PARTY INDUSTRIAL CO., LIMITED

**ALUMINUM ELECTROLYTIC CAPACITOR**

# RL Long Life Assurance,High Ripple Current

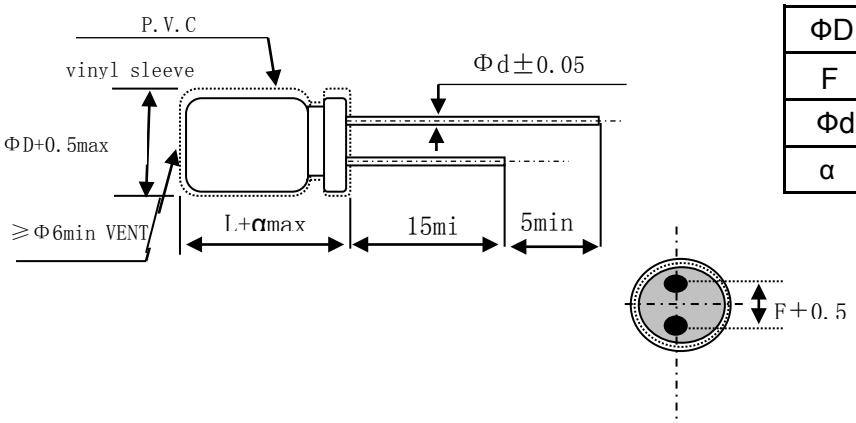
☆ High temperature and long load life,3000~8000 hours

## ■Specifications

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Operating temperature range | −40～+105℃ | | | | | −25～+105℃ | | | | | |
| Rated voltage range | 6.3～100V DC | | | | | 160～450V DC | | | | | |
| Nominal capacitance range | 0.1～22000μF | | | | | | | | | | |
| Capacitance tolerance | ±20%(25℃,120Hz) | | | | | | | | | | |
| Leakage current | I≤0.03CRUR Whichever is greater( 1minutes ) | | | | | I≤0.04CRUR +40(μA), Whichever is greater( 1minutes ) | | | | | |
| Tg δ Dissipation factor (25℃,120HZ) | $U_R$（V） | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | 160 | 200 |
| | tg δ | 0.28 | 0.24 | 0.2 | 0.16 | 0.14 | 0.12 | 0.1 | 0.08 | 0.20 | 0.20 |
| | $U_R$（V） | 250 | 350 | 400 | 450 | | | | | | |
| | tg δ | 0.20 | 0.25 | 0.25 | 0.25 | | | | | | |
| | 0.02 is added to every 1000μF increase over 1000μF | | | | | | | | | | |
| characteristics （120HZ） | UR（V） | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | | |
| | Z-25℃ / Z+20℃ | 5 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | | |
| | Z-40℃ / Z+20℃ | 12 | 10 | 8 | 5 | 4 | 3 | 3 | 3 | | |
| | UR（V） | 160 | 200 | 250 | 350 | 400 | 450 | | | | |
| | Z-25℃ / Z+20℃ | 3 | 3 | 4 | 4 | 6 | 15 | | | | |
| | 0.5 is added to every 1000μF increase over 1000μF | | | | | | | | | | |
| Load life | After appyiyng rated voltage with specified ripple current for 3000 to 8000hours at +105℃ and then resumed 16hours;<br>Capacitance change : Within ±25% of the initial measured value<br>Leakage current: : Not more than the initial specified value<br>Dissipation factor: Not more than 200% of the iniaial specified value | | | | | | | | | | |
| Shelf life | After storage for 1000hours at +105℃ then resumed 16hours;<br>Capacitance change : With ±20% of the initial measured value<br>Leakage current: : Not more than 200% of the initial specified value<br>Dissipation factor : Not more than 200% of the initial specified value | | | | | | | | | | |

## ■Case size table

Unit:mm




| ΦD | 5 | 6 | 8 | 10 | 12 | 13 | 16 | 18 | 21 | 22 |
|---|---|---|---|---|---|---|---|---|---|---|
| F | 2.0 | 2.5 | 3.5 | 5.0 | | | 7.5 | | 10.0 | |
| Φd | 0.5 | | | 0.6 | | | 0.8 | | | |
| α | 1.0 | | | 1.5 | | | 2.0 | | | |

