



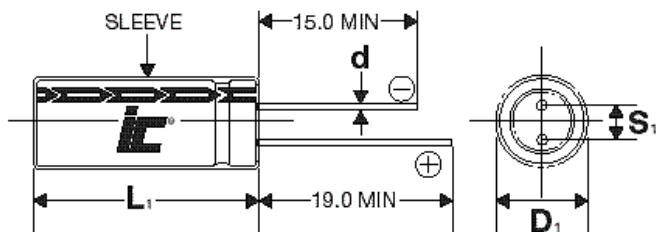
#### FEATURES

Small Size - Low Profile - Lead Free Leads

#### APPLICATIONS

Coupling - Blocking - Bypass - Filtering

| Operating Temperature Range                              |                | -40°C to +85°C                             |                                  |     |      |      |      |                  |     |     |     |     |  |  |  |  |  |
|----------------------------------------------------------|----------------|--------------------------------------------|----------------------------------|-----|------|------|------|------------------|-----|-----|-----|-----|--|--|--|--|--|
| Capacitance Tolerance                                    |                | +20% at 120 Hz, 20°C                       |                                  |     |      |      |      |                  |     |     |     |     |  |  |  |  |  |
| Surge voltage                                            | WVDC           | 6.3                                        | 10                               | 16  | 25   | 35   | 50   |                  |     |     |     |     |  |  |  |  |  |
|                                                          | SVDC           | 7.9                                        | 13                               | 20  | 32   | 44   | 63   |                  |     |     |     |     |  |  |  |  |  |
| Dissipation Factor                                       | WVDC           | 6.3                                        | 10                               | 16  | 25   | 35   | 50   |                  |     |     |     |     |  |  |  |  |  |
|                                                          | tan δ          | .25                                        | .2                               | .17 | .15  | .12  | .1   |                  |     |     |     |     |  |  |  |  |  |
| Leakage current                                          |                | 2 Minutes                                  |                                  |     |      |      |      |                  |     |     |     |     |  |  |  |  |  |
|                                                          |                | .01CV or 3uA, Whichever is greater         |                                  |     |      |      |      |                  |     |     |     |     |  |  |  |  |  |
| Low temperature stability<br>Impedance ratio<br>(120 Hz) | Rated WVDC     | 6.3                                        | 10                               | 16  | 25   | 35   | 50   |                  |     |     |     |     |  |  |  |  |  |
|                                                          | -25°C to +20°C | 5                                          | 4                                | 3   | 2    | 2    | 2    |                  |     |     |     |     |  |  |  |  |  |
|                                                          | -40°C to +20°C | 10                                         | 8                                | 6   | 4    | 4    | 4    |                  |     |     |     |     |  |  |  |  |  |
| Load Life                                                |                | 1000 hours at 85°C with rated WVDC applied |                                  |     |      |      |      |                  |     |     |     |     |  |  |  |  |  |
|                                                          |                | Capacitance change                         | ≤20% of initial measured value   |     |      |      |      |                  |     |     |     |     |  |  |  |  |  |
|                                                          |                | Dissipation factor                         | ≤200% of maximum specified value |     |      |      |      |                  |     |     |     |     |  |  |  |  |  |
|                                                          |                | Leakage current                            | ≥100% of maximum specified value |     |      |      |      |                  |     |     |     |     |  |  |  |  |  |
| Shelf Life                                               |                | 1000 hours at 85°C with no voltage applied |                                  |     |      |      |      |                  |     |     |     |     |  |  |  |  |  |
|                                                          |                | Capacitance change                         | ≤20% of initial measured value   |     |      |      |      |                  |     |     |     |     |  |  |  |  |  |
|                                                          |                | Dissipation factor                         | ≤200% of maximum specified value |     |      |      |      |                  |     |     |     |     |  |  |  |  |  |
|                                                          |                | Leakage current                            | ≥100% of maximum specified value |     |      |      |      |                  |     |     |     |     |  |  |  |  |  |
| Ripple Current Multipliers                               |                | Frequency (Hz)                             |                                  |     |      |      |      | Temperature (°C) |     |     |     |     |  |  |  |  |  |
|                                                          |                | 50                                         | 120                              | 400 | 1k   | 10k  | 100k | 85               | 70  | 65  | 60  | 45  |  |  |  |  |  |
|                                                          |                | 0.85                                       | 1.0                              | 1.1 | 1.13 | 1.15 | 1.4  | 1.0              | 1.4 | 1.6 | 1.7 | 1.8 |  |  |  |  |  |



