# Alchip™-MZE Series

- Endurance : 7,000 to 8,000 hours at 105℃
- Low impedance
- Rated voltage range : 6.3 to 50V
- Nominal capacitance range : 10 to 470μF
- Suitable for high reliability products
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- **RoHS Compliant**

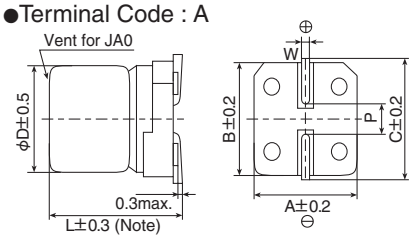
MVY P76 → Longer life → MLA P84 → Longer life → **MZE**

## ◆SPECIFICATIONS

| Items | Characteristics | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Category Temperature Range** | -25 to +105℃ | | | | | | | |
| **Rated Voltage Range** | 6.3 to 50Vdc | | | | | | | |
| **Capacitance Tolerance** | ±20%(M) | | | | | | | (at 20℃,120Hz) |
| **Leakage Current** | I=0.01CV or 3μA, whichever is greater<br>Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) | | | | | | | (at 20℃, after 2 minutes) |
| **Dissipation Factor (tanδ)** | Rated voltage (Vdc) | 6.3V | 10V | 16V | 25V | 35V | 50V | |
| | tanδ (Max.) | 0.32 | 0.28 | 0.26 | 0.16 | 0.14 | 0.14 | (at 20℃,120Hz) |
| **Low Temperature Characteristics (Max. Impedance Ratio)** | Rated voltage(Vdc) | 6.3V | 10V | 16V | 25V | 35V | 50V | |
| | Z(-10℃)/Z(+20℃) | 4 | 3 | 2 | 2 | 2 | 2 | (at 120Hz) |
| **Endurance** | The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for specified time at 105℃.<br>Time: E73 & F73 : 7,000 hours; F90 to JA0 : 8,000 hours<br>Capacitance change: ≦±30% of the initial value<br>D.F. (tanδ): ≦300% of the initial specified value<br>Leakage current: ≦The initial specified value | | | | | | | |
| **Shelf Life** | The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.<br>Capacitance change: ≦±30% of the initial value<br>D.F. (tanδ): ≦300% of the initial specified value<br>Leakage current: ≦The initial specified value | | | | | | | |

## ◆DIMENSIONS [mm]

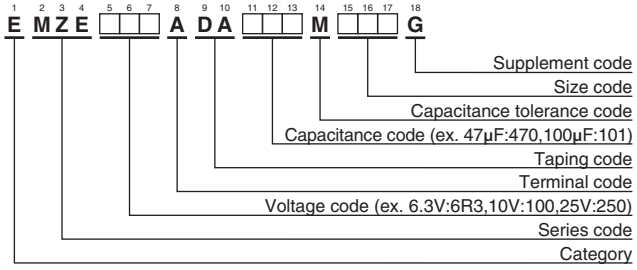
●Terminal Code : A




Note : L±0.5 for HA0 and JA0

| Size code | D | L | A | B | C | W | P |
|---|---|---|---|---|---|---|---|
| **E73** | 5 | 7.0 | 5.3 | 5.3 | 5.9 | 0.5 to 0.8 | 1.4 |
| **F73** | 6.3 | 7.0 | 6.6 | 6.6 | 7.2 | 0.5 to 0.8 | 1.9 |
| **F90** | 6.3 | 8.7 | 6.6 | 6.6 | 7.2 | 0.5 to 0.8 | 1.9 |
| **HA0** | 8 | 10.0 | 8.3 | 8.3 | 9.0 | 0.7 to 1.1 | 3.1 |
| **JA0** | 10 | 10.0 | 10.3 | 10.3 | 11.0 | 0.7 to 1.1 | 4.5 |

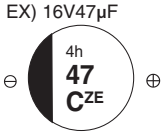
## ◆PART NUMBERING SYSTEM




Please refer to "Product code guide (surface mount type)"

## ◆MARKING

EX) 16V47μF




●Rated voltage symbol

| Rated voltage (Vdc) | 6.3 | 10 | 16 | 25 | 35 | 50 |
|---|---|---|---|---|---|---|
| Symbol | j | A | C | E | V | H |

Product specifications in this catalog are subject to change without notice.Request our product specifications before purchase and/or use. Please use our products based on the information contained in this catalog and product specifications.

