



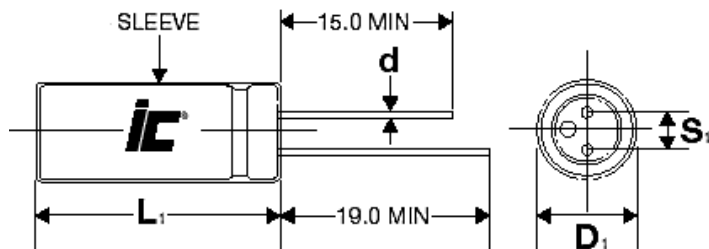
#### FEATURES

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                                                                      |                |     |      |                                  |      |                  |     |     |     |     |
|                                                    |                | .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)<br>120 Hz,<br>+20°C | Maximum RMS Ripple Current (mA)<br>120 Hz,<br>+85°C | Dims DxL (mm) |
|------------------|------|-----------------------------|-------------------------------------|-----------------------------------------------------|---------------|
| 0.47             | 50   | <a href="#">4748BPS050M</a> | 564.379                             | 5                                                   | 5x11          |
| 0.47             | 100  | <a href="#">4748BPS100M</a> | 352.737                             | 10                                                  | 5x11          |
| 1                | 50   | <a href="#">1058BPS050M</a> | 265.258                             | 10                                                  | 5x11          |
| 1                | 100  | <a href="#">1058BPS100M</a> | 165.786                             | 18                                                  | 5x11          |
| 2.2              | 50   | <a href="#">2258BPS050M</a> | 120.572                             | 23                                                  | 5x11          |
| 2.2              | 100  | <a href="#">2258BPS100M</a> | 75.358                              | 30                                                  | 6.3x11        |
| 3.3              | 50   | <a href="#">3358BPS050M</a> | 80.381                              | 28                                                  | 5x11          |
| 3.3              | 100  | <a href="#">3358BPS100M</a> | 50.238                              | 35                                                  | 6.3x11        |
| 4.7              | 50   | <a href="#">4758BPS050M</a> | 56.438                              | 35                                                  | 5x11          |
| 4.7              | 63   | <a href="#">4758BPS063M</a> | 42.328                              | 37                                                  | 5x11          |
| 4.7              | 100  | <a href="#">4758BPS100M</a> | 35.274                              | 44                                                  | 6.3x11        |
| 10               | 35   | <a href="#">1068BPS035M</a> | 23.21                               | 46                                                  | 5x11          |
| 10               | 50   | <a href="#">1068BPS050M</a> | 26.526                              | 54                                                  | 6.3x11        |
| 10               | 63   | <a href="#">1068BPS063M</a> | 19.894                              | 58                                                  | 6.3x11        |
| 10               | 100  | <a href="#">1068BPS100M</a> | 16.579                              | 72                                                  | 8x11.5        |
| 22               | 16   | <a href="#">2268BPS016M</a> | 16.579                              | 60                                                  | 5x11          |
| 22               | 35   | <a href="#">2268BPS035M</a> | 10.55                               | 75                                                  | 6.3x11        |
| 22               | 50   | <a href="#">2268BPS050M</a> | 12.057                              | 90                                                  | 8x11.5        |
| 22               | 63   | <a href="#">2268BPS063M</a> | 9.043                               | 96                                                  | 8x11.5        |
| 22               | 100  | <a href="#">2268BPS100M</a> | 7.536                               | 138                                                 | 10x16         |
| 33               | 16   | <a href="#">3368BPS016M</a> | 11.052                              | 72                                                  | 5x11          |
| 33               | 25   | <a href="#">3368BPS025M</a> | 10.048                              | 82                                                  | 6.3x11        |
| 33               | 50   | <a href="#">3368BPS050M</a> | 8.038                               | 108                                                 | 8x11.5        |
| 33               | 63   | <a href="#">3368BPS063M</a> | 6.029                               | 135                                                 | 10x12.5       |
| 33               | 100  | <a href="#">3368BPS100M</a> | 5.024                               | 200                                                 | 12.5x20       |
| 47               | 10   | <a href="#">4768BPS010M</a> | 8.466                               | 82                                                  | 5x11          |
| 47               | 25   | <a href="#">4768BPS025M</a> | 7.055                               | 95                                                  | 6.3x11        |
| 47               | 35   | <a href="#">4768BPS035M</a> | 4.938                               | 120                                                 | 8x11.5        |
| 47               | 50   | <a href="#">4768BPS050M</a> | 5.644                               | 155                                                 | 10x12.5       |
| 47               | 63   | <a href="#">4768BPS063M</a> | 4.233                               | 185                                                 | 10x16         |
| 47               | 100  | <a href="#">4768BPS100M</a> | 3.527                               | 245                                                 | 12.5x20       |
| 100              | 10   | <a href="#">1078BPS010M</a> | 3.979                               | 125                                                 | 6.3x11        |
| 100              | 25   | <a href="#">1078BPS025M</a> | 3.316                               | 160                                                 | 8x11.5        |
| 100              | 35   | <a href="#">1078BPS035M</a> | 2.321                               | 230                                                 | 10x16         |
| 100              | 50   | <a href="#">1078BPS050M</a> | 2.653                               | 270                                                 | 10x20         |

