

AXZ

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



FEATURES

- Wide Capacitance Range 1.0 to 1,500 μ F
- Solvent Proof
- Low Impedance
- Operating Voltage Range: 6.3WVDC to 50WVDC
- Extended Life

SPECIFICATIONS

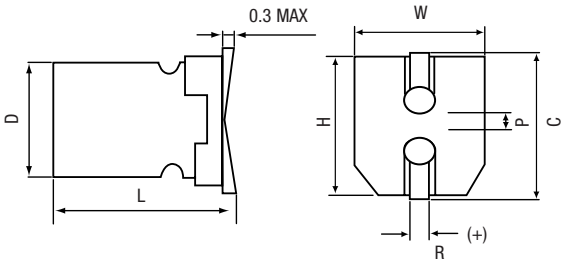
| | | | | | | | |
|--|--|--|-----|-----|-----|-----|-----|
| Capacitance Tolerance | | $\pm 20\%$ at 120Hz, 20°C | | | | | |
| Operating Temperature Range | | -55°C to $+105^\circ\text{C}$ | | | | | |
| Dissipation Factor 120Hz, 20°C (Max) $\tan \delta$ | WVDC | 6.3 | 10 | 16 | 25 | 35 | 50 |
| | D=4-6.3 | .24 | .20 | .16 | .14 | .12 | .12 |
| | D=8,10 | .28 | .24 | .20 | .16 | .14 | .14 |
| | | Note: For above D.F. specifications, add .02 for every 1000 μ F above 1000 μ F | | | | | |
| Leakage current | Time | 2 minutes | | | | | |
| | L.C. | .01 CV or 3 μ A, whichever is greater | | | | | |
| Impedance Ratio at Low Temperature (120Hz) | $-25^\circ\text{C}/20^\circ\text{C}$ | 3 | 2 | 2 | 2 | 2 | 2 |
| | $-40^\circ\text{C}/20^\circ\text{C}$ | 5 | 4 | 4 | 3 | 3 | 3 |
| Load Life | 2,000 hours at 105°C with rated voltage (D \leq 6.3, 1000hrs.) | | | | | | |
| | Capacitance change Dissipation factor Leakage current | $\leq 25\%$ of initial measured values $\leq 200\%$ initial specified value $\leq 100\%$ Initial specified value | | | | | |
| Shelf Life | 1000 hours at 105°C with no applied voltage. | | | | | | |
| Resistance to Soldering Heat | Capacitors placed on a 250°C hot plate for 30 seconds with their electrode terminals facing downward will fulfill the following conditions after being cooled to room temperature. | | | | | | |
| | Capacitance change Dissipation factor Leakage current | $\leq 10\%$ of the initial measured value \leq The initial specified value \leq The Initial specified value | | | | | |

PHYSICAL DIMENSIONS

| WVDC (SV) / (μF) | 6.3 (7.9) | 10 (13) | 16 (20) | 25 (32) | 35 (44) | 50 (63) |
|------------------|-----------|---------|---------|---------|---------|---------|
| 1 | | | | | | 4x5.8 |
| 2.2 | | | | | | 4x5.8 |
| 3.3 | | | | | | 4x5.8 |
| 4.7 | | | | | 4x5.8 | 5x5.8 |
| 6.8 | | | | | | 5x5.8 |
| 10 | | | | 4x5.8 | 5x5.8 | 6.3x5.8 |
| 15 | | | 4x5.8 | | 5x5.8 | 6.3x5.8 |
| 22 | | 4x5.8 | | | 5x5.8 | 6.3x5.8 |
| 27 | 4x5.8 | | 5x5.8 | | 6.3x5.8 | 6.3x7.7 |
| 33 | | 5x5.8 | | | 6.3x5.8 | 6.3x7.7 |
| 47 | 5x5.8 | | | | 6.3x5.8 | 6.3x7.7 |
| 56 | 5x5.8 | | | 6.3x5.8 | 6.3x7.7 | 8x10.2 |
| 68 | | | | 6.3x5.8 | 6.3x7.7 | 8x10.2 |
| 100 | | | 6.3x5.8 | 6.3x7.7 | | 8x10.2 |
| 150 | | 6.3x5.8 | 6.3x7.7 | | 8x10.2 | 10x10.2 |
| 220 | 6.3x5.8 | | 6.3x7.7 | | 8x10.2 | 10x10.2 |
| 330 | 6.3x7.7 | | 10x7.7 | 8x10.2 | 10x10.2 | |
| 470 | | | 8x10.2 | 10x10.2 | | |
| 680 | 8x10.2 | | 10x10.2 | | | |
| 1000 | 8x10.2 | 10x10.2 | | | | |
| 1500 | 10x10.2 | | | | | |