| D+5 | 4   | 5   | 6.3 | 8   | 10  | 12.5 | 16  |
|-----|-----|-----|-----|-----|-----|------|-----|
| S   | 1.5 | 2   | 2.5 | 3.5 | 5   | 5    | 7.5 |
| d   | .45 | .45 | .45 | .6  | .6  | .6   | .8  |
| B   | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.8  | 0.5 |

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

# RSS

+85°C, 7 to 15mm Height,  
1000 hours

| Capacitance (μF) | WVDC | IC PART NUMBER    | Maximum ESR (Ω)<br>120 Hz,<br>+20°C | Maximum RMS Ripple Current (mA)<br>120 Hz,<br>+85°C | Dims DxL (mm) |
|------------------|------|-------------------|-------------------------------------|-----------------------------------------------------|---------------|
| 1                | 50   | <b>105RSS050M</b> | 165.786                             | 10                                                  | 4x7           |
| 2.2              | 50   | <b>225RSS050M</b> | 75.358                              | 20                                                  | 4x7           |
| 3.3              | 50   | <b>335RSS050M</b> | 50.238                              | 25                                                  | 4x7           |
| 4.7              | 35   | <b>475RSS035M</b> | 42.328                              | 25                                                  | 4x7           |
| 4.7              | 50   | <b>475RSS050M</b> | 35.274                              | 30                                                  | 5x7           |
| 10               | 16   | <b>106RSS016M</b> | 28.184                              | 40                                                  | 4x7           |
| 10               | 35   | <b>106RSS035M</b> | 19.894                              | 45                                                  | 5x7           |
| 10               | 50   | <b>106RSS050M</b> | 16.579                              | 50                                                  | 6.3x7         |
| 22               | 16   | <b>226RSS016M</b> | 12.811                              | 45                                                  | 5x7           |
| 22               | 35   | <b>226RSS035M</b> | 9.043                               | 70                                                  | 6.3x7         |
| 33               | 10   | <b>336RSS010M</b> | 10.0477                             | 50                                                  | 5x7           |
| 33               | 25   | <b>336RSS025M</b> | 7.536                               | 70                                                  | 6.3x7         |

| Capacitance (μF) | WVDC | IC PART NUMBER    | Maximum ESR (Ω)<br>120 Hz,<br>+20°C | Maximum RMS Ripple Current (mA)<br>120 Hz,<br>+85°C | Dims DxL (mm) |
|------------------|------|-------------------|-------------------------------------|-----------------------------------------------------|---------------|
| 47               | 6.3  | <b>476RSS6R3M</b> | 8.818                               | 80                                                  | 5x7           |
| 47               | 16   | <b>476RSS016M</b> | 5.997                               | 80                                                  | 6.3x7         |
| 100              | 6.3  | <b>107RSS6R3M</b> | 4.145                               | 90                                                  | 6.3x7         |
| 100              | 25   | <b>107RSS025M</b> | 2.487                               | 135                                                 | 8x9           |
| 100              | 35   | <b>107RSS035M</b> | 1.989                               | 160                                                 | 10x9          |
| 220              | 10   | <b>227RSS010M</b> | 1.507                               | 165                                                 | 8x9           |
| 220              | 16   | <b>227RSS016M</b> | 1.281                               | 202                                                 | 10x9          |
| 470              | 6.3  | <b>477RSS6R3M</b> | 0.882                               | 238                                                 | 10x9          |
| 470              | 35   | <b>477RSS035M</b> | 0.423                               | 524                                                 | 10x12.5       |
| 1000             | 16   | <b>108RSS016M</b> | 0.282                               | 655                                                 | 12.5x15       |
| 1000             | 35   | <b>108RSS035M</b> | 0.199                               | 1000                                                | 16x15         |
| 2200             | 16   | <b>228RSS016M</b> | 0.1583                              | 940                                                 | 16x15         |