

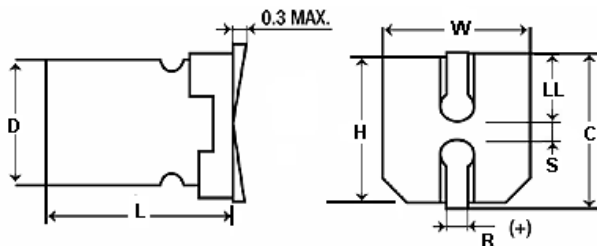
### FEATURES

Small Size – Long Life – Low Impedance

### APPLICATIONS

Filtering – Bypass/ Coupling – De-Coupling

|   |   |   |           |           |           |           |           |
|---|---|---|-----------|-----------|-----------|-----------|-----------|
| <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>D≤6.3mm</b>  | .26                                       | .2        | .16       | .14       | .12       | .12       |
|   | <b>D≥8mm</b>  | .28                                       | .24       | .2        | .16       | .14       | .14       |
| <b>Leakage Current</b>                                    |   | <b>2 Minutes</b>                          |           |           |           |           |           |
|   |   | <b>.01CV or 3uA, Whichever is greater</b> |           |           |           |           |           |
| <b>Low Temperature Stability Impedance Ratio (120 Hz)</b> | <b>Rated WVDC</b>   | <b>6.3</b>                                | <b>10</b> | <b>16</b> | <b>25</b> | <b>35</b> | <b>50</b> |
|   | <b>-25°C to +20°C</b>   | 3   | 2         | 2         | 2         | 2         | 2         |
|   | <b>-40°C to +20°C</b>   | 5   | 4         | 4         | 3         | 3         | 3         |
| <b>Load Life</b>  | <b>5000 hours (2000 hours for D=4,5,6.3mm) at 105°C with rated WVDC</b>   |   |           |           |           |           |           |
|   | <b>Capacitance Change</b>   | ≤30% of initial measured value            |           |           |           |           |           |
|   | <b>Dissipation Factor</b>   | ≤300% of maximum specified value          |           |           |           |           |           |
|   | <b>Leakage Current</b>  | ≤100% of maximum specified value          |           |           |           |           |           |
| <b>Shelf Life</b>   | <b>1000 hours at 85°C with no voltage applied</b>   |   |           |           |           |           |           |
|   | <b>Capacitance Change</b>   | ≤30% of initial measured value            |           |           |           |           |           |
|   | <b>Dissipation Factor</b>   | ≤300% of maximum specified value          |           |           |           |           |           |
|   | <b>Leakage Current</b>  | ≤100% of maximum specified value          |           |           |           |           |           |
| <b>Resistance to Soldering Heat</b>                       | <b>Capacitors placed on a 250°C hot plate for 30 seconds with their electrode terminations facing downward will fulfill the following conditions after being cooled to room temperature</b> |   |           |           |           |           |           |
|   | <b>Capacitance Change</b>   | ≤10% of initial measured value            |           |           |           |           |           |
|   | <b>Dissipation Factor</b>   | ≤100% of maximum specified value          |           |           |           |           |           |
|   | <b>Leakage Current</b>  | ≤100% of maximum specified value          |           |           |           |           |           |
| <b>Ripple Current Multipliers</b>                         | <b>Frequency (Hz)</b>   |   |           |           |           |           |           |
|   | 50  | 120                                       | 300       | 1k        | 100k      |           |           |
|   | .35   | .5  | .64       | 0.83      | 1.0       |           |           |



| D   | L             | W±0.2 | H±0.2 | C±0.2 | R       | LL±0.2 | S±0.2 |
|-----|---------------|-------|-------|-------|---------|--------|-------|
| 4   | 5.4 +0.1/-0.2 | 4.3   | 4.3   | 5.0   | 0.5-0.8 | 1.8    | 1.0   |
| 5   | 5.4 +0.1/-0.2 | 5.3   | 5.3   | 6.0   | 0.5-0.8 | 2.1    | 1.3   |
| 6.3 | 5.4 +0.1/-0.2 | 6.6   | 6.6   | 7.3   | 0.5-0.8 | 2.4    | 2.2   |
| 6.3 | 7.7 +0.1/-0.2 | 6.6   | 6.6   | 7.3   | 0.5-0.8 | 2.4    | 2.2   |
| 8   | 10.2+0.1/-0.2 | 8.3   | 8.3   | 9.0   | 0.7-1.0 | 2.9    | 3.1   |
| 10  | 10.2+0.1/-0.2 | 10.3  | 10.3  | 11.0  | 0.7-1.0 | 3.2    | 4.5   |

