Hongda Capacitors®
Email: sales@hongdacap.com.hk Web: www.hongdacap.com.hk
Skype: Hongdacapacitors Tel: +86 (0)769 82207248

# RGK Series, Radial Aluminum Electrolytic Capacitors

©-55℃~105°C, 2000~5000 hours ,Load life.
©Enabled high ripple current by a reduction of impedance at high frequency range.
©Lowest impedance for personal computer and storage equipment.

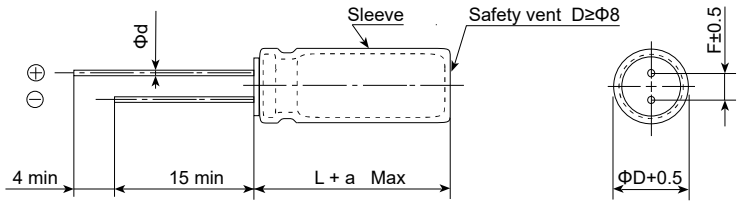
## How to order

| RGK | 338 | M | 016 | 01250250 | 050 | B | 000 | - |
|---|---|---|---|---|---|---|---|---|
| **Type** | **Capacitance code** | **Tolerance** | **Rated Voltage** | **Size Code** | **Pitch** | **Package** | **Lead Length** | **Additional characters maybe added for special requirements** |
| RGK<br>RGF<br>RGR<br>RGL<br>RB2<br>RM2 | pF Code: 1st two digits represent significant figures<br>3rd digit represents multiplier<br>(number of zeros to follow)<br>107 = 100uF<br>108 = 1000uF<br>338 =3300uF | M: -20%~+20% | Code 016: 16VDC<br>For DC Voltage<br>006: 6.3VDC<br>016: 16VDC<br>035: 35VDC<br>200: 200VDC<br>450: 450VDC | Code 01250250: Size 12.5*25mm<br>00630110: Size 6.3*11mm<br>01250250: Size 12.5*25mm<br>01600250: Size 16*25mm | Axial: 000<br>2.0: 020<br>2.5: 025<br>3.5: 035<br>5.0: 050<br>7.5: 075 | B: BULK<br>T: AMMO TAPED | Standard: 000<br>Cut Lead Length:<br>3.0mm：030<br>3.5mm: 035<br>4.0mm: 040<br>4.5mm：045<br>5.0mm：050 | |

## Specifications

| Item | Characteristics | | | | | |
|---|---|---|---|---|---|---|
| Operating temperature range | -55℃~+105℃ | | | | | |
| Rated voltage range | 160-450V.DC | | | | | |
| Nominal capacitance range | 4.7-6800uF | | | | | |
| Capacitance tolerance | ±20% (120Hz·20℃) | | | | | |
| leakage current(20℃) | I≤0.01CV or 3μA(whichever is greater) after 2 minute | | | | | |
| | I：Leakage current C：Normanl capacitance V： Rated voltage | | | | | |
| Dissipation factor (120Hz·20℃) | Rated voltage (V) | 160 | 200 | 250 | 400 | 450 |
| | tgδ (MAX) | 0.15 | 0.15 | 0.15 | 0.2 | 0.2 |
| Surge Voltage | WV | 160 | 200 | 250 | 400 | 450 |
| Low temperature characteristics (Impedance ratio max. at 120Hz) | Z-25℃ / Z+20℃ | 3 | 3 | 3 | 3 | 4 |
| | Z-55℃ / Z+20℃ | 6 | 6 | 6 | 6 | 7 |
| Load Life | Durat on: | | | | | |
| | ΦD: 5~6.3 — Load life: 2000h; 8 — 3000h; 10 — 4000h; 13~ — 5000h | | | | | |
| | After applying rated voltage at +105℃ and then resumed 16 hours: | | | | | |
| | Capacitance change | Within ±20% of the initial measured value | | | | |
| | tgδ | ≤200% of the initial spectified value | | | | |
| | Leakage current | ≤initial specified value | | | | |
| Shelf Life | After storage for 1000 hours at 105℃ then resumed 16 hours: | | | | | |
| | Capactiance change | Within ±20% of the initial measured value | | | | |
| | tgδ | ≤200% of the initial spectified value | | | | |
| | Leakage current | ≤initial specified value | | | | |

## Diagram of Dimensions(mm)




| φD | 8 | 10 | 13 | 16 | 18 |
|---|---|---|---|---|---|
| F±0.5 | 3.5 | 5.0 | 5.0 | 7.5 | 7.5 |
| φd±0.05 | 0.5 | 0.6 | 0.6 | 0.8 | 0.8 |
| α | (L<20) 1.5 (L≥20) 2.0 | | | | |

