



## Aluminum Electrolytic Capacitors

+85°C Non-Polar, Axial Lead

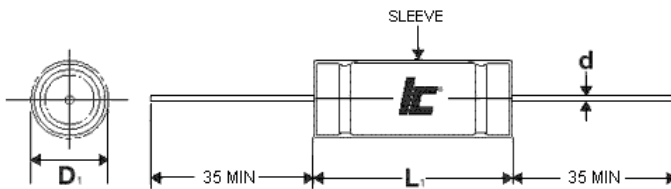
### FEATURES

Small Size – Non/ Bi-Polar

### APPLICATIONS

Audio Coupling – Crossover Networks

|  |                |   |                |                                  |      |      |      |                  |     |     |     |     |  |  |  |  |  |
|--|----------------|---|----------------|----------------------------------|------|------|------|------------------|-----|-----|-----|-----|--|--|--|--|--|
| Operating Temperature Range                        |                | <b>-40°C to +85°C</b>   |                |                                  |      |      |      |                  |     |     |     |     |  |  |  |  |  |
| Capacitance Tolerance                              |                | <b>+20% at 120 Hz, 20°C</b>   |                |                                  |      |      |      |                  |     |     |     |     |  |  |  |  |  |
| Surge Voltage                                      | WVDC           | 16  | 25             | 50                               | 100  |      |      |                  |     |     |     |     |  |  |  |  |  |
|  | SVDC           | 20  | 32             | 63                               | 125  |      |      |                  |     |     |     |     |  |  |  |  |  |
| Dissipation Factor                                 | WVDC           | 16  | 25             | 50                               | 100  |      |      |                  |     |     |     |     |  |  |  |  |  |
|  | Tan δ          | .22   | .2             | .14                              | .1   |      |      |                  |     |     |     |     |  |  |  |  |  |
| Leakage Current                                    |                | <b>5 Minutes</b>  |                |                                  |      |      |      |                  |     |     |     |     |  |  |  |  |  |
|  |                | .05CV or 3uA,<br>Whichever is greater   |                |                                  |      |      |      |                  |     |     |     |     |  |  |  |  |  |
| Low Temperature Stability Impedance Ratio (120 Hz) | WVDC           | 16  | 25             | 50                               | 100  |      |      |                  |     |     |     |     |  |  |  |  |  |
|  | -25°C to 20°C  | 2   | 2              | 2                                | 2    |      |      |                  |     |     |     |     |  |  |  |  |  |
|  | -40°C to +20°C | 6   | 5              | 4                                | 3    |      |      |                  |     |     |     |     |  |  |  |  |  |
| Load Life  |                | <b>2000 hours at 85°C with rated WVDC and rated voltage reversed every 250 hours.</b> |                |                                  |      |      |      |                  |     |     |     |     |  |  |  |  |  |
|  |                | Capacitance Change  |                | ≤20% of initial measured value   |      |      |      |                  |     |     |     |     |  |  |  |  |  |
|  |                | Dissipation Factor  |                | ≤200% of maximum specified value |      |      |      |                  |     |     |     |     |  |  |  |  |  |
|  |                | Leakage Current   |                | ≥100% of maximum specified value |      |      |      |                  |     |     |     |     |  |  |  |  |  |
| Shelf Life   |                | <b>1000 hours at 85°C with no voltage applied</b>                                     |                |                                  |      |      |      |                  |     |     |     |     |  |  |  |  |  |
|  |                | 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  | 22  | 25  |
| d | 0.5 | 0.5 | 0.6 | 0.6 | 0.6  | 0.8 | 0.8 | 0.8 | 0.8 |
| B | 0.5 | 0.5 | 0.5 | 0.5 | 0.8  | 0.5 | 0.5 | 1.0 | 1.0 |