| 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) |
|------------------|------|----------------------------|-------------------------------------|-----------------------------------------------------|---------------|
| 100              | 63   | <a href="#">107BPS063M</a> | 1.989                               | 325                                                 | 12.5x20       |
| 100              | 100  | <a href="#">107BPS100M</a> | 1.628                               | 430                                                 | 16x25         |
| 220              | 10   | <a href="#">227BPS010M</a> | 1.809                               | 215                                                 | 8x11.5        |
| 220              | 16   | <a href="#">227BPS016M</a> | 1.658                               | 263                                                 | 10x12.5       |
| 220              | 25   | <a href="#">227BPS025M</a> | 1.507                               | 305                                                 | 10x16         |
| 220              | 35   | <a href="#">227BPS035M</a> | 1.055                               | 418                                                 | 12.5x20       |
| 220              | 50   | <a href="#">227BPS050M</a> | 1.206                               | 490                                                 | 12.5x25       |
| 220              | 63   | <a href="#">227BPS063M</a> | 0.904                               | 575                                                 | 16x25         |
| 220              | 100  | <a href="#">227BPS100M</a> | 0.754                               | 650                                                 | 18x35.5       |
| 330              | 6.3  | <a href="#">337BPS6R3M</a> | 1.206                               | 255                                                 | 8x11          |
| 330              | 16   | <a href="#">337BPS016M</a> | 1.105                               | 358                                                 | 10x16         |
| 330              | 35   | <a href="#">337BPS035M</a> | 0.703                               | 520                                                 | 12.5x20       |
| 330              | 50   | <a href="#">337BPS050M</a> | 0.804                               | 660                                                 | 16x25         |
| 330              | 63   | <a href="#">337BPS063M</a> | 0.603                               | 655                                                 | 16x31.5       |
| 330              | 100  | <a href="#">337BPS100M</a> | 0.502                               | 790                                                 | 18x35.5       |
| 470              | 6.3  | <a href="#">477BPS6R3M</a> | 0.979                               | 350                                                 | 10x12.5       |
| 470              | 10   | <a href="#">477BPS010M</a> | 0.847                               | 410                                                 | 10x16         |
| 470              | 16   | <a href="#">477BPS016M</a> | 0.776                               | 465                                                 | 10x20         |
| 470              | 25   | <a href="#">477BPS025M</a> | 0.706                               | 550                                                 | 12.5x20       |
| 470              | 35   | <a href="#">477BPS035M</a> | 0.494                               | 665                                                 | 12.5x25       |
| 470              | 50   | <a href="#">477BPS050M</a> | 0.564                               | 850                                                 | 16x31.5       |
| 470              | 63   | <a href="#">477BPS063M</a> | 0.423                               | 965                                                 | 18x35.5       |
| 470              | 100  | <a href="#">477BPS100M</a> | 0.353                               | 1030                                                | 18x42         |
| 1000             | 6.3  | <a href="#">108BPS6R3M</a> | 0.4603                              | 615                                                 | 10x20         |
| 1000             | 10   | <a href="#">108BPS010M</a> | 0.398                               | 725                                                 | 12.5x20       |
| 1000             | 16   | <a href="#">108BPS016M</a> | 0.365                               | 825                                                 | 12.5x25       |
| 1000             | 25   | <a href="#">108BPS025M</a> | 0.332                               | 965                                                 | 16x25         |
| 1000             | 35   | <a href="#">108BPS035M</a> | 0.232                               | 1160                                                | 16x31.5       |
| 2200             | 6.3  | <a href="#">228BPS6R3M</a> | 0.211                               | 1070                                                | 13x25         |
| 2200             | 10   | <a href="#">228BPS010M</a> | 0.211                               | 1280                                                | 16x25         |
| 2200             | 16   | <a href="#">228BPS016M</a> | 0.196                               | 1460                                                | 16x31.5       |
| 2200             | 25   | <a href="#">228BPS025M</a> | 0.181                               | 1620                                                | 18x35.5       |
| 3300             | 10   | <a href="#">338BPS010M</a> | 0.151                               | 1590                                                | 16x31.5       |
| 3300             | 16   | <a href="#">338BPS016M</a> | 0.141                               | 1890                                                | 18x35.5       |
| 4700             | 10   | <a href="#">478BPS010M</a> | 0.113                               | 1990                                                | 18x35.5       |