

Radial Aluminum Electrolytic Capacitor – JRB

FEATURES

- Wide temperature range, long life: 105°C 2000 hours.
- Miniature and large capacity

SPECIFICATIONS



| Operating Temperature Range (°C) | -40°C ~ +105°C | -25°C ~ +105°C |
|-------------------------------------|--|--|
| Rated Voltage (V) | 6.3V ~ 100V | 160V ~ 450V |
| Capacitance Range | 0.1µF ~ 22000µF | 0.47µF ~ 470µF |
| Capacitance Tolerance (20°C, 120Hz) | ±20% | |
| Leakage Current (+20°C, max) | $I \leq 0.01CV$ or $3 \mu A$ (after 2 minutes, whichever is greater) | $I \leq 0.03CV (\mu A) + 40 \mu A$ (after 2 minutes) |

| Dissipation Factor (+20°C, 120Hz) | U _R (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | 160~250 | 350~400 | 450 |
|-----------------------------------|--------------------|-----|------|------|------|------|------|------|------|---------|---------|------|
| | Tan δ(Max.) | | 0.22 | 0.17 | 0.15 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 | 0.12 | 0.15 |

When nominal capacitance exceeds 1000µF, add 0.02 to the value above for each 1000µF increase.

| Temperature Characteristics (Impedance ratio at 120Hz) | U _R (V) | 6.3 | 10 | 16 | 25~100 | 160 | 200 | 250 | 350 | 400 | 450 |
|--|--------------------|-----|----|----|--------|-----|-----|-----|-----|-----|-----|
| | Z-25°C/Z+20°C | 4 | 3 | 2 | 2 | 2 | 2 | 3 | 5 | 6 | 6 |
| | Z-40°C/Z+20°C | 8 | 6 | 4 | 3 | 2 | 2 | 3 | 5 | 6 | 6 |

Load Life After applying rated voltage with specified ripple current for 2000 hours at +105°C and then resumed 24 hours:
 Capacitance change: ±20% of the initial measured value

Leakage current: ≤the initial specified value

Dissipation factor: ≤200% of the initial specified value

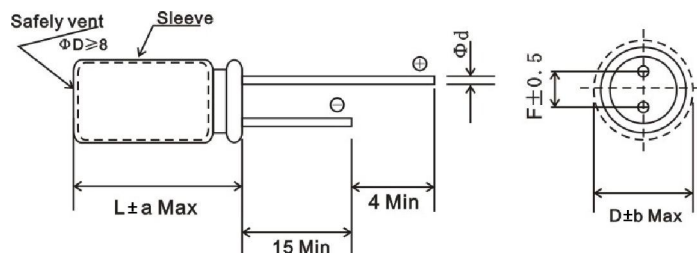
Shelf Life After storage for 1000 hours at +105°C, U_R to be applied for 30 minutes and then resumed 24 hours:

Capacitance change: ±20% of the initial measured value

Leakage current: ≤the initial specified value

Dissipation factor: ≤200% of the initial specified value

DIMENSIONS (mm)



| ΦD | 5 | 6.3 | 8 | 10 | 12.5/13 | 16~18 | 22 |
|----------|-----|--------|--------|-----|---------|-------|----|
| F | 2.0 | 2.5 | 3.5 | 5.0 | | 7.5 | 10 |
| Φd ±0.05 | 0.5 | L < 20 | L ≥ 20 | 0.6 | | 0.8 | |
| | | 0.5 | 0.5 | | | | |

| a Max. | D < 18 | D = 18 | | D > 18 |
|--------|-----------|-----------|-----------|-----------|
| | +1.5 -1.0 | L < 35.5 | L ≥ 35.5 | |
| | | +1.5 -1.0 | +2.0 -1.0 | +2.0 -1.0 |

| b Max. | (D < 18) | 0.5 |
|--------|----------|----------|
| | | (D ≥ 18) |

MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

| Frequency (Hz) | Cap (µF) | | | | | |
|------------------|----------|-----|------|------|------|----------|
| | 50 (60) | 120 | 400 | 1K | 10K | 50K-100K |
| CAP ≤ 10 | 0.8 | 1 | 1.30 | 1.45 | 1.65 | 1.70 |
| 10 < CAP ≤ 100 | 0.8 | 1 | 1.23 | 1.36 | 1.48 | 1.53 |
| 100 < CAP ≤ 1000 | 0.8 | 1 | 1.16 | 1.25 | 1.35 | 1.38 |
| 1000 < CAP | 0.8 | 1 | 1.11 | 1.17 | 1.25 | 1.28 |

Temperature coefficient

| Temperature (°C) | +70 | +85 | +105 |
|------------------|------|------|------|
| Coefficient | 1.96 | 1.68 | 1.0 |

Please visit our website to get more update data, those data & specification are subject to change without notice.