# RL Long Life Assurance, High Ripple Current

■Nominal capacitance, rated voltage, rated ripple current and case size table

| $U_R$(V) / ltem / $C_R$(μF) / code | 6.3V (1A) | | 10V (1A) | | 16V (1C) | | 25V (1E) | |
|---|---|---|---|---|---|---|---|---|
| | D×L (mm) | Ripple (mA) | D×L (mm) | Ripple (mA) | D×L (mm) | Ripple (mA) | D×L (mm) | Ripple (mA) |
| 4.7 | 4R7 | | | | | | | 5×11 | 26 |
| 10 | 100 | | | | | | 5×11 | 35 | 5×11 | 38 |
| 22 | 220 | 5×11 | 42 | 5×11 | 48 | 5×11 | 52 | 5×11 | 55 |
| 33 | 330 | 5×11 | 52 | 5×11 | 56 | 5×11 | 60 | 5×11 | 78 |
| 47 | 470 | 5×11 | 62 | 5×11 | 68 | 5×11 | 80 | 5×11 | 82 |
| 100 | 101 | 5×11 | 98 | 5×11 | 108 | 6.3×11 | 130 | 6.3×11 | 165 |
| 220 | 221 | 6.3×11 | 186 | 6.3×11 | 210 | 8×12 | 270 | 8×12 | 298 |
| 330 | 331 | 6.3×11 | 233 | 8×12 | 308 | 8×12 | 340 | 10×12.5 | 413 |
| 470 | 471 | 8×12 | 330 | 8×12 | 365 | 10×12.5 | 456 | 10×16 | 555 |
| 1000 | 102 | 10×12.5 | 560 | 10×16 | 690 | 10×20 | 815 | 12.5×20 | 1014 |
| 2200 | 222 | 12.5×20 | 1010 | 12.5×20 | 1095 | 12.5×25 | 1328 | 16×25 | 1549 |
| 3300 | 332 | 12.5×20 | 1280 | 12.5×25 | 1456 | 16×25 | 1745 | 16×30 | 1860 |
| 4700 | 472 | 16×25 | 1778 | 16×25 | 1878 | 16×30 | 2052 | 18×35 | 2510 |
| 6800 | 682 | 16×25 | 1958 | 16×30 | 2165 | 18×35 | 2730 | 22×40 | 3116 |
| 10000 | 103 | 16×30 | 2250 | 18×35 | 2158 | 22×40 | 3705 | | |
| 12000 | 123 | 16×30 | 2300 | 18×35 | 2850 | | | | |
| 15000 | 153 | 18×35 | 2748 | 18×40 | 2700 | | | | |
| 18000 | 183 | 18×40 | 3040 | 22×40 | 3125 | | | | |
| 22000 | 223 | 22×40 | 3068 | | | | | | |

| $U_R$(V) / ltem / $C_R$(μF) / code | 35V (1V) | | 50V (1H) | | 63V (1J) | | 100V (2A) | |
|---|---|---|---|---|---|---|---|---|
| | D×L (mm) | Ripple (mA) | D×L (mm) | Ripple (mA) | D×L (mm) | Ripple (mA) | D×L (mm) | Ripple (mA) |
| 0.1 | 0R1 | | | 5×11 | 1 | | | 5×11 | 3.5 |
| 0.22 | R22 | | | 5×11 | 2.5 | | | 5×11 | 5.5 |
| 0.33 | R33 | | | 5×11 | 3.5 | | | 5×11 | 6.5 |
| 0.47 | R47 | | | 5×11 | 7 | | | 5×11 | 8.5 |
| 1 | 010 | | | 5×11 | 12 | | | 5×11 | 17 |
| 2.2 | 2R2 | | | 5×11 | 20 | | | 5×11 | 22 |
| 3.3 | 3R3 | | | 5×11 | 30 | | | 5×11 | 35 |
| 4.7 | 4R7 | 5×11 | 25 | 5×11 | 38 | 5×11 | 40 | 5×11 | 42 |
| 10 | 100 | 5×11 | 39 | 5×11 | 52 | 5×11 | 60 | 6.3×11 | 64 |
| 22 | 220 | 5×11 | 69 | 6.3×11 | 90 | 6.3×11 | 88 | 8×12 | 111 |
| 33 | 330 | 5×11 | 80 | 6.3×11 | 117 | 8×12 | 145 | 10×12.5 | 163 |
| 47 | 470 | 6.3×11 | 122 | 6.3×11 | 136 | 8×12 | 171 | 10×16 | 223 |
| 100 | 101 | 8×12 | 210 | 8×12 | 232 | 10×12.5 | 256 | 12.5×20 | 405 |
| 220 | 221 | 10×12.5 | 354 | 10×16 | 530 | 10×20 | 504 | 16×25 | 737 |
| 330 | 331 | 10×16 | 495 | 10×20 | 716 | 12.5×20 | 718 | 16×25 | 911 |
| 470 | 471 | 10×20 | 644 | 12.5×20 | 821 | 12.5×25 | 907 | 16×30 | 1029 |
| 1000 | 102 | 12.5×25 | 1221 | 16×25 | 1566 | 18×30 | 1743 | 18×40 | 2022 |
| 2200 | 222 | 16×30 | 1723 | 18×35 | 2012 | 18×40 | 1979 | | |
| 3300 | 332 | 18×35 | 2174 | 22×40 | 2728 | | | | |
| 4700 | 472 | 18×40 | 2675 | | | | | | |

