



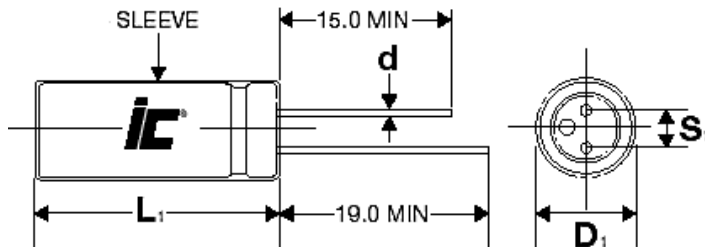
#### FEATURES

Small size – Non/ Bi- Polar

#### APPLICATIONS

Audio Coupling – Crossover Networks

| Operating Temperature Range                        |  | -40°C to +85°C                                     |     |      |      |      |      |                  |     |     |     |
|--|--|--|-----|------|------|------|------|------------------|-----|-----|-----|
| Capacitance Tolerance                              |  | +20% at 120 Hz, 20°C                               |     |      |      |      |      |                  |     |     |     |
| Surge Voltage                                      | WVDC   | 10   | 16  | 25   | 35   | 50   | 63   | 100              |     |     |     |
|  | SVDC   | 13   | 20  | 32   | 44   | 63   | 79   | 125              |     |     |     |
| Dissipation Factor                                 | WVDC   | 10   | 16  | 25   | 35   | 50   | 63   | 100              |     |     |     |
|  | Tan δ  | .24  | .22 | .2   | .16  | .14  | .12  | .1               |     |     |     |
| Leakage Current                                    |  | 5 Minutes<br>.05CV or 3uA,<br>Whichever is greater |     |      |      |      |      |                  |     |     |     |
| Low temperature Stability Impedance Ratio (120 Hz) | WVDC   | 10   | 16  | 25   | 35   | 50   | 63   | 100              |     |     |     |
|  | -25°C to 20°C  | 3  | 2   | 2    | 2    | 2    | 2    | 2                |     |     |     |
|  | -40°C to +20°C   | 8  | 6   | 5    | 4    | 4    | 3    | 3                |     |     |     |
| Load Life  | 2000 hours at 85°C with rated WVDC and rated voltage reversed every 250 hours. |  |     |      |      |      |      |                  |     |     |     |
|  | 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                         | Capacitance  | Frequency (Hz)                                     |     |      |      |      |      | Temperature (°C) |     |     |     |
|  | uF   | 50   | 120 | 400  | 1k   | 10k  | 50k  | +85              | +70 | +60 | +30 |
|  | C<10   | .72  | 1.0 | 1.25 | 1.45 | 1.65 | 1.7  | 1.0              | 1.3 | 1.5 | 1.8 |
|  | 10<C<100   | .75  | 1.0 | 1.19 | 1.36 | 1.53 | 1.57 | 1.0              | 1.3 | 1.5 | 1.8 |
|  | 100<C<1000   | .79  | 1.0 | 1.15 | 1.3  | 1.45 | 1.49 | 1.0              | 1.3 | 1.5 | 1.8 |



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

L<sub>1</sub>=L+2.0mm Max.  
D<sub>1</sub>=D+0.5 Max.  
S<sub>1</sub>=S±0.5 mm

# BPS

+85°C, Bi-Polar, 2000 hours

| Capacitance (µF) | WVDC | IC PART NUMBER | Maximum ESR (Ω) 120 Hz, +20°C | Maximum RMS Ripple Current (mA) 120 Hz, +85°C | Dims DxL (mm) |
|------------------|------|----------------|-------------------------------|---|---------------|
| 0.47             | 50   | 474BPS050M     | 493.832                       | 11  | 5x11          |
| 0.47             | 100  | 474BPS100M     | 352.737                       | 14  | 5x11          |
| 1                | 50   | 105BPS050M     | 232.101                       | 17  | 5x11          |
| 1                | 100  | 105BPS100M     | 215.522                       | 21  | 5x11          |
| 2.2              | 50   | 225BPS050M     | 105.5                         | 25  | 5x11          |
| 2.2              | 100  | 225BPS100M     | 75.357                        | 36  | 6.3x11        |
| 3.3              | 50   | 335BPS050M     | 70.334                        | 27  | 5x11          |
| 3.3              | 100  | 335BPS100M     | 65.31                         | 39  | 6.3x11        |
| 4.7              | 50   | 475BPS050M     | 49.383                        | 34  | 5x11          |
| 4.7              | 63   | 475BPS063M     | 45.856                        | 34  | 5x11          |
| 4.7              | 100  | 475BPS100M     | 45.856                        | 47  | 6.3x11        |
| 10               | 35   | 106BPS035M     | 24.868                        | 43  | 5x11          |
| 10               | 50   | 106BPS050M     | 23.21                         | 52  | 6.3x11        |
| 10               | 63   | 106BPS063M     | 21.552                        | 57  | 6.3x11        |
| 10               | 100  | 106BPS100M     | 21.552                        | 71  | 8x11.5        |
| 22               | 16   | 226BPS016M     | 16.579                        | 60  | 5x11          |
| 22               | 35   | 226BPS035M     | 11.304                        | 75  | 6.3x11        |
| 22               | 50   | 226BPS050M     | 10.55                         | 89  | 8x11.5        |
| 22               | 63   | 226BPS063M     | 9.796                         | 95  | 8x11.5        |
| 22               | 100  | 226BPS100M     | 9.796                         | 135   | 10x16         |
| 33               | 16   | 336BPS016M     | 11.052                        | 64  | 5x11          |
| 33               | 25   | 336BPS025M     | 10.048                        | 80  | 6.3x11        |
| 33               | 50   | 336BPS050M     | 7.033                         | 105   | 8x11.5        |
| 33               | 63   | 336BPS063M     | 6.531                         | 135   | 10x12.5       |
| 33               | 100  | 336BPS100M     | 6.531                         | 220   | 12.5x20       |
| 47               | 10   | 476BPS010M     | 8.466                         | 76  | 5x11          |
| 47               | 25   | 476BPS025M     | 7.055                         | 95  | 6.3x11        |
| 47               | 35   | 476BPS035M     | 5.291                         | 120   | 8x11.5        |
| 47               | 50   | 476BPS050M     | 4.938                         | 150   | 10x12.5       |
| 47               | 63   | 476BPS063M     | 4.586                         | 180   | 10x16         |
| 47               | 100  | 476BPS100M     | 4.586                         | 240   | 12.5x20       |
| 100              | 10   | 107BPS010M     | 3.979                         | 125   | 6.3x11        |
| 100              | 25   | 107BPS025M     | 3.316                         | 160   | 8x11.5        |
| 100              | 35   | 107BPS035M     | 2.487                         | 230   | 10x16         |
| 100              | 50   | 107BPS050M     | 2.321                         | 265   | 10x20         |