DxL (mm)

DIMENSIONS



| D+0.5 MAX | L | W±0.2 | H±0.2 | C±0.2 | R | P±0.2 |
|-----------|---------------|-------|-------|-------|---------|-------|
| 4 | 5.8 +0.1/-0.2 | 4.3 | 4.3 | 5.0 | 0.5~0.8 | 1.0 |
| 5 | 5.8 +0.1/-0.2 | 5.3 | 5.3 | 6.0 | 0.5~0.8 | 1.4 |
| 6.3 | 5.8 +0.3 MAX | 6.6 | 6.6 | 7.3 | 0.5~0.8 | 2.2 |
| 6.3 | 7.7 +0.3 MAX | 6.6 | 6.6 | 7.3 | 0.5~0.8 | 2.2 |
| 8 | 10.2 +0.3 MAX | 8.3 | 8.3 | 9.0 | 0.7~1.0 | 3.2 |
| 10 | 10.2 +0.3 MAX | 10.3 | 10.3 | 11.0 | 0.7~1.0 | 4.6 |

(mm)

STANDARD PART LISTING

| Capacitance (µF) | WVDC | IC [®] PART NUMBER | Maximum ESR Ω 120Hz +20°C | Impedance Ω 100kHz +20°C | Maximum RMS Ripple Current (mA) at 100kHz, +105°C | Dimensions DxL (mm) |
|------------------|------|-----------------------------|---------------------------------|--------------------------------|---|---------------------|
| 1 | 50 | 105AXZ050M | 198.944 | 5 | 30 | 4x5.8 |
| 2.2 | 50 | 225AXZ050M | 90.429 | 5 | 30 | 4x5.8 |
| 3.3 | 50 | 335AXZ050M | 60.286 | 5 | 30 | 4x5.8 |
| 4.7 | 35 | 475AXZ035M | 42.328 | 1.8 | 80 | 4x5.8 |
| 4.7 | 50 | 475AXZ050M | 42.328 | 1.52 | 85 | 5x5.8 |
| 6.8 | 50 | 685AXZ050M | 29.256 | 1.2 | 120 | 5x5.8 |
| 10 | 25 | 106AXZ025M | 23.210 | 1.8 | 80 | 4x5.8 |
| 10 | 35 | 106AXZ035M | 19.894 | .76 | 150 | 5x5.8 |
| 10 | 50 | 106AXZ050M | 19.894 | .88 | 165 | 6.3x5.8 |
| 15 | 16 | 156AXZ016M | 17.684 | 1.8 | 80 | 4x5.8 |
| 15 | 35 | 156AXZ035M | 13.263 | .76 | 150 | 5x5.8 |
| 15 | 50 | 156AXZ050M | 13.263 | .88 | 165 | 6.3x5.8 |
| 22 | 10 | 226AXZ010M | 15.071 | 1.8 | 80 | 4x5.8 |
| 22 | 35 | 226AXZ035M | 9.043 | .76 | 150 | 5x5.8 |
| 22 | 50 | 226AXZ050M | 9.043 | .88 | 165 | 6.3x5.8 |
| 27 | 6.3 | 276AXZ6R3M | 14.737 | 1.8 | 80 | 4x5.8 |
| 27 | 16 | 276AXZ016M | 9.824 | .76 | 150 | 5x5.8 |
| 27 | 35 | 276AXZ035M | 7.368 | .44 | 230 | 6.3x5.8 |
| 27 | 50 | 276AXZ050M | 7.368 | .68 | 185 | 6.3x7.7 |
| 33 | 10 | 336AXZ010M | 10.048 | .76 | 150 | 5x5.8 |
| 33 | 35 | 336AXZ035M | 6.029 | .44 | 230 | 6.3x5.8 |
| 33 | 50 | 336AXZ050M | 6.029 | .68 | 185 | 6.3x7.7 |
| 47 | 6.3 | 476AXZ6R3M | 8.466 | .76 | 150 | 5x5.8 |
| 47 | 35 | 476AXZ035M | 4.233 | .44 | 230 | 6.3x5.8 |
| 47 | 50 | 476AXZ050M | 4.233 | .68 | 185 | 6.3x7.7 |
| 56 | 6.3 | 566AXZ6R3M | 7.105 | .76 | 150 | 5x5.8 |
| 56 | 25 | 566AXZ025M | 4.145 | .44 | 230 | 6.3x5.8 |

