



## Aluminum Electrolytic Capacitors

+105°C Long Life, Radial Lead

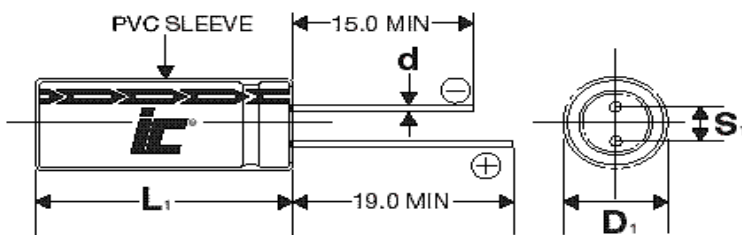
### FEATURES

High Temperature - High Voltage - Long Life

### APPLICATIONS

Switching Power Supplies - Electronic Ballasts

|   |              |   |                                  |            |            |             |            |            |
|---|--------------|---|----------------------------------|------------|------------|-------------|------------|------------|
| <b>Operating Temperature Range</b>                                |              | <b>-25°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>160</b>  | <b>200</b>                       | <b>250</b> | <b>350</b> | <b>400</b>  | <b>450</b> |            |
|   | <b>SVDC</b>  | <b>200</b>  | <b>250</b>                       | <b>300</b> | <b>400</b> | <b>450</b>  | <b>500</b> |            |
| <b>Dissipation Factor</b>   | <b>WVDC</b>  | <b>160</b>  | <b>200</b>                       | <b>250</b> | <b>350</b> | <b>400</b>  | <b>450</b> |            |
|   | <b>tan δ</b> | .15   | .15                              | .15        | .2         | .2          | .2         |            |
| <b>Leakage current</b>  |              | .02CV+25uA<br>2 Minutes                               |                                  |            |            |             |            |            |
| <b>Low temperature stability<br/>Impedance ratio<br/>(120 Hz)</b> |              | <b>Rated WVDC</b>                                     | <b>160</b>                       | <b>200</b> | <b>250</b> | <b>350</b>  | <b>400</b> | <b>450</b> |
|   |              | <b>-25°C to +20°C</b>                                 | 3                                | 3          | 4          | 6           | 6          | 7          |
| <b>Load Life</b>  |              | <b>5000 hours with rated voltage applied at 105°C</b> |                                  |            |            |             |            |            |
|   |              | <b>Capacitance change</b>                             | ≤20% of initial measured value   |            |            |             |            |            |
|   |              | <b>Dissipation factor</b>                             | ≤200% of maximum specified value |            |            |             |            |            |
|   |              | <b>Leakage current</b>                                | ≥100% of maximum specified value |            |            |             |            |            |
| <b>Shelf Life</b>   |              | <b>1000 hours at 105°C with no voltage applied</b>    |                                  |            |            |             |            |            |
|   |              | <b>Capacitance change</b>                             | ≤20% of initial measured value   |            |            |             |            |            |
|   |              | <b>Dissipation factor</b>                             | ≤200% of maximum specified value |            |            |             |            |            |
|   |              | <b>Leakage current</b>                                | ≥100% of maximum specified value |            |            |             |            |            |
| <b>Ripple Current Multipliers</b>                                 |              | <b>Frequency (Hz)</b>                                 |                                  |            |            |             |            |            |
|   |              | <b>WVDC</b>   | <b>120</b>                       | <b>1k</b>  | <b>10k</b> | <b>100k</b> |            |            |
|   |              | ≤100  | 1                                | 1.75       | 2.25       | 2.5         |            |            |
|   |              | >100  | 1                                | 1.67       | 2.05       | 2.25        |            |            |



Lead spacing VS. Case diameter

| D | 10  | 12.5 | 16  | 18  |
|---|-----|------|-----|-----|
| S | 5.0 | 5.0  | 7.5 | 7.5 |
| d | 0.6 | 0.6  | 0.8 | 0.8 |
| B | 1.5 | 1.5  | 1.5 | 1.5 |

$L_1 = L + 1.5$  ( $L < 20$ ) mm

$L_1 = L + 2$  ( $L \geq 20$ )