| Capacitance (µF) | WVDC | IC PART NUMBER | Maximum ESR (Ω) 120 Hz, +20°C | Maximum RMS Ripple Current (mA) 120 Hz, +85°C | Dims DxL (mm) |
|------------------|------|----------------|-------------------------------|---|---------------|
| 100              | 63   | 107BPS063M     | 2.155                         | 320   | 12.5x20       |
| 100              | 100  | 107BPS100M     | 2.155                         | 425   | 16x25         |
| 220              | 10   | 227BPS010M     | 1.809                         | 215   | 8x11.5        |
| 220              | 16   | 227BPS016M     | 1.658                         | 275   | 10x12.5       |
| 220              | 25   | 227BPS025M     | 1.507                         | 305   | 10x16         |
| 220              | 35   | 227BPS035M     | 1.13                          | 410   | 12.5x20       |
| 220              | 50   | 227BPS050M     | 1.055                         | 480   | 12.5x25       |
| 220              | 63   | 227BPS063M     | 0.98                          | 575   | 16x25         |
| 220              | 100  | 227BPS100M     | 0.98                          | 720   | 18x35.5       |
| 330              | 6.3  | 337BPS6R3M     | 1.407                         | 265   | 8x11          |
| 330              | 16   | 337BPS016M     | 1.105                         | 375   | 10x16         |
| 330              | 35   | 337BPS035M     | 0.754                         | 505   | 12.5x20       |
| 330              | 50   | 337BPS050M     | 0.7033                        | 650   | 16x25         |
| 330              | 63   | 337BPS063M     | 0.653                         | 655   | 16x31.5       |
| 330              | 100  | 337BPS100M     | 0.653                         | 720   | 18x35.5       |
| 470              | 6.3  | 477BPS6R3M     | 0.988                         | 370   | 10x12.5       |
| 470              | 10   | 477BPS010M     | 0.847                         | 410   | 10x16         |
| 470              | 16   | 477BPS016M     | 0.776                         | 485   | 10x20         |
| 470              | 25   | 477BPS025M     | 0.705                         | 540   | 12.5x20       |
| 470              | 35   | 477BPS035M     | 0.529                         | 655   | 12.5x25       |
| 470              | 50   | 477BPS050M     | 0.494                         | 835   | 16x31.5       |
| 470              | 63   | 477BPS063M     | 0.459                         | 965   | 18x35.5       |
| 470              | 100  | 477BPS100M     | 0.459                         | 1030  | 18x42         |
| 1000             | 6.3  | 108BPS6R3M     | 0.464                         | 650   | 10x20         |
| 1000             | 10   | 108BPS010M     | 0.398                         | 720   | 12.5x20       |
| 1000             | 16   | 108BPS016M     | 0.365                         | 855   | 12.5x25       |
| 1000             | 25   | 108BPS025M     | 0.332                         | 950   | 16x25         |
| 1000             | 35   | 108BPS035M     | 0.249                         | 1140  | 16x31.5       |
| 2200             | 6.3  | 228BPS6R3M     | 0.211                         | 1160  | 13x25         |
| 2200             | 10   | 228BPS010M     | 0.211                         | 1280  | 16x25         |
| 2200             | 16   | 228BPS016M     | 0.196                         | 1510  | 16x31.5       |
| 2200             | 25   | 228BPS025M     | 0.181                         | 1620  | 18x35.5       |
| 3300             | 10   | 338BPS010M     | 0.151                         | 1690  | 16x31.5       |
| 3300             | 16   | 338BPS016M     | 0.141                         | 1980  | 18x35.5       |
| 4700             | 10   | 478BPS010M     | 0.113                         | 2160  | 18x35.5       |