

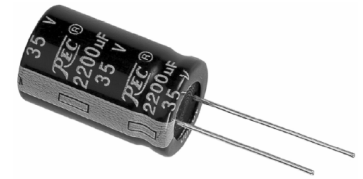


RoHS Compliant ALUMINIUM ELECTROLYTIC CAPACITOR

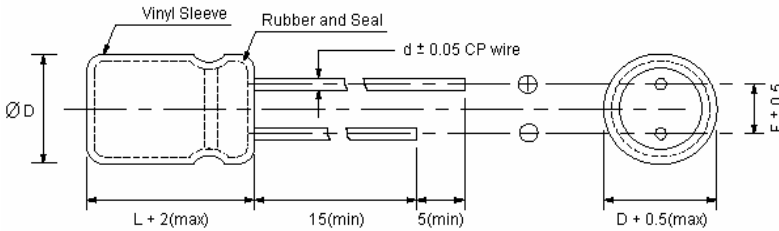
SR Series

■ **FEATURES**

Load life of 2000 hours at 85 °C. High value of CV range.
 Standard series for general purpose.
 Applications for TV, video, audio, office and home appliances etc.



■ **OUTLINE**



| | mm | | | | | | | | | |
|---|-----|-----|-----|-----|----|-----|----|------|----|------|
| D | 5 | 6.3 | 8 | 10 | 13 | 16 | 18 | 20 | 22 | 25 |
| F | 2.0 | 2.5 | 3.5 | 5.0 | | 7.5 | | 10.0 | | 12.5 |
| d | 0.5 | | 0.6 | | | 0.8 | | | 1 | |

■ **SPECIFICATIONS**

| Items | Characteristics | | | | | | | | | | | | | | | |
|---|---|---|------|------|-----------------------------------|------|------|------|---|------|------|------|------|------|------|------|
| Capacitance Tolerance (120Hz, 25°C) | ± 20% (M) | | | | | | | | | | | | | | | |
| Rated Working Voltage Range | 6.3 ~ 100VDC | | | | | | | | 160 ~ 450VDC | | | | | | | |
| Operation Temperature | -40°C ~ +85°C | | | | | | | | -25°C ~ +85°C | | | | | | | |
| Leakage Current (25°C) | (After 2 minutes applying the DC working voltage) | | | | | | | | (After 5 minutes applying the DC working voltage) | | | | | | | |
| | $I \leq 0.01CV$ or $3 (\mu A)$ | | | | | | | | $I \leq 0.03CV + 10 (\mu A)$ | | | | | | | |
| | I : Leakage Current (μA) | | | | C : Rated Capacitance (μF) | | | | V : Working Voltage (V) | | | | | | | |
| Surge Voltage (25°C) | W.V. | 6.3 | 10 | 16 | 25 | 35 | 40 | 50 | 63 | 100 | 160 | 200 | 250 | 350 | 400 | 450 |
| | S.V. | 8 | 13 | 20 | 32 | 44 | 50 | 63 | 79 | 125 | 200 | 250 | 300 | 400 | 450 | 500 |
| Dissipation Factor (120Hz, 25°C) | W.V. | 6.3 | 10 | 16 | 25 | 35 | 40 | 50 | 63 | 100 | 160 | 200 | 250 | 350 | 400 | 450 |
| | $\tan d$ | 0.25 | 0.20 | 0.17 | 0.15 | 0.12 | 0.12 | 0.10 | 0.10 | 0.10 | 0.15 | 0.15 | 0.15 | 0.20 | 0.20 | 0.20 |
| For capacitance exceeding 1000 μF , add 0.02 per increment of 1000 μF | | | | | | | | | | | | | | | | |
| Temperature Characteristics | W.V. | 6.3 | 10 | 16 | 25 | 35 | 40 | 50 | 63 | 100 | 160 | 200 | 250 | 350 | 400 | 450 |
| | - 25°C / + 25°C | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 6 | 6 | 6 |
| | - 40°C / + 25°C | 10 | 8 | 6 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 6 | 6 | 6 |
| Impedance ratio at 120Hz | | | | | | | | | | | | | | | | |
| Load Test | After 2000 hours application of WV at +85°C, the capacitor shall meet the following limits. | | | | | | | | | | | | | | | |
| | Capacitance Change | $\leq \pm 20\%$ of initial value | | | | | | | | | | | | | | |
| | $\tan d$ | $\leq 150\%$ of initial specified value | | | | | | | | | | | | | | |
| | Leakage Current | \leq initial specified value | | | | | | | | | | | | | | |
| Shelf Test | After 1000 hours, no voltage applied at +85°C, the capacitor shall meet the following limits. | | | | | | | | | | | | | | | |
| | Capacitance Change | $\leq \pm 20\%$ of initial value | | | | | | | | | | | | | | |
| | $\tan d$ | $\leq 150\%$ of initial specified value | | | | | | | | | | | | | | |
| | Leakage Current | $\leq 200\%$ of initial specified value | | | | | | | | | | | | | | |



