

# AXZ

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



### Features

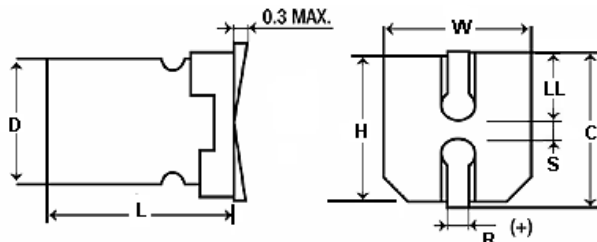
- Standard case sizes
- Low impedance
- Lead Free Leads
- Extended life

### Applications

- Bypass
- Coupling
- filtering
- De-Coupling

### Specifications

|   |   |   |           |           |                         |           |           |  |
|---|---|---|-----------|-----------|-------------------------|-----------|-----------|--|
| <b>Operating Temperature Range</b>                        |   | <b>-55°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>6.3</b>                                | <b>10</b> | <b>16</b> | <b>25</b>               | <b>35</b> | <b>50</b> |  |
|   | <b>SVDC</b>   | 7.9                                       | 13        | 20        | 32                      | 44        | 63        |  |
| <b>Dissipation Factor</b>                                 | <b>WVDC</b>   | <b>6.3</b>                                | <b>10</b> | <b>16</b> | <b>25</b>               | <b>35</b> | <b>50</b> |  |
|   | <b>D≤6.3mm</b>  | .24                                       | .2        | .16       | .14                     | .12       | .12       |  |
|   | <b>D&gt;8mm</b>   | .28                                       | .24       | .2        | .16                     | .14       | .14       |  |
| <b>Leakage current</b>                                    |   | <b>2 Minutes</b>                          |           |           |                         |           |           |  |
|   |   | <b>.01CV or 3uA, Whichever is greater</b> |           |           |                         |           |           |  |
| <b>Low temperature stability Impedance ratio (120 Hz)</b> | <b>Rated WVDC</b>   | <b>6.3</b>                                | <b>10</b> | <b>16</b> | <b>25</b>               | <b>35</b> | <b>50</b> |  |
|   | <b>-25°C to +20°C</b>   | 3   | 2         | 2         | 2                       | 2         | 2         |  |
|   | <b>-40°C to +20°C</b>   | 5   | 4         | 4         | 3                       | 3         | 3         |  |
| <b>Load Life</b>  | <b>2000 hours (D≤6.3mm, 1000 Hrs.) at 105°C with rated WVDC and ripple current applied</b>  |   |           |           |                         |           |           |  |
|   | <b>Capacitance change</b>   | <25% 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 85°C with no voltage applied</b>   |   |           |           |                         |           |           |  |
|   | <b>Capacitance change</b>   | <25% of initial measured value            |           |           |                         |           |           |  |
|   | <b>Dissipation factor</b>   | <200% of maximum specified value          |           |           |                         |           |           |  |
|   | <b>Leakage current</b>  | >100% of maximum specified value          |           |           |                         |           |           |  |
| <b>Resistance to soldering heat</b>                       | <b>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</b> |   |           |           |                         |           |           |  |
|   | <b>Capacitance change</b>   | <10% of initial measured value            |           |           |                         |           |           |  |
|   | <b>Dissipation factor</b>   | <100% of maximum specified value          |           |           |                         |           |           |  |
|   | <b>Leakage current</b>  | >100% of maximum specified value          |           |           |                         |           |           |  |
| <b>Ripple Current Multipliers</b>                         | <b>Frequency (Hz)</b>   |   |           |           | <b>Temperature (°C)</b> |           |           |  |
|   | 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       |

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