## Freuency coefficient

| Freuency | 120Hz | 1KHz | 10KHz-50KHz | 100KHz |
|---|---|---|---|---|
| coefficient | 1 | 1.3 | 1.40 | 1.44 |

## Multiplier for Ripple Current vs. Temperature:

| Temperature℃ | ~55 | 70 | 85 | 105 |
|---|---|---|---|---|
| Factor | 2.23 | 2.00 | 1.75 | 1.00 |

## Standard Ratings

| Voltage (Code) | | 6.3V | | 10V | | 16V | |
|---|---|---|---|---|---|---|---|
| Cap. (μF) | Code | Size | ripple current (mA.r.m.s/ 105℃100KHZ) | Size | ripple current (mA.r.m.s/ 105℃100KHZ) | Size | ripple current (mA.r.m.s/ 105℃100KHZ) |
| 100 | 107 | 5*11 | 220 | 6.3*11 | 405 | | |
| 120 | 127 | | | | | 6.3*11 | 405 |
| 220 | 227 | 6.3*11 | 405 | 8*12 | 760 | 8*12 | 760 |
| 330 | 337 | 6.3*11 | 405 | 8*12 | 760 | 8*12 | 760 |
| 470 | 477 | 8*12 | 760 | 8*12 | 820 | 10*13 | 1030 |
| | | | | 8*15 | 820 | | |
| 560 | 567 | 8*12 | 760 | | | | |
| 680 | 687 | | | 8*12 | 1250 | 10*13 | 1020 |
| 820 | 827 | 8*16 | 995 | 10*16 | 1430 | | |
| 1000 | 108 | 10*13 | 1030 | 10*20 | 1820 | 10*16 | 1630 |
| 1200 | 128 | 10*16 | 1430 | 10*20 | 1950 | 10*20 | 1900 |
| 1500 | 158 | 10*20 | 1820 | 13*20 | 2150 | 10*20 | 1950 |
| 2200 | 228 | 10*25 | 1980 | 13*25 | 2770 | 13*20 | 2100 |
| 2700 | 278 | | | 13*30 | 2850 | 13*25 | 2850 |
| 3300 | 338 | 13*20 | 2080 | 13*35 | 3150 | | |
| 3900 | 398 | 13*25 | 2470 | 16*25 | 3018 | | |
| 4700 | 478 | 13*30 | 2850 | | | | |
| 5600 | 568 | 16*20 | 3150 | | | | |
| 6800 | 688 | 16*25 | 3250 | | | | |

| Voltage (Code) | | 25V | | 35V | | 50V | |
|---|---|---|---|---|---|---|---|
| Cap. (μF) | Code | Size | ripple current (mA.r.m.s/ 105℃100KHZ) | Size | ripple current (mA.r.m.s/ 105℃100KHZ) | Size | ripple current (mA.r.m.s/ 105℃100KHZ) |
| 47 | 476 | | | 5*11 | 200 | 6.3*11 | 320 |
| 56 | 566 | | | 6.3*11 | 350 | | |
| 68 | 686 | | | | | | |
| 82 | 826 | | | | | | |
| 100 | 107 | 6.3*11 | 410 | 6.3*11 | 400 | 8*12 | 610 |
| 120 | 127 | | | | | | |
| 220 | 227 | 8*12 | 760 | 10*13 | 1050 | 10*16 | 1136 |
| 270 | 277 | | | | | | |
| 330 | 337 | 10*13 | 1030 | 10*13 | 1120 | 10*20 | 1500 |
| 470 | 477 | 10*16 | 1430 | 13*16 | 1500 | 13*20 | 1900 |
| 560 | 567 | | | | | | |
| 680 | 687 | 10*16 | 1550 | 13*20 | 2150 | | |
| 820 | 827 | 10*20 | 1890 | | | 16*20 | 2100 |
| 1000 | 108 | 13*20 | 2360 | 13*20 | 2100 | 16*25 | 2850 |
| 1200 | 128 | | | 13*25 | 2300 | | |
| 1500 | 158 | 13*20 | 2400 | 16*25 | 2700 | | |
| 2200 | 228 | 13*25 | 2450 | | | | |
| 2700 | 278 | 16*25 | 3000 | | | | |
| 3300 | 338 | | | | | | |
| 3900 | 398 | | | | | | |
| 4700 | 478 | 16*30 | 3260 | | | | |

Maximum Allowable Ripple Current (mArms) at 105˚C 100kHz Case Size ΦD x L (mm)