# Alchip™-MZE Series

## ◆STANDARD RATINGS

| WV (Vdc) | Cap (μF) | Size code | Impedance (Ωmax/20℃, 100kHz) | Rated ripple current (mArms/105℃, 100kHz) | Part No. |
|---|---|---|---|---|---|
| 6.3 | 47 | E73 | 2.2 | 95 | EMZE6R3ADA470ME73G |
| | 100 | F73 | 1.1 | 140 | EMZE6R3ADA101MF73G |
| | 220 | F90 | 1.0 | 230 | EMZE6R3ADA221MF90G |
| | 330 | F90 | 1.0 | 230 | EMZE6R3ADA331MF90G |
| | 470 | HA0 | 0.22 | 600 | EMZE6R3ADA471MHA0G |
| 10 | 33 | E73 | 2.2 | 95 | EMZE100ADA330ME73G |
| | 150 | F73 | 1.1 | 140 | EMZE100ADA151MF73G |
| 16 | 22 | E73 | 2.2 | 95 | EMZE160ADA220ME73G |
| | 47 | F73 | 1.1 | 140 | EMZE160ADA470MF73G |
| | 100 | F73 | 1.1 | 140 | EMZE160ADA101MF73G |
| | 150 | F90 | 1.0 | 230 | EMZE160ADA151MF90G |
| | 220 | F90 | 1.0 | 230 | EMZE160ADA221MF90G |
| | 330 | HA0 | 0.22 | 600 | EMZE160ADA331MHA0G |
| | 470 | JA0 | 0.16 | 850 | EMZE160ADA471MJA0G |
| 25 | 22 | E73 | 2.2 | 95 | EMZE250ADA220ME73G |
| | 33 | F73 | 1.1 | 140 | EMZE250ADA330MF73G |
| | 47 | F73 | 1.1 | 140 | EMZE250ADA470MF73G |
| | 100 | F90 | 1.0 | 230 | EMZE250ADA101MF90G |
| | 220 | HA0 | 0.22 | 600 | EMZE250ADA221MHA0G |
| | 330 | JA0 | 0.16 | 850 | EMZE250ADA331MJA0G |
| 35 | 10 | E73 | 2.2 | 95 | EMZE350ADA100ME73G |
| | 10 | F73 | 1.1 | 140 | EMZE350ADA100MF73G |
| | 22 | E73 | 2.2 | 95 | EMZE350ADA220ME73G |
| | 22 | F73 | 1.1 | 140 | EMZE350ADA220MF73G |
| | 33 | F90 | 1.0 | 230 | EMZE350ADA330MF90G |
| | 47 | F90 | 1.0 | 230 | EMZE350ADA470MF90G |
| | 100 | HA0 | 0.22 | 600 | EMZE350ADA101MHA0G |
| | 220 | JA0 | 0.16 | 850 | EMZE350ADA221MJA0G |
| 50 | 47 | HA0 | 0.53 | 350 | EMZE500ADA470MHA0G |
| | 100 | JA0 | 0.35 | 670 | EMZE500ADA101MJA0G |

## ◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

| Frequency(Hz) / Capacitance(μF) | 120 | 1k | 10k | 100k |
|---|---|---|---|---|
| 10 to 150 | 0.40 | 0.75 | 0.90 | 1.00 |
| 220 to 470 | 0.50 | 0.85 | 0.94 | 1.00 |

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5℃ rise. When long life performance is required in actual use, the rms ripple current has to be reduced.

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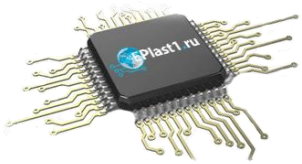
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.




**Как с нами связаться**

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