$D_1 = D + 0.5$

# TXK

**+105°C, High Voltage Low Impedance Long Life, 5000 hours**

| Capacitance (µF) | WVDC | IC PART NUMBER | Maximum ESR (Ω) 120 Hz, +20°C | Maximum RMS Ripple Current (mA) 120 kHz, +105°C | Dims DxL (mm) |
|------------------|------|----------------|-------------------------------|---|---------------|
| 2.2              | 450  | 225TXK450MFH   | 150.715                       | 45  | 8x11.5        |
| 3.3              | 400  | 335TXK400MFH   | 100.477                       | 62  | 8x11.5        |
| 3.3              | 450  | 335TXK450MFC   | 100.477                       | 62  | 8x14          |
| 4.7              | 350  | 475TXK350MFH   | 70.5474                       | 75  | 8x11.5        |
| 4.7              | 450  | 475TXK450MFBW  | 70.5474                       | 85  | 8x16          |
| 6.8              | 250  | 685TXK250MFC   | 36.5705                       | 93  | 8x14          |
| 6.8              | 350  | 685TXK350MFBW  | 48.7607                       | 102   | 8x16          |
| 6.8              | 450  | 685TXK450MGBW  | 48.7607                       | 110   | 10x16         |
| 8.2              | 250  | 825TXK250MFBW  | 30.3267                       | 113   | 8x16          |
| 10               | 160  | 106TXK160MGU   | 24.868                        | 122   | 10x12.5       |
| 10               | 350  | 106TXK350M     | 33.1573                       | 220   | 10x20         |
| 10               | 400  | 106TXK400M     | 33.1573                       | 130   | 10x20         |
| 10               | 400  | 106TXK400MGBW  | 33.1573                       | 135   | 10x16         |
| 10               | 450  | 106TXK450MGJG  | 33.1573                       | 130   | 10x20         |
| 10               | 450  | 106TXK450M     | 33.1573                       | 120   | 13x26         |
| 15               | 350  | 156TXK350MGJG  | 22.1049                       | 182   | 10x20         |
| 15               | 450  | 156TXK450MTJG  | 22.1049                       | 195   | 12.5x20       |
| 22               | 160  | 226TXK160MGBW  | 11.304                        | 202   | 10x16         |
| 22               | 200  | 226TXK200M     | 11.304                        | 350   | 10x20         |
| 22               | 250  | 226TXK250MGJG  | 11.304                        | 225   | 10x20         |
| 22               | 350  | 226TXK350M     | 15.0715                       | 240   | 12.5x20       |
| 22               | 400  | 226TXK400MTJG  | 15.0715                       | 240   | 12.5x20       |
| 22               | 450  | 226TXK450MTJD  | 15.0715                       | 241   | 12.5x25       |
| 33               | 160  | 336TXK160M     | 7.536                         | 275   | 10x20         |
| 33               | 200  | 336TXK200M     | 7.536                         | 315   | 12.5x20       |
| 33               | 250  | 336TXK250MTJG  | 7.536                         | 315   | 12.5x20       |
| 33               | 400  | 336TXK400MKJG  | 10.0477                       | 343   | 16x20         |
| 33               | 450  | 336TXK450MKJD  | 10.0477                       | 340   | 16x25         |
| 47               | 160  | 476TXK160M     | 5.291                         | 350   | 12.5x20       |
| 47               | 200  | 476TXK200M     | 5.291                         | 175   | 12.5x20       |
| 47               | 250  | 476TXK250M     | 5.291                         | 385   | 12.5x25       |
| 47               | 350  | 476TXK350M     | 7.0547                        | 440   | 16x25         |

| Capacitance (µF) | WVDC | IC PART NUMBER | Maximum ESR (Ω) 120 Hz, +20°C | Maximum RMS Ripple Current (mA) 120 kHz, +105°C | Dims DxL (mm) |
|------------------|------|----------------|-------------------------------|---|---------------|
| 47               | 400  | 476TXK400M     | 7.0547                        | 442   | 16x25         |
| 47               | 450  | 476TXK450MKAG  | 7.0547                        | 440   | 16x30         |
| 68               | 160  | 686TXK160M     | 3.657                         | 475   | 12.5x25       |
| 68               | 200  | 686TXK200M     | 3.657                         | 475   | 12.5x25       |
| 68               | 200  | 686TXK200MKJG  | 3.657                         | 490   | 16x20         |
| 68               | 250  | 686TXK250M     | 3.657                         | 540   | 16x25         |
| 68               | 350  | 686TXK350M     | 4.8761                        | 580   | 16x31.5       |
| 68               | 400  | 686TXK400MKAD  | 4.8761                        | 620   | 16x35         |
| 68               | 450  | 686TXK450MKCG  | 4.8761                        | 610   | 16x40         |
| 82               | 350  | 826TXK350MKAD  | 4.0436                        | 680   | 16x35         |
| 82               | 400  | 826TXK400MKCG  | 4.0436                        | 690   | 16x40         |
| 82               | 450  | 826TXK450MLAD  | 4.0436                        | 670   | 18x35         |
| 100              | 160  | 107TXK160M     | 2.487                         | 645   | 16x25         |
| 100              | 200  | 107TXK200M     | 2.487                         | 650   | 16x25         |
| 100              | 250  | 107TXK250M     | 2.487                         | 710   | 16x31.5       |
| 100              | 350  | 107TXK350M     | 3.3157                        | 780   | 18x35.5       |
| 100              | 400  | 107TXK400M     | 3.3157                        | 780   | 18x35.5       |
| 100              | 450  | 107TXK450MLCG  | 3.3157                        | 780   | 18x40         |
| 120              | 350  | 127TXK350MLAD  | 2.7631                        | 850   | 18x35         |
| 120              | 400  | 127TXK400MLCG  | 2.7631                        | 900   | 18x40         |
| 120              | 450  | 127TXK450MLCD  | 2.7631                        | 900   | 18x45         |
| 150              | 160  | 157TXK160M     | 1.658                         | 840   | 16x31.5       |
| 150              | 200  | 157TXK200M     | 1.658                         | 850   | 16x31.5       |
| 150              | 250  | 157TXK250MKAD  | 1.658                         | 900   | 16x35         |
| 150              | 350  | 157TXK350MLCG  | 2.2105                        | 1000  | 18x40         |
| 150              | 400  | 157TXK400MLCD  | 2.2105                        | 1050  | 18x45         |
| 150              | 450  | 157TXK450MLCG  | 2.2105                        | 1050  | 18x40         |
| 150              | 450  | 157TXK450MNCG  | 2.2105                        | 1050  | 22x40         |
| 220              | 160  | 227TXK160MKAD  | 1.1304                        | 1000  | 16x35         |
| 220              | 200  | 227TXK200M     | 1.1304                        | 1050  | 18x35.5       |
| 220              | 250  | 227TXK250M     | 1.1304                        | 1120  | 18x40         |