## Standard Ratings

| Voltage (Code) | | 63V | | 100V | | 160 | |
|---|---|---|---|---|---|---|---|
| Cap. (μF) | Code | Size | ripple current (mA.r.m.s/ 105℃100KHZ) | Size | ripple current (mA.r.m.s/ 105℃100KHZ) | Size | ripple current (mA.r.m.s/ 105℃100KHZ) |
| 4.7 | 475 | | | 5*11 | 105 | 6.3*11 | 45 |
| 5.6 | 565 | | | 5*11 | 116 | | |
| 6.8 | 685 | | | 5*11 | 120 | 8*12 | 50 |
| 10 | 106 | | | 6.3*11 | 150 | 8*12 | 65 |
| 22 | 226 | 6.3*11 | 250 | 8*12 | 370 | 10*12 | 110 |
| 33 | 336 | 6.3*11 | 270 | 8*12 | 370 | 10*16 | 150 |
| 47 | 476 | 8*12 | 480 | 10*13 | 500 | 10*20 | 190 |
| 56 | 566 | | | 10*13 | 550 | 10*25 | 235 |
| 68 | 686 | 8*12 | 550 | 10*16 | 630 | 13*20 | 260 |
| 82 | 826 | | | 10*16 | 700 | 13*25 | 335 |
| 100 | 107 | 10*13 | 720 | 10*20 | 970 | 13*25 | 350 |
| 120 | | | | | | 16*25 | 380 |
| 150 | | | | | | 16*30 | 400 |
| 180 | | | | | | 16*32 | 480 |
| 220 | 227 | 10*25 | 1315 | 13*20 | 1500 | 16*36 | 570 |
| 270 | 277 | 13*20 | 1560 | | | | |
| 330 | 337 | 10*30 | 1750 | 16*25 | 2150 | 18*40 | 750 |
| 470 | 477 | 16*20 | 2300 | 16*30 | 2350 | 22*40 | 900 |
| 680 | 687 | | | | | | |
| 820 | 827 | | | | | | |
| 1000 | 108 | | | | | | |
| 1200 | 128 | 16*30 | 2850 | | | | |
| 1500 | 158 | | | | | | |

| Voltage (Code) | | 200 | | 250 | | 400 | | 450 | |
|---|---|---|---|---|---|---|---|---|---|
| Cap. (μF) | Code | Size | ripple current (mA.r.m.s/ 105℃100KHZ) | Size | ripple current (mA.r.m.s/ 105℃100KHZ) | Size | ripple current (mA.r.m.s/ 105℃100KHZ) | Size | ripple current (mA.r.m.s/ 105℃100KHZ) |
| 4.7 | 475 | 8*12 | 40 | 8*12 | 40 | 10*16 | 42 | 10*16 | 42 |
| 6.8 | 685 | 8*12 | 53 | 8*12 | 50 | 10*16 | 58 | 10*25 | 58 |
| 10 | 106 | 10*12 | 70 | 10*17 | 70 | 10*20 | 78 | 13*20 | 80 |
| 22 | 226 | 10*16 | 110 | 10*20 | 120 | 13*25 | 140 | 16*20 | 150 |
| 33 | 336 | 10*16 | 160 | 13*20 | 170 | 16*20 | 210 | 16*25 | 230 |
| 47 | 476 | 13*20 | 200 | 13*25 | 225 | 16*25 | 330 | 16*30 | 300 |
| 56 | 566 | 13*25 | 240 | 16*20 | 270 | 16*25 | 360 | 16*35 | 370 |
| 68 | 686 | 13*25 | 270 | 16*20 | 295 | 16*30 | 400 | 18*30 | 410 |
| 82 | 826 | 16*20 | 350 | 16*25 | 310 | 18*30 | 450 | 18*35 | 460 |
| 100 | 107 | 16*25 | 360 | 16*30 | 340 | 18*35 | 490 | 18*40 | 500 |
| 120 | 127 | 16*30 | 400 | 16*35 | 410 | 18*40 | 530 | 22*35 | 540 |
| 150 | 157 | 16*35 | 440 | 16*40 | 460 | 22*35 | 560 | | |
| 180 | 187 | 16*40 | 510 | 18*40 | 525 | | | | |
| 220 | 227 | 18*35 | 575 | 18*36 | 600 | | | | |
| 330 | 337 | 20*40 | 755 | | | | | | |
| 470 | 477 | | | | | | | | |

Maximum Allowable Ripple Current (mArms) at 105˚C 100kHz Case Size ΦD x L (mm)