

# AXZ

## +105°C Low Impedance Surface Mount Aluminum Electrolytic Capacitors



### Features

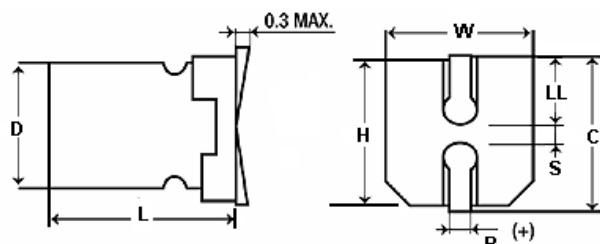
- Standard case sizes
- Low impedance
- Lead Free Leads
- Extended life

### Applications

- Bypass
- Coupling
- filtering
- De-Coupling

### Specifications

|                                                          |                |                                                                                                                                                                                      |                                  |     |      |                  |     |      |  |
|----------------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----|------|------------------|-----|------|--|
| Operating Temperature Range                              |                | -55°C to +105°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  |      |  |
|                                                          | D≤6.3mm        | .24                                                                                                                                                                                  | .2                               | .16 | .14  | .12              | .12 |      |  |
|                                                          | D>8mm          | .28                                                                                                                                                                                  | .24                              | .2  | .16  | .14              | .14 |      |  |
| 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 | 3                                                                                                                                                                                    | 2                                | 2   | 2    | 2                | 2   |      |  |
|                                                          | -40°C to +20°C | 5                                                                                                                                                                                    | 4                                | 4   | 3    | 3                | 3   |      |  |
| Load Life                                                |                | 2000 hours(D<6.3mm,1000 Hrs.) at 105°C with rated WVDC and ripple current applied                                                                                                    |                                  |     |      |                  |     |      |  |
|                                                          |                | Capacitance change                                                                                                                                                                   | <25% 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                                                                                                                                                                   | <25% of initial measured value   |     |      |                  |     |      |  |
|                                                          |                | Dissipation factor                                                                                                                                                                   | <200% of maximum specified value |     |      |                  |     |      |  |
|                                                          |                | Leakage current                                                                                                                                                                      | >100% of maximum specified value |     |      |                  |     |      |  |
| Resistance to soldering heat                             |                | Capacitors placed on a 250°C hot plate for 30 seconds with their electrode terminations facing downward will fulfill the following conditions after being cooled to room temperature |                                  |     |      |                  |     |      |  |
|                                                          |                | Capacitance change                                                                                                                                                                   | <10% of initial measured value   |     |      |                  |     |      |  |
|                                                          |                | Dissipation factor                                                                                                                                                                   | <100% of maximum specified value |     |      |                  |     |      |  |
|                                                          |                | Leakage current                                                                                                                                                                      | >100% of maximum specified value |     |      |                  |     |      |  |
| Ripple Current Multipliers                               |                | Frequency (Hz)                                                                                                                                                                       |                                  |     |      | Temperature (°C) |     |      |  |
|                                                          |                | 50                                                                                                                                                                                   | 120                              | 1k  | 100k | 105              | 85  | 65   |  |
|                                                          |                | .45                                                                                                                                                                                  | .5                               | .83 | 1.0  | 1.0              | 1.7 | 1.45 |  |



| D   | L             | W±0.2 | H±0.2 | C±0.2 | R       | P±0.2 |
|-----|---------------|-------|-------|-------|---------|-------|
| 4   | 5.4 +0.1/-0.2 | 4.3   | 4.3   | 5.0   | 0.5-0.8 | 1.0   |
| 5   | 5.4 +0.1/-0.2 | 5.3   | 5.3   | 6.0   | 0.5-0.8 | 1.4   |
| 6.3 | 5.4 +0.1/-0.2 | 6.6   | 6.6   | 7.3   | 0.5-0.8 | 2.2   |
| 6.3 | 5.8 +0.1/-0.2 | 6.6   | 6.6   | 7.3   | 0.5-0.8 | 2.2   |
| 6.3 | 7.7 +0.1/-0.2 | 6.6   | 6.6   | 7.3   | 0.5-0.8 | 2.2   |
| 8   | 6.2 +0.1/-0.2 | 8.3   | 8.3   | 9.0   | 0.7-1.0 | 3.2   |
| 8   | 10.2+0.1/-0.2 | 8.3   | 8.3   | 9.0   | 0.7-1.0 | 3.2   |
| 10  | 10.2+0.1/-0.2 | 10    | 10    | 11.0  | 0.7-1.0 | 4.6   |



