 to +105˚C | | | |
| Rated Working Voltage Range | 160 to 400V | | | | 450 to 500V | | | |
| Nominal Capacitance Range | 1 to 330μF | | | | | | | |
| Capacitance Tolerance | ±20% at 120Hz, +20˚C | | | | | | | |
| Leakage Current | I ≤0.02CV +25 (μA)<br>after 2 minutes application of rated working voltage at +20˚C | | | | | | | |
| tan δ (120Hz, +20˚C) | Working Voltage (V) | 160 | 200 | 250 | 350 | 400 | 450 | 500 |
| | tan δ (max.) | 0.15 | 0.15 | 0.15 | 0.20 | 0.20 | 0.20 | 0.20 |
| Low Temperature Characteristics | Impedance ratio max. at 120Hz | | | | | | | |
| | Rated Voltage (V) | 160 | 200 | 250 | 350 | 400 | 450 | 500 |
| | Z-25˚C / Z+20˚C | 3 | 3 | 3 | 5 | 5 | 6 | 12 |
| High Temperature Loading | Test time : ΦD / Load life: 8~10 / 8,000h; 12.5~18 / 10,000h<br>Test temperature : +105˚C<br>Test conditions : Rated DC working voltage with rated ripple current | | | | Post test requirements at +20˚C<br>Leakage current : ≤Initial specified value<br>Cap. change : within ±20% of the initial measured value<br>tan δ : ≤200% of the initial specified value | | | |
| Shelf Life | At +105˚C no voltage applied after 1,000 hours and then being stabilized at +20˚C the capacitors shall meet the following limits<br>Leakage current : ≤Initial specified value<br>Cap. change : within ±20% of the initial measured value<br>tan δ : ≤200% of the initial specified value | | | | | | | |
| Industrial Standard | JIS C - 5101-4 (IEC 60384-4) | | | | | | | |

## CASE SIZE TABLE




| ΦD | 8 (L <20) | 8 (L ≥20) | 10 | 12.5 | 16 | 18 |
|---|---|---|---|---|---|---|
| F | 3.5 | 3.5 | 5.0 | 5.0 | 7.5 | 7.5 |
| Φd | 0.5 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 |
| α | (L <20) 1.5 | | | (L ≥20) 2.0 | | |
| β | (D <20) 0.5 | | | (D ≥20) 1.0 | | |

## RIPPLE CURRENT MULTIPLIER

**Frequency Coefficient**

| Coefficient / Freq. (Hz) / Cap (μF) | 120 | 1k | 10k | 100k |
|---|---|---|---|---|
| 1~5.6 | 0.20 | 0.40 | 0.80 | 1.00 |
| 6.8~180 | 0.40 | 0.75 | 0.90 | 1.00 |
| ≥220 | 0.50 | 0.85 | 0.94 | 1.00 |

## PART NUMBER SYSTEM (EXAMPLE : 350V 33μF)

| 1 | 2 3 | 4 5 6 | 7 | 8 9 | 10 | 11 12 | 13 14 |
|---|---|---|---|---|---|---|---|
| E | RD | 336 | M | 2V | K | 20 | RR |

- RR — Type (Radial Bulk)
- 20 — Case Length (20mm)
- K — Diameter (16mm)
- 2V — Voltage (350V)
- M — Tolerance (±20%)
- 336 — Capacitance (33μF)
- RD — Series
- E — E-CAP