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■ DIMENSIONS

D x L (mm)

| WV uF | 6.3 | 10 | 16 | 25 | 35 | 40 | 50 | 63 | 100 | 160 | 200 | 250 | 350 | 400 | 450 |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0.1 | | | | | | ⇒ | 5x11 | 5x11 | 5x11 | | | | | | |
| 0.22 | | | | | | ⇒ | 5x11 | 5x11 | 5x11 | | | | | | |
| 0.33 | | | | | | ⇒ | 5x11 | 5x11 | 5x11 | | | | | | |
| 0.47 | | | | | | ⇒ | 5x11 | 5x11 | 5x11 | 5x11 | 6.3x11 | 6.3x11 | 6.3x11 | 6.3x11 | 6.3x11 |
| 1 | | | | | | ⇒ | 5x11 | 5x11 | 5x11 | 5x11 | 6.3x11 | 6.3x11 | 6.3x11 | 8x12 | 8x12 |
| 2.2 | | | | | | ⇒ | 5x11 | 5x11 | 5x11 | 6.3x12 | 6.3x12 | 6.3x12 | 8x12 | 8x12 | 10x12 |
| 3.3 | | | | | | ⇒ | 5x11 | 5x11 | 5x11 | 6.3x12 | 6.3x12 | 8x12 | 10x12 | 10x12 | 10x16 |
| 4.7 | | | | | | ⇒ | 5x11 | 5x11 | 5x11 | 6.3x12 | 8x12 | 8x12 | 10x15 | 10x16 | 10x20 |
| 10 | | | ⇒ | 5x11 | 5x11 | 5x11 | 5x11 | 5x11 | 6.3x11 | 8x12 | 10x12 | 10x15 | 10x20 | 10x20 | 13x25 |
| 22 | | | ⇒ | 5x11 | 5x11 | 5x11 | 5x11 | 6.3x11 | 8x12 | 10x16 | 10x16 | 10x20 | 13x20 | 13x25 | 16x26 |
| 33 | | | ⇒ | 5x11 | 5x11 | 5x11 | 6.3x11 | 8x12 | 8x14 | 10x20 | 10x20 | 13x20 | 13x25 | 16x26 | 16x31 |
| 47 | | ⇒ | 5x11 | 5x11 | 5x11 | 6.3x11 | 6.3x11 | 8x12 | 10x16 | 13x20 | 13x20 | 13x25 | 16x26 | 16x31 | 18x35 |
| 100 | 5x11 | 5x11 | 5x11 | 6.3x11 | 6.3x12 | 8x12 | 8x12 | 10x12 | 10x20 | 16x26 | 16x26 | 16x31 | 18x41 | 22x32 | |
| 220 | 5x11 | 6.3x11 | 6.3x12 | 8x12 | 8x12 | 8x16 | 10x15 | 10x16 | 13x25 | 16x35 | 18x35 | 22x36 | | | |
| 330 | 6.3x11 | 6.3x12 | 8x12 | 8x14 | 10x12 | 10x15 | 10x16 | 10x20 | 16x26 | 20x35 | 22x36 | | | | |
| 470 | 6.3x12 | 8x12 | 8x12 | 8x16 | 10x16 | 10x20 | 10x20 | 13x20 | 16x31 | 22x36 | 22x42 | | | | |
| 1000 | 8x14 | 8x14 | 10x16 | 10x20 | 13x20 | 13x25 | 13x25 | 16x31 | 20x35 | | | | | | |
| 2200 | 10x16 | 10x20 | 13x20 | 13x25 | 16x26 | 16x31 | 16x35 | 18x41 | 25x43 | | | | | | |
| 3300 | 10x20 | 13x20 | 13x25 | 16x26 | 16x35 | 18x31 | 18x35 | 20x41 | | | | | | | |
| 4700 | 13x20 | 13x25 | 16x26 | 16x35 | 18x35 | 20x35 | 22x36 | 25x43 | | | | | | | |
| 6800 | 16x26 | 16x26 | 16x31 | 18x35 | 22x42 | | | | | | | | | | |
| 10000 | 16x26 | 16x35 | 18x35 | 22x42 | 25x43 | | | | | | | | | | |