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

mm

# BPA

+85°C, Bi-Polar/ non-polar  
2000 hrs

| 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   | <a href="#">474BPA050M</a> | 493.832                       | 13  | 6x16          |
| 1                | 50   | <a href="#">105BPA050M</a> | 232.101                       | 19  | 6x16          |
| 1                | 100  | <a href="#">105BPA100M</a> | 165.786                       | 25  | 6x16          |
| 2.2              | 50   | <a href="#">225BPA050M</a> | 105.5                         | 30  | 6x16          |
| 2.2              | 100  | <a href="#">225BPA100M</a> | 75.358                        | 36  | 6x16          |
| 3.3              | 50   | <a href="#">335BPA050M</a> | 70.334                        | 37  | 6x16          |
| 3.3              | 100  | <a href="#">335BPA100M</a> | 50.238                        | 46  | 6x16          |
| 4.7              | 50   | <a href="#">475BPA050M</a> | 49.383                        | 46  | 6x16          |
| 4.7              | 100  | <a href="#">475BPA100M</a> | 35.274                        | 55  | 6x16          |
| 10               | 50   | <a href="#">106BPA050M</a> | 23.21                         | 68  | 6x16          |
| 10               | 100  | <a href="#">106BPA100M</a> | 16.579                        | 92  | 8x19          |
| 15               | 25   | <a href="#">156BPA025M</a> | 22.105                        | 73  | 6x16          |
| 15               | 50   | <a href="#">156BPA050M</a> | 15.47                         | 98  | 8x16          |
| 22               | 25   | <a href="#">226BPA025M</a> | 15.072                        | 88  | 6x16          |
| 22               | 50   | <a href="#">226BPA050M</a> | 9.38                          | 120   | 8x16          |
| 22               | 100  | <a href="#">226BPA100M</a> | 7.538                         | 155   | 10x19         |
| 33               | 25   | <a href="#">336BPA025M</a> | 10.048                        | 120   | 8x16          |
| 33               | 50   | <a href="#">336BPA050M</a> | 7.033                         | 145   | 8x19          |
| 33               | 100  | <a href="#">336BPA100M</a> | 5.024                         | 210   | 10x24         |
| 47               | 16   | <a href="#">476BPA016M</a> | 7.76                          | 110   | 6x16          |
| 47               | 25   | <a href="#">476BPA025M</a> | 7.055                         | 140   | 8x16          |

| 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) |
|------------------|------|----------------------------|-------------------------------|---|---------------|
| 47               | 50   | <a href="#">476BPA050M</a> | 4.938                         | 200   | 10x19         |
| 47               | 100  | <a href="#">476BPA100M</a> | 3.527                         | 285   | 12.5x27       |
| 68               | 16   | <a href="#">686BPA016M</a> | 5.364                         | 155   | 8x16          |
| 68               | 25   | <a href="#">686BPA025M</a> | 4.876                         | 204   | 10x19         |
| 68               | 50   | <a href="#">686BPA050M</a> | 3.413                         | 260   | 10x24         |
| 100              | 16   | <a href="#">107BPA016M</a> | 3.647                         | 175   | 8x19          |
| 100              | 25   | <a href="#">107BPA025M</a> | 3.316                         | 235   | 10x19         |
| 100              | 50   | <a href="#">107BPA050M</a> | 2.321                         | 325   | 10x24         |
| 100              | 100  | <a href="#">107BPA100M</a> | 1.658                         | 500   | 16x34         |
| 150              | 25   | <a href="#">157BPA025M</a> | 2.211                         | 320   | 10x19         |
| 220              | 16   | <a href="#">227BPA016M</a> | 1.658                         | 290   | 10x19         |
| 220              | 25   | <a href="#">227BPA025M</a> | 1.507                         | 390   | 10x24         |
| 220              | 50   | <a href="#">227BPA050M</a> | 1.055                         | 600   | 12.5x31       |
| 330              | 16   | <a href="#">337BPA016M</a> | 1.105                         | 450   | 10x24         |
| 330              | 25   | <a href="#">337BPA025M</a> | 1.005                         | 555   | 12.5x27       |
| 330              | 50   | <a href="#">337BPA050M</a> | 0.703                         | 730   | 16x34         |
| 470              | 16   | <a href="#">477BPA016M</a> | 0.776                         | 565   | 10x30         |
| 470              | 25   | <a href="#">477BPA025M</a> | 0.706                         | 665   | 12.5x31       |
| 470              | 50   | <a href="#">477BPA050M</a> | 0.494                         | 860   | 16x39         |
| 1000             | 16   | <a href="#">108BPA016M</a> | 0.365                         | 950   | 12.5x31       |