SAMXON®
Aluminum Electrolytic Capacitors

**Longer Life Assurance (較長壽命), High Ripple Current (高紋波)**

## STANDARD RATINGS

| Voltage (Code) | | 160V (2C) | | 200V (2D) | | 250V (2E) | | 350V (2V) | |
|---|---|---|---|---|---|---|---|---|---|
| Cap. (μF) | Code | Case Size | Ripple Current | Case Size | Ripple Current | Case Size | Ripple Current | Case Size | Ripple Current |
| 10 | 106 | | | | | | | 10 x 20 | 350 |
| 22 | 226 | 10 x 20 | 500 | 10 x 20 | 600 | 10 x 20 | 560 | 12.5 x 20 | 480 |
| 33 | 336 | 10 x 20 | 580 | 10 x 20 | 650 | 12.5 x 20 | 710 | 16 x 20 | 640 |
| 47 | 476 | 10 x 20 | 750 | 12.5 x 20 | 790 | 12.5 x 25 | 920 | 16 x 25 | 800 |
| | | | | | | 16 x 20 | 990 | 18 x 20 | 800 |
| 68 | 686 | 12.5 x 20 | 950 | 12.5 x 25 | 950 | 16 x 20 | 1000 | 16 x 30 | 1100 |
| | | | | 16 x 20 | 1000 | | | 18 x 25 | 1000 |
| 82 | 826 | 12.5 x 25 | 1060 | 16 x 20 | 1100 | 16 x 25 | 1200 | 18 x 25 | 1100 |
| | | | | | | 18 x 20 | 1200 | | |
| 100 | 107 | 12.5 x 25 | 1170 | 16 x 25 | 1300 | 16 x 30 | 1500 | 18 x 30 | 1200 |
| | | 16 x 20 | 1280 | 18 x 20 | 1280 | 18 x 25 | 1500 | | |
| 150 | 157 | 16 x 25 | 1400 | 16 x 25 | 1400 | 18 x 30 | 1800 | | |
| | | 18 x 20 | 1400 | | | | | | |
| 220 | 227 | 16 x 30 | 1700 | 18 x 30 | 2000 | 18 x 40 | 2100 | | |
| | | 18 x 25 | 1500 | | | | | | |
| 330 | 337 | 18 x 30 | 2000 | 18 x 40 | 2400 | | | | |

Maximum Allowable Ripple Current (mArms) at 105°C 100kHz

Case Size ΦD x L (mm)

| Voltage (Code) | | 400V (2G) | | 450V (2W) | | 500V (2H) | |
|---|---|---|---|---|---|---|---|
| Cap. (μF) | Code | Case Size | Ripple Current | Case Size | Ripple Current | Case Size | Ripple Current |
| 1 | 105 | 8 x 12 | 41 | | | | |
| 1.5 | 155 | 8 x 12 | 77 | | | | |
| | | 10 x 12.5 | 86 | | | | |
| 1.8 | 185 | 8 x 12 | 81 | | | | |
| | | 10 x 12.5 | 103 | | | | |
| 2.2 | 225 | 8 x 12 | 81 | | | | |
| | | 10 x 12.5 | 120 | | | | |
| 3.3 | 335 | 10 x 12.5 | 128 | | | | |
| 4.7 | 475 | 10 x 16 | 188 | 10 x 20 | 128 | | |
| 5.6 | 565 | 10 x 16 | 214 | 10 x 20 | 144 | | |
| 6.8 | 685 | 10 x 16 | 230 | 10 x 20 | 160 | | |
| 10 | 106 | 10 x 20 | 300 | 12.5 x 20 | 350 | 12.5 x 20 | 280 |
| 15 | 156 | 12.5 x 20 | 410 | 12.5 x 25 | 560 | 12.5 x 25 | 390 |
| | | | | | | 16 x 20 | 390 |
| 22 | 226 | 12.5 x 25 | 500 | 16 x 20 | 680 | 16 x 25 | 500 |
| | | 16 x 20 | 600 | | | 18 x 20 | 500 |
| 33 | 336 | 16 x 20 | 730 | 16 x 25 | 785 | | |
| | | | | 16 x 30 | 850 | 16 x 30 | 630 |
| | | | | 18 x 25 | 850 | 18 x 25 | 630 |
| 47 | 476 | 16 x 25 | 840 | 16 x 25 | 864 | 18 x 30 | 750 |
| | | 18 x 20 | 840 | 18 x 30 | 1000 | | |
| 68 | 686 | 18 x 30 | 1200 | 18 x 24 | 1036 | 18 x 35 | 890 |
| | | | | 18 x 30 | 1140 | | |
| 82 | 826 | 18 x 40 | 1500 | | | 18 x 45 | 980 |

Maximum Allowable Ripple Current (mArms) at 105°C 100kHz

Case Size ΦD x L (mm)