# AVD

+105°C, Low Impedance, up to 5000 hours

| Capacitance (μF) | WVDC | IC PART NUMBER | Maximum ESR (Ω) 120 Hz, +20°C | Impedance Ω +20°C, 100kHz | Maximum RMS Ripple Current (mA) 100 kHz, +105°C | Dims DxL (mm) |
|------------------|------|----------------|-------------------------------|---------------------------|---|---------------|
| 1                | 50   | 105AVD050MCR   | 232.1                         | 5                         | 30  | 4x5.4         |
| 2.2              | 50   | 225AVD050MCR   | 90.43                         | 5                         | 30  | 4x5.4         |
| 3.3              | 50   | 335AVD050MCR   | 60.29                         | 5                         | 30  | 4x5.4         |
| 4.7              | 35   | 475AVD035MCR   | 42.33                         | 1.8                       | 80  | 4x5.4         |
| 4.7              | 50   | 475AVD050MDR   | 42.33                         | 1.52                      | 85  | 5x5.4         |
| 10               | 25   | 106AVD025MCR   | 23.21                         | 1.8                       | 80  | 4x5.4         |
| 10               | 35   | 106AVD035MDR   | 19.89                         | 0.76                      | 150   | 5x5.4         |
| 10               | 50   | 106AVD050MER   | 19.89                         | 0.88                      | 165   | 6.3x5.4       |
| 22               | 10   | 226AVD010MCR   | 15.07                         | 1.8                       | 80  | 4x5.4         |
| 22               | 35   | 226AVD035MDR   | 9.04                          | 0.76                      | 150   | 5x5.4         |
| 22               | 50   | 226AVD050MER   | 9.04                          | 0.88                      | 165   | 6.3x5.4       |
| 33               | 10   | 336AVD010MDR   | 10.05                         | 0.76                      | 150   | 5x5.4         |
| 33               | 35   | 336AVD035MER   | 6.03                          | 0.44                      | 230   | 6.3x5.4       |
| 33               | 50   | 336AVD050MEL   | 6.03                          | 0.68                      | 185   | 6.3x7.7       |
| 47               | 6.3  | 476AVD6R3MDR   | 9.17                          | 0.76                      | 150   | 5x5.4         |
| 47               | 25   | 476AVD025MER   | 4.94                          | 0.44                      | 230   | 6.3x5.4       |

| Capacitance (μF) | WVDC | IC PART NUMBER | Maximum ESR (Ω) 120 Hz, +20°C | Impedance Ω +20°C, 100kHz | Maximum RMS Ripple Current (mA) 100 kHz, +105°C | Dims DxL (mm) |
|------------------|------|----------------|-------------------------------|---------------------------|---|---------------|
| 47               | 35   | 476AVD035MEL   | 4.23                          | 0.34                      | 280   | 6.3x7.7       |
| 47               | 50   | 476AVD050MFE   | 4.94                          | 0.34                      | 350   | 8x10.5        |
| 100              | 16   | 107AVD016MER   | 2.65                          | 0.44                      | 230   | 6.3x5.4       |
| 100              | 25   | 107AVD025MEL   | 2.32                          | 0.34                      | 280   | 6.3x7.7       |
| 100              | 35   | 107AVD035MFE   | 2.32                          | 0.17                      | 600   | 8x10.5        |
| 100              | 50   | 107AVD050MGE   | 2.32                          | 0.18                      | 670   | 10x10.5       |
| 220              | 6.3  | 227AVD6R3MER   | 1.96                          | 0.44                      | 230   | 6.3x5.4       |
| 220              | 16   | 227AVD016MEL   | 1.36                          | 0.34                      | 280   | 6.3x7.7       |
| 220              | 25   | 227AVD025MFE   | 1.21                          | 0.17                      | 600   | 8x10.5        |
| 220              | 35   | 227AVD035MGE   | 1.06                          | 0.09                      | 850   | 10x10.5       |
| 330              | 6.3  | 337AVD6R3MFE   | 1.41                          | 0.34                      | 280   | 6.3x7.7       |
| 330              | 16   | 337AVD016MFE   | 1                             | 0.17                      | 600   | 8x10.5        |
| 330              | 25   | 337AVD025MGE   | 0.8                           | 0.09                      | 850   | 10x10.5       |
| 470              | 10   | 477AVD010MFE   | 0.85                          | 0.17                      | 600   | 8x10.5        |
| 470              | 16   | 477AVD016MGE   | 0.71                          | 0.09                      | 850   | 10x10.5       |
| 1000             | 10   | 108AVD010MGE   | 0.4                           | 0.09                      | 850   | 10x10.5       |