■ PERMISSIBLE RIPPLE CURRENT

mA (rms) at 120Hz 85°C

| WV uF | 6.3 | 10 | 16 | 25 | 35 | 40 | 50 | 63 | 100 | 160 | 200 | 250 | 350 | 400 | 450 |
|----------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|
| 0.1 | | | | | | ⇒ | 10 | 10 | 12 | | | | | | |
| 0.22 | | | | | | ⇒ | 10 | 10 | 12 | | | | | | |
| 0.33 | | | | | | ⇒ | 10 | 10 | 12 | | | | | | |
| 0.47 | | | | | | ⇒ | 12 | 12 | 13 | 12 | 13 | 14 | 15 | 15 | 15 |
| 1 | | | | | | ⇒ | 18 | 18 | 22 | 17 | 19 | 21 | 22 | 22 | 22 |
| 2.2 | | | | | | ⇒ | 27 | 28 | 34 | 26 | 32 | 35 | 34 | 34 | 35 |
| 3.3 | | | | | | ⇒ | 34 | 36 | 42 | 35 | 37 | 44 | 42 | 45 | 47 |
| 4.7 | | | | | | ⇒ | 43 | 45 | 48 | 42 | 50 | 56 | 50 | 63 | 73 |
| 10 | | | ⇒ | 55 | 57 | 61 | 65 | 67 | 80 | 76 | 81 | 90 | 89 | 115 | 110 |
| 22 | | | ⇒ | 86 | 90 | 95 | 98 | 112 | 137 | 127 | 143 | 160 | 150 | 170 | 160 |
| 33 | | | ⇒ | 105 | 110 | 124 | 127 | 135 | 180 | 170 | 185 | 195 | 190 | 200 | 210 |
| 47 | | ⇒ | 124 | 124 | 128 | 150 | 155 | 185 | 240 | 225 | 235 | 260 | 240 | 260 | 280 |
| 100 | 130 | 150 | 157 | 195 | 200 | 251 | 260 | 290 | 390 | 380 | 390 | 440 | 410 | 480 | |
| 220 | 195 | 248 | 255 | 325 | 370 | 390 | 455 | 470 | 690 | 675 | 740 | 810 | | | |
| 330 | 295 | 310 | 370 | 405 | 460 | 480 | 520 | 690 | 850 | 840 | 880 | | | | |
| 470 | 320 | 410 | 440 | 510 | 580 | 700 | 710 | 920 | 1110 | 1060 | 1270 | | | | |
| 1000 | 590 | 610 | 750 | 925 | 1110 | 1230 | 1290 | 1505 | 1635 | | | | | | |
| 2200 | 846 | 1070 | 1360 | 1500 | 1540 | 1780 | 2000 | 2210 | 2450 | | | | | | |
| 3300 | 1100 | 1440 | 1590 | 1670 | 2155 | 2260 | 2307 | 2660 | | | | | | | |
| 4700 | 1390 | 1735 | 1915 | 2225 | 2405 | 2730 | 2800 | 3010 | | | | | | | |
| 6800 | 1890 | 1990 | 2335 | 2590 | 3100 | | | | | | | | | | |
| 10000 | 1970 | 2350 | 2620 | 3280 | 3860 | | | | | | | | | | |