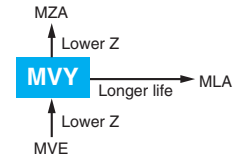


Alchip™-MVY Series

- Endurance : 1,000 to 5,000 hours at 105°C
- Low impedance
- For digital equipment, especially DC-DC converters
- Solvent resistant type except 80 & 100V_{dc} (see PRECAUTIONS AND GUIDELINES)
- Vibration resistant structure
- RoHS2 Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.