# AXZ

+105°C, Low Impedance 2000 hours

| Capacitance (µF) | WVDC | IC PART NUMBER | Maximum ESR (mΩ) 120 Hz, +20°C | Impedance Ω +20°C/-10°C 100kHz | Maximum RMS Ripple Current (mA) 100 kHz, +105°C | Dims DxL (mm) |
|------------------|------|----------------|--------------------------------|--------------------------------|-------------------------------------------------|---------------|
| 1                | 50   | 105AXZ050M     | 198.944                        | 5                              | 30                                              | 4x5.4         |
| 2.2              | 50   | 225AXZ050M     | 90.429                         | 5                              | 30                                              | 4x5.4         |
| 3.3              | 50   | 335AXZ050M     | 60.286                         | 5                              | 30                                              | 4x5.4         |
| 4.7              | 35   | 475AXZ035M     | 42.33                          | 1.8                            | 80                                              | 4x5.4         |
| 4.7              | 50   | 475AXZ050M     | 42.328                         | 1.52                           | 85                                              | 5x5.4         |
| 6.8              | 50   | 685AXZ050M     | 29.256                         | 1.2                            | 120                                             | 5x5.4         |
| 10               | 25   | 106AXZ025M     | 23.21                          | 1.8                            | 80                                              | 4x5.4         |
| 10               | 35   | 106AXZ035M     | 19.89                          | 0.76                           | 150                                             | 5x5.4         |
| 10               | 50   | 106AXZ050M     | 19.894                         | 0.88                           | 165                                             | 6.3x5.4       |
| 15               | 16   | 156AXZ016M     | 17.68                          | 1.8                            | 80                                              | 4x5.4         |
| 15               | 35   | 156AXZ035M     | 13.263                         | 0.76                           | 150                                             | 5x5.4         |
| 15               | 50   | 156AXZ050M     | 13.263                         | 0.88                           | 165                                             | 6.3x5.4       |
| 22               | 10   | 226AXZ010M     | 15.07                          | 1.8                            | 80                                              | 4x5.4         |
| 22               | 35   | 226AXZ035M     | 9.04                           | 0.76                           | 150                                             | 5x5.4         |
| 22               | 50   | 226AXZ050M     | 9.043                          | 0.88                           | 165                                             | 6.3x5.4       |
| 27               | 6.3  | 276AXZ6R3M     | 14.737                         | 1.8                            | 80                                              | 4x5.4         |
| 27               | 16   | 276AXZ016M     | 9.824                          | 0.76                           | 150                                             | 5x5.4         |
| 27               | 35   | 276AXZ035M     | 7.368                          | 0.44                           | 230                                             | 6.3x5.4       |
| 27               | 50   | 276AXZ050M     | 7.368                          | 0.68                           | 185                                             | 6.3x7.7       |
| 33               | 10   | 336AXZ010M     | 10.05                          | 0.76                           | 150                                             | 5x5.4         |
| 33               | 35   | 336AXZ035M     | 6.03                           | 0.44                           | 230                                             | 6.3x5.4       |
| 33               | 50   | 336AXZ050M     | 6.029                          | 0.68                           | 185                                             | 6.3x7.7       |
| 47               | 6.3  | 476AXZ6R3M     | 8.47                           | 0.76                           | 150                                             | 5x5.4         |
| 47               | 35   | 476AXZ035M     | 4.23                           | 0.44                           | 230                                             | 6.3x5.4       |
| 47               | 50   | 476AXZ050M     | 4.233                          | 0.68                           | 185                                             | 6.3x7.7       |
| 56               | 6.3  | 566AXZ6R3M     | 7.11                           | 0.76                           | 150                                             | 5x5.4         |
| 56               | 25   | 566AXZ025M     | 4.145                          | 0.44                           | 230                                             | 6.3x5.4       |

