# GAZ

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


## FEATURES

- *Wide Capacitance Range .1 µF to 100 µF*
- *Solvent Proof*
- *Low Impedance*
- *Low Profile*
- *Operating Voltage Range: 6.3 WVDC to 50 WVDC*
- *Extended Life*

## SPECIFICATIONS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Capacitance Tolerance** | | **±20% at 120Hz, 20°C** | | | | | |
| **Operating Temperature Range** | | **-55°C to +105°C** | | | | | |
| **Dissipation Factor 120Hz, 20°C (Max)** | **WVDC** | 6.3 | 10 | 16 | 25 | 35 | 50 |
| | **tan δ** | .22 | .20 | .16 | .14 | .12 | .12 |
| **Leakage current** | **Time** | 2 minutes | | | | | |
| | | .01 CV or 3µA, whichever is greater | | | | | |
| **Impedance (120Hz) Ratio at Low Temperature** | **-25°C/20°C** | 2 | 2 | 2 | 2 | 2 | 2 |
| | **-40°C/20°C** | 5 | 4 | 4 | 3 | 3 | 3 |
| **Load Life** | **1000 hours at 105°C with rated voltage** | | | | | | |
| | Capacitance change<br>Dissipation factor<br>Leakage current | | | | | | ≤ 25% of initial measured values<br>≤ 200% initial specified value<br>≤100% Initial specified value |
| **Shelf Life** | **1000 hours at 105°C with no applied voltage. Units will meet load specifications.** | | | | | | |
| **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<br>Dissipation factor<br>Leakage current | | | | | | ≤ 10% of the initial measured value<br>≤ 100% of specified value<br>≤ 100% of specified value |

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## STANDARD PART LISTING

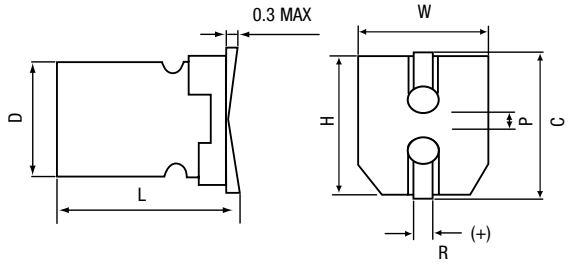
| Capacitance (µF) | WVDC | IC PART NUMBER | Maximum ESR Ω 120Hz,+20°C | Impedance Ω at 100Hz, +20°C | Maximum RMS Ripple Current (mA) at 100Hz, +105°C | Dimensions DxL (mm) |
|---|---|---|---|---|---|---|
| 1 | 35 | **105GAZ035M** | 198.944 | 3.9 | 60 | 4x5.4 |
| 1 | 50 | **105GAZ050M** | 198.944 | 4.9 | 30 | 4x5.4 |
| 2.2 | 35 | **225GAZ035M** | 90.429 | 3.6 | 60 | 4x5.4 |
| 2.2 | 50 | **225GAZ050M** | 90.429 | 4.5 | 30 | 4x5.4 |
| 3.3 | 35 | **335GAZ035M** | 60.286 | 3 | 60 | 4x5.4 |
| 3.3 | 50 | **335GAZ050M** | 60.286 | 3.7 | 30 | 4x5.4 |
| 4.7 | 35 | **475GAZ035M** | 42.328 | 2.5 | 60 | 4x5.4 |
| 4.7 | 50 | **475GAZ050M** | 42.328 | 3.1 | 41 | 5x5.4 |
| 6.8 | 25 | **685GAZ025M** | 34.132 | 2.7 | 60 | 4x5.4 |
| 6.8 | 35 | **685GAZ035M** | 29.256 | 2.2 | 60 | 5x5.4 |
| 6.8 | 50 | **685GAZ050M** | 29.256 | 2.7 | 55 | 6.3x5.4 |
| 10 | 16 | **106GAZ016M** | 26.526 | 3.3 | 60 | 4x5.4 |
| 10 | 35 | **106GAZ035M** | 19.894 | 1.9 | 70 | 5x5.4 |
| 10 | 50 | **106GAZ050M** | 19.894 | 2.4 | 70 | 6.3x5.4 |
| 22 | 6.3 | **226GAZ6R3M** | 18.086 | 3.2 | 60 | 4x5.4 |
| 22 | 16 | **226GAZ016M** | 12.057 | 1.8 | 85 | 5x5.4 |
| 22 | 35 | **226GAZ035M** | 9.043 | 1 | 120 | 6.3x5.4 |
| 33 | 10 | **336GAZ010M** | 10.048 | 1.7 | 75 | 5x5.4 |
| 33 | 25 | **336GAZ025M** | 7.033 | 1 | 140 | 6.3x5.4 |
| 47 | 6.3 | **476GAZ6R3M** | 8.466 | 2 | 80 | 5x5.4 |
| 47 | 16 | **476GAZ016M** | 5.644 | 1.1 | 140 | 6.3x5.4 |
| 68 | 10 | **686GAZ010M** | 4.876 | 1.1 | 130 | 6.3x5.4 |
| 100 | 10 | **107GAZ010M** | 3.316 | .9 | 150 | 6.3x5.4 |

## PHYSICAL DIMENSIONS

| (µF) \ WVDC (SV) | 6.3 (7.9) | 10 (16) | 16 (20) | 25 (32) | 35 (44) | 50 (63) |
|---|---|---|---|---|---|---|
| **1** | → | → | → | → | 4x5.4 | 4x5.4 |
| **2.2** | → | → | → | → | 4x5.4 | 4x5.4 |
| **3.3** | → | → | → | → | 4x5.4 | 4x5.4 |
| **4.7** | → | → | → | → | 4x5.4 | 5x5.4 |
| **6.8** | → | → | → | 4x5.4 | 5x5.4 | 6.3x5.4 |
| **10** | → | → | 4x5.4 | → | 5x5.4 | 6.3x5.4 |
| **22** | 4x5.4 | → | 5x5.4 | → | 6.3x5.4 | |
| **33** | → | 5x5.4 | → | 6.3x5.4 | | |
| **47** | 5x5.4 | → | 6.3x5.4 | | | |
| **68** | → | 6.3x5.4 | | | | |
| **100** | → | 6.3x5.4 | | | | |

**(mm)**

## DIMENSIONS




| $D_{+0.5\ MAX}$ | L | $W_{\pm0.2}$ | $H_{\pm0.2}$ | $C_{\pm0.2}$ | R | $P_{\pm0.2}$ |
|---|---|---|---|---|---|---|
| 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 |

**(mm)**