# RL Long Life Assurance,High Ripple Current

■Nominal capacitance,rated voltage,rated ripple current and case size table

| $U_R$(V) / ltem / $C_R$(μF) / code | 160V (2C) | | 200V (2D) | | 250V (2E) | | 315V (2F) | |
|---|---|---|---|---|---|---|---|---|
| | D×L (mm) | Ripple (mA) | D×L (mm) | Ripple (mA) | D×L (mm) | Ripple (mA) | D×L (mm) | Ripple (mA) |
| 0.47 | R47 | 6.3×11 | 13 | 6.3×11 | 11 | 6.3×11 | 8 | | |
| 1 | 010 | 6.3×11 | 20 | 6.3×11 | 16 | 6.3×11 | 17 | 6.3×11 | 18 |
| 2.2 | 2R2 | 6.3×11 | 29 | 6.3×11 | 25 | 8×12 | 32 | 8×12 | 30 |
| 3.3 | 3R3 | 8×12 | 42 | 8×12 | 35 | 8×12 | 34 | 10×12.5 | 46 |
| 4.7 | 4R7 | 8×12 | 51 | 10×12.5 | 56 | 8×12 | 38 | 10×16 | 51 |
| 10 | 100 | 10×16 | 80 | 10×16 | 80 | 10×16 | 90 | 10×20 | 78 |
| 22 | 220 | 10×20 | 123 | 10×20 | 128 | 10×20 | 148 | 12.5×25 | 162 |
| 33 | 330 | 10×20 | 160 | 10×20 | 140 | 12.5×20 | 190 | 16×25 | 200 |
| 47 | 470 | 10×20 | 217 | 12.5×20 | 230 | 12.5×20 | 281 | 16×30 | 296 |
| 100 | 101 | 12.5×25 | 409 | 16×20 | 380 | 16×25 | 501 | 18×40 | 507 |
| 150 | 151 | 16×25 | 480 | 16×25 | 550 | 18×25 | 490 | 18×40 | 627 |
| 220 | 221 | 16×30 | 805 | 18×30 | 650 | 18×40 | 603 | | |
| 270 | 271 | 18×40 | 902 | 18×40 | 970 | | | | |
| 330 | 331 | 20×40 | 983 | | | | | | |

| $U_R$(V) / ltem / $C_R$(μF) / code | 350V (2V) | | 400V (2G) | | 450V (2W) | |
|---|---|---|---|---|---|---|
| | D×L (mm) | Ripple (mA) | D×L (mm) | Ripple (mA) | D×L (mm) | Ripple (mA) |
| 1 | 10 | 8×12 | 22 | 8×12 | 23 | 10×12.5 | 22 |
| 2.2 | 2R2 | 8×12 | 35 | 10×12.5 | 35 | 10×16 | 32 |
| 3.3 | 3R3 | 10×12.5 | 42 | 10×16 | 40 | 10×20 | 34 |
| 4.7 | 4R7 | 10×12.5 | 54 | 10×16 | 56 | 10×20 | 52 |
| 10 | 100 | 10×20 | 90 | 10×20 | 100 | 12.5×20 | 92 |
| 22 | 220 | 12.5×20 | 162 | 16×20 | 186 | 16×25 | 164 |
| 33 | 330 | 16×20 | 218 | 16×20 | 254 | 18×25 | 325 |
| 47 | 470 | 18×25 | 341 | 18×25 | 345 | | |