| Capacitance (µF) | WVDC | IC PART NUMBER | Maximum ESR (mΩ) 120 Hz, +20°C | Impedance Ω +20°C/-10°C 100kHz | Maximum RMS Ripple Current (mA) 100 kHz, +105°C | Dims DxL (mm) |
|------------------|------|----------------|--------------------------------|--------------------------------|-------------------------------------------------|---------------|
| 56               | 35   | 566AXZ035M     | 3.553                          | 0.34                           | 280                                             | 6.3x7.7       |
| 56               | 50   | 566AXZ050M     | 4.145                          | 0.34                           | 350                                             | 8x10.5        |
| 68               | 25   | 686AXZ025M     | 3.41                           | 0.44                           | 230                                             | 6.3x5.4       |
| 68               | 35   | 686AXZ035M     | 2.93                           | 0.34                           | 280                                             | 6.3x7.7       |
| 68               | 50   | 686AXZ050M     | 3.413                          | 0.34                           | 350                                             | 8x10.5        |
| 100              | 16   | 107AXZ016M     | 2.65                           | 0.44                           | 230                                             | 6.3x5.4       |
| 100              | 25   | 107AXZ025M     | 2.32                           | 0.34                           | 280                                             | 6.3x7.7       |
| 100              | 50   | 107AXZ050M     | 2.321                          | 0.18                           | 300                                             | 8x10.5        |
| 150              | 10   | 157AXZ010M     | 2.21                           | 0.44                           | 230                                             | 6.3x5.4       |
| 150              | 16   | 157AXZ016M     | 1.77                           | 0.34                           | 280                                             | 6.3x7.7       |
| 150              | 35   | 157AXZ035MD8   | 1.55                           | 0.17                           | 600                                             | 8x10.5        |
| 150              | 50   | 157AXZ050M     | 1.547                          | 0.18                           | 670                                             | 10x10.5       |
| 220              | 6.3  | 227AXZ6R3M     | 1.81                           | 0.44                           | 230                                             | 6.3x5.4       |
| 220              | 16   | 227AXZ016M     | 1.206                          | 0.34                           | 280                                             | 6.3x7.7       |
| 220              | 35   | 227AXZ035M     | 1.06                           | 0.17                           | 600                                             | 8x10.5        |
| 220              | 50   | 227AXZ050M     | 1.055                          | 0.18                           | 670                                             | 10x10.5       |
| 330              | 6.3  | 337AXZ6R3M     | 1.206                          | 0.34                           | 280                                             | 6.3x7.7       |
| 330              | 16   | 337AXZ016M     | 1.01                           | 0.17                           | 450                                             | 10x7.7        |
| 330              | 25   | 337AXZ025M     | 0.804                          | 0.17                           | 600                                             | 8x10.5        |
| 330              | 35   | 337AXZ035M     | 0.703                          | 0.09                           | 850                                             | 10x10.5       |
| 470              | 16   | 477AXZ016M     | 0.706                          | 0.17                           | 600                                             | 8x10.5        |
| 470              | 25   | 477AXZ025M     | 0.564                          | 0.09                           | 850                                             | 10x10.5       |
| 680              | 6.3  | 687AXZ6R3MD8   | 0.683                          | 0.17                           | 450                                             | 8x10.5        |
| 680              | 16   | 687AXZ016M     | 0.488                          | 0.09                           | 850                                             | 10x10.5       |
| 1000             | 6.3  | 108AXZ6R3M     | 0.464                          | 0.17                           | 600                                             | 8x10.5        |
| 1000             | 10   | 108AXZ010M     | 0.398                          | 0.09                           | 850                                             | 10x10.5       |
| 1500             | 6.3  | 158AXZ6R3M     | 0.309                          | 0.09                           | 850                                             | 10x10.5       |