| Capacitance (µF) | WVDC | IC [®] PART NUMBER | Maximum ESR Ω 120Hz +20°C | Impedance Ω 100kHz +20°C | Maximum RMS Ripple Current (mA) at 100kHz, +105°C | Dimensions DxL (mm) |
|------------------|------|-----------------------------|---------------------------------|--------------------------------|---|---------------------|
| 56 | 35 | 566AXZ035M | 3.553 | .34 | 280 | 6.3x7.7 |
| 56 | 50 | 566AXZ050M | 4.145 | .34 | 300 | 8x10.2 |
| 68 | 25 | 686AXZ025M | 3.413 | .44 | 230 | 6.3x5.8 |
| 68 | 35 | 686AXZ035M | 2.926 | .34 | 280 | 6.3x7.7 |
| 68 | 50 | 686AXZ050M | 3.413 | .34 | 300 | 8x10.2 |
| 100 | 16 | 107AXZ016M | 2.653 | .44 | 230 | 6.3x5.8 |
| 100 | 25 | 107AXZ025M | 2.321 | .34 | 290 | 6.3x7.7 |
| 100 | 50 | 107AXZ050M | 2.321 | .34 | 300 | 8x10.2 |
| 150 | 10 | 157AXZ010M | 2.210 | .44 | 230 | 6.3x5.8 |
| 150 | 16 | 157AXZ016M | 1.768 | .34 | 280 | 6.3x7.7 |
| 150 | 35 | 157AXZ035MD8 | 1.547 | .17 | 450 | 8x10.2 |
| 150 | 50 | 157AXZ050M | 1.547 | .18 | 670 | 10x10.2 |
| 220 | 6.3 | 227AXZ6R3M | 1.809 | .44 | 230 | 6.3x5.8 |
| 220 | 16 | 227AXZ016M | 1.206 | .34 | 280 | 6.3x7.7 |
| 220 | 35 | 227AXZ035M | 1.055 | .17 | 450 | 8x10.2 |
| 220 | 50 | 227AXZ050M | 1.055 | .18 | 670 | 10x10.2 |
| 330 | 6.3 | 337AXZ6R3M | 1.206 | .34 | 280 | 6.3x7.7 |
| 330 | 16 | 337AXZ016M | 1.005 | .17 | 450 | 10x7.7 |
| 330 | 25 | 337AXZ025M | 0.804 | .17 | 450 | 8x10.2 |
| 330 | 35 | 337AXZ035M | 0.703 | .09 | 670 | 10x10.2 |
| 470 | 16 | 477AXZ016M | 0.705 | .17 | 450 | 8x10.2 |
| 470 | 25 | 477AXZ025M | 0.564 | .09 | 670 | 10x10.2 |
| 680 | 6.3 | 687AXZ6R3MD8 | 0.683 | .17 | 450 | 8x10.2 |
| 680 | 16 | 687AXZ016M | 0.488 | .09 | 670 | 10x10.2 |
| 1000 | 6.3 | 108AXZ6R3M | 0.464 | .17 | 450 | 8x10.2 |
| 1000 | 10 | 108AXZ010M | 0.398 | .09 | 670 | 10x10.2 |
| 1500 | 6.3 | 158AXZ6R3M | 0.332 | .09 | 670 | 10x10.2 |