



## Radial Lead Aluminum Electrolytic Capacitors

+105°C High Frequency

### FEATURES

Low ESR - High Ripple Current - Multiple case sizes

### APPLICATIONS

Filtering - Bypass - Coupling - Blocking

|   |                       |   |           |                                  |           |           |           |                                       |      |      |      |     |
|---|-----------------------|---|-----------|----------------------------------|-----------|-----------|-----------|---------------------------------------|------|------|------|-----|
| <b>Operating Temperature Range</b>                        |                       | <b>-55°C to +105°C</b>  |           |                                  |           |           |           |                                       |      |      |      |     |
| <b>Capacitance Tolerance</b>                              |                       | <b>+20% at 120 Hz, 20°C</b>   |           |                                  |           |           |           |                                       |      |      |      |     |
| <b>Surge voltage</b>                                      | <b>WVDC</b>           | <b>6.3</b>  | <b>10</b> | <b>16</b>                        | <b>25</b> | <b>35</b> | <b>50</b> |                                       |      |      |      |     |
|   | <b>SVDC</b>           | 7.9   | 13        | 20                               | 32        | 44        | 63        |                                       |      |      |      |     |
| <b>Dissipation Factor</b>                                 | <b>WVDC</b>           | <b>6.3</b>  | <b>10</b> | <b>16</b>                        | <b>25</b> | <b>35</b> | <b>50</b> |                                       |      |      |      |     |
|   | <b>Tan δ</b>          | .26   | .22       | .18                              | .16       | .14       | .12       | Add .02 for every 1000uF above 1000uF |      |      |      |     |
| <b>Leakage current</b>                                    |                       | <b>1 Minute</b>   |           |                                  |           |           |           |                                       |      |      |      |     |
|   |                       | .03CV   |           |                                  |           |           |           |                                       |      |      |      |     |
| <b>Low temperature stability Impedance ratio (120 Hz)</b> | <b>WVDC</b>           | <b>6.3</b>  | <b>10</b> | <b>16</b>                        | <b>25</b> | <b>35</b> | <b>50</b> |                                       |      |      |      |     |
|   | <b>-55°C to +20°C</b> | 6   | 6         | 4                                | 4         | 4         | 3         |                                       |      |      |      |     |
| <b>Load Life</b>  |                       | <b>3000 hours at 105°C with rated WVDC and ripple current applied (2000 hrs for D<sub>≤6.3</sub>)</b> |           |                                  |           |           |           |                                       |      |      |      |     |
|   |                       | <b>Capacitance change</b>   |           | ≤20% of initial measured value   |           |           |           |                                       |      |      |      |     |
|   |                       | <b>Dissipation factor</b>   |           | ≤200% of maximum specified value |           |           |           |                                       |      |      |      |     |
|   |                       | <b>Leakage current</b>  |           | ≤100% of maximum specified value |           |           |           |                                       |      |      |      |     |
| <b>Shelf Life</b>   |                       | <b>1000 hours at 105°C with no voltage applied</b>  |           |                                  |           |           |           |                                       |      |      |      |     |
|   |                       | <b>Capacitance change</b>   |           | ≤20% initial measured value      |           |           |           |                                       |      |      |      |     |
|   |                       | <b>Dissipation factor</b>   |           | ≤200% of maximum specified value |           |           |           |                                       |      |      |      |     |
|   |                       | <b>Leakage current</b>  |           | ≤100% of maximum specified value |           |           |           |                                       |      |      |      |     |
| <b>Ripple Current Multipliers</b>                         |                       | <b>Frequency (Hz)</b>   |           |                                  |           |           |           | <b>Temperature (°C)</b>               |      |      |      |     |
|   |                       | <b>Capacitance</b>  | 50        | 120                              | 300       | 1k        | 10k       | 100k                                  | +105 | +85  | +65  | +50 |
|   |                       | <b>C&lt;4.7</b>   | .3        | .43                              | .7        | .54       | .83       | 1.0                                   | 1.0  | 1.73 | 2.19 | 2.4 |
|   |                       | <b>4.7&lt;C≤33</b>  | .38       | .51                              | .62       | .76       | .87       | 1.0                                   | 1.0  | 1.73 | 2.19 | 2.4 |
|   |                       | <b>33&lt;C≤100</b>  | .48       | .6                               | .71       | .85       | .9        | 1.0                                   | 1.0  | 1.73 | 2.19 | 2.4 |
|   |                       | <b>100&lt;C≤270</b>   | .6        | .72                              | .8        | .91       | .95       | 1.0                                   | 1.0  | 1.73 | 2.19 | 2.4 |
|   |                       | <b>270&lt;C≤1000</b>  | .68       | .83                              | .9        | .96       | 1.0       | 1.0                                   | 1.0  | 1.73 | 2.19 | 2.4 |
|   |                       | <b>C&gt;1000</b>  | .82       | .91                              | .98       | .98       | 1.0       | 1.0                                   | 1.0  | 1.73 | 2.19 | 2.4 |



|          |          |            |          |           |             |           |           |
|----------|----------|------------|----------|-----------|-------------|-----------|-----------|
| <b>D</b> | <b>5</b> | <b>6.3</b> | <b>8</b> | <b>10</b> | <b>12.5</b> | <b>16</b> | <b>18</b> |
| <b>S</b> | 2.0      | 2.5        | 3.5      | 5.0       | 5.0         | 7.5       | 7.5       |
| <b>d</b> | 0.5      | 0.5        | 0.6      | 0.6       | 0.6         | 0.8       | 0.8       |

L≤16mm, L<sub>1</sub>=L+1.5mm Max.

L>16mm, L<sub>1</sub>=L+2mm Max.

D<sub>1</sub>=D+0.5mm Max.

S<sub>1</sub>=S+0.5 mm