Just your best choice

Radial Aluminum Electrolytic Capacitor – JRB

STANDARD RATINGS

Ripple Current: 105°C, 120Hz

| WV μF | 6.3 | | 10 | | 16 | | 25 | | 35 | | 50 | | 63 | | 100 | |
|------------|-----------|----------------|----------------|----------------|----------------|----------------|---------------|----------------|-----------|----------------|-----------|----------------|-----------|----------------|-----------|----------------|
| | Size (mm) | Ripple Current | Size (mm) | Ripple Current | Size (mm) | Ripple Current | Size (mm) | Ripple Current | Size (mm) | Ripple Current | Size (mm) | Ripple Current | Size (mm) | Ripple Current | Size (mm) | Ripple Current |
| | ØDxL | mArms | ØDxL | mArms | ØDxL | mArms | ØDxL | mArms | ØDxL | mArms | ØDxL | mArms | ØDxL | mArms | ØDxL | mArms |
| 0.1 – 0.47 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 5x11 | 3 | 5x11 | 3 | 5x11 | 3 |
| 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 5x11 | 9 | 5x11 | 9 | 5x11 | 9 |
| 2.2 | -- | -- | -- | -- | -- | -- | 5x11 | 11 | -- | -- | 5x11 | 11 | 5x11 | 11 | 5x11 | 15 |
| 3.3 | -- | -- | -- | -- | -- | -- | 5x11 | 15 | -- | -- | 5x11 | 15 | 5x11 | 15 | 5x11 | 18 |
| 4.7 | -- | -- | -- | -- | -- | -- | 5x11 | 18 | -- | -- | 5x11 | 18 | 5x11 | 20 | 5x11 | 20 |
| 6.8 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 5x11 | 20 | 5x11 | 25 | 5x11 | 25 |
| 10 | -- | -- | 5x11 | 20 | 5x11 | 20 | 5x11 | 25 | 5x11 | 25 | 5x11 | 25 | 5x11 | 30 | 6.3x12 | 35 |
| 22 | -- | -- | 5x11 | 20 | 5x11 | 30 | 5x11 | 35 | 5x11 | 35 | 5x11 | 40 | 6.3x11 | 50 | 6.3x12 | 65 |
| 33 | -- | -- | 5x11 | 20 | 5x11 | 40 | 5x11 | 40 | 5x11 | 50 | 5x12 | 50 | 6.3x11 | 60 | 8x12 | 85 |
| 47 | -- | -- | 5x11 | 45 | 5x11 | 50 | 5x11 | 50 | 6.3x11 | 65 | 6.3x11 | 70 | 6.3x12 | 90 | 10x12.5 | 120 |
| 68 | -- | -- | 5x11 | 60 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 10x16 | 180 |
| 100 | -- | -- | 5x11 | 180 | 5x11 6x11 | 70 80 | 6.3x11 | 90 | 6.3x12 | 102 | 8x12 | 120 | 10x12 | 150 | 10x20 | 220 |
| 120 | -- | -- | -- | -- | -- | -- | 6.3x11 | 100 | 8x12 | 120 | 8x16 | 140 | 10x16 | 180 | 10x20 | 250 |
| 150 | -- | -- | -- | -- | -- | -- | 6.3x11 | 110 | 8x12 | 140 | 10x12 | 160 | 10x16 | 210 | 13x20 | 280 |
| 180 | -- | -- | -- | -- | -- | -- | 8x12 | 135 | 8x12 | 165 | 10x12 | 190 | 10x16 | 230 | 13x20 | 310 |
| 220 | 5x11 | 75 | 5x11 6.3x11 | 110 130 | 6.3x11 | 95 | 8x12 | 150 | 8x12 | 180 | 10x17 | 240 | 10x17 | 270 | 13x25 | 380 |
| 330 | 6.3x12 | 100 | 6.3x11 | 110 | 8x12 | 180 | 8x12 | 170 | 8x16 | 200 | 10x17 | 320 | 13x20 | 380 | 16x25 | 510 |
| 470 | 6.3x12 | 130 | 6.3x12 8x12 | 120 190 | 8x12 | 210 | 8x16 10x12 | 190 250 | 10x17 | 310 | 13x20 | 430 | 13x25 | 500 | 16x25 | 680 |
| 560 | -- | -- | 8x12 10x12 | 200 220 | -- | -- | -- | -- | 10x20 | 400 | 13x20 | 600 | 13x25 | 600 | 16x35 | 750 |
| 680 | -- | -- | 8x16 | 320 | -- | -- | 10x16 | 380 | 10x20 | 450 | 13x25 | 720 | 16x25 | 700 | 16x35 | 850 |
| 820 | -- | -- | 10x12 | 350 | -- | -- | -- | -- | 13x20 | 500 | 13x25 | 750 | 16x25 | 800 | 18x35 | 1000 |
| 1000 | 8x14 | 300 | 8x14 | 400 | 10x17 | 440 | 10x21 | 500 | 13x20 | 580 | 13x25 | 790 | 16x30 | 900 | 18x40 | 1200 |
| 1200 | -- | -- | -- | -- | -- | -- | -- | -- | 13x20 | 700 | 16x25 | 850 | 16x35 | 1100 | -- | -- |
| 1500 | -- | -- | 10x16 | 520 | -- | -- | 13x20 | 600 | 13x25 | 860 | 16x30 | 980 | 18x35 | 1210 | -- | -- |
| 1800 | -- | -- | -- | -- | -- | -- | -- | -- | 16x25 | 900 | 16x35 | 1150 | -- | -- | -- | -- |
| 2200 | 10x20 | 540 | 10x20 | 600 | 10x20 13x20 | 600 700 | 13x25 | 800 | 16x25 | 937 | 16x35 | 1230 | 18x35 | 1310 | -- | -- |
| 2700 | -- | -- | -- | -- | -- | -- | 16x25 | 900 | -- | -- | 18x35 | 1320 | -- | -- | -- | -- |
| 3300 | 13x20 | 670 | 13x20 | 800 | 13x25 | 920 | 16x25 | 1000 | 16x30 | 1080 | 18x40 | 1400 | -- | -- | -- | -- |
| 3900 | -- | -- | 13x20 | 900 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 4700 | 13x20 | 900 | 13x25 | 1000 | 16x25 | 1050 | -- | -- | 18x40 | 1540 | -- | -- | -- | -- | -- | -- |
| 6800 | 13x25 | 1020 | 16x25 | 1200 | 16x35 | 1430 | 18x35 | 1630 | -- | -- | -- | -- | -- | -- | -- | -- |
| 8200 | -- | -- | 16x30 | 1450 | -- | -- | 18x35 | 2000 | -- | -- | -- | -- | -- | -- | -- | -- |
| 10000 | 16x25 | 1220 | 16x35 | 1600 | 18x35 | 1700 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 12000 | -- | -- | 16x35 | 1650 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 15000 | 16x35 | 1300 | 18x35 | 1700 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 22000 | 18x40 | 1400 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| WV μF | 160 | | 200 | | 250 | | 350 | | 400 | | 450 | | 500 | |
|----------|-----------|----------------|-----------|----------------|-----------|----------------|-----------|----------------|-----------|----------------|----------------|----------------|-----------|----------------|
| | Size (mm) | Ripple Current | Size (mm) | Ripple Current | Size (mm) | Ripple Current | Size (mm) | Ripple Current | Size (mm) | Ripple Current | Size (mm) | Ripple Current | Size (mm) | Ripple Current |
| | ØDxL | mArms | ØDxL | mArms | ØDxL | mArms | ØDxL | mArms | ØDxL | mArms | ØDxL | mArms | ØDxL | mArms |
| 1 | 6.3x11 | 14 | -- | -- | 6.3x12 | 9 | 6.3x11 | 15 | 8x12 | 19 | 6.3x11 | 12 | -- | -- |
| 2.2 | 6.3x11 | 15 | 6.3x11 | 15 | 6.3x11 | 15 | 6.3x11 | 20 | 8x12 | 30 | 8x12 | 24 | -- | -- |
| 3.3 | 6.3x11 | 20 | 8x11 | 20 | 8x11 | 35 | 8x11 | 30 | 8x12 | 35 | 8x12 | 38 | -- | -- |
| 4.7 | 6.3x11 | 45 | 8x12 | 40 | 8x12 | 40 | 8x12 | 35 | 8x12 | 42 | 10x12 | 42 | -- | -- |
| 6.8 | -- | -- | -- | -- | 8x12 | 50 | 10x12 | 45 | 10x13 | 58 | 10x20 | 58 | -- | -- |
| 10 | 8x12 | 65 | 10x12 | 70 | 10x17 | 70 | 10x20 | 75 | 10x16 | 78 | 10x20 | 80 | -- | -- |
| 22 | 10x12 | 110 | 10x16 | 110 | 10x17 | 120 | 13x20 | 130 | 13x20 | 140 | 13x20 | 150 | -- | -- |
| 33 | 10x16 | 150 | 10x16 | 135 | 13x20 | 170 | 13x25 | 190 | 13x20 | 210 | 13x25 16x20 | 230 | -- | -- |
| 47 | 10x20 | 190 | 13x20 | 190 | 13x25 | 225 | 16x25 | 300 | 16x20 | 390 | 16x25 | 400 | 18x25 | 420 |
| 56 | -- | -- | -- | -- | 13x25 | 270 | 16x25 | 340 | -- | -- | 16x30 | 320 | -- | -- |
| 68 | 13x20 | 260 | 13x25 | 250 | 13x25 | 295 | 16x30 | 370 | 16x25 | 420 | 18x26 | 366 | -- | -- |
| 82 | -- | -- | -- | -- | 16x25 | 310 | 16x35 | 410 | 18x30 | 450 | 18x30 | 440 | -- | -- |
| 100 | 13x25 | 350 | 13x25 | 310 | 16x25 | 340 | 18x30 | 450 | 18x30 | 490 | 18x40 | 490 | -- | -- |
| 120 | -- | -- | -- | -- | -- | -- | -- | -- | 18x32 | 530 | 18x40 | 540 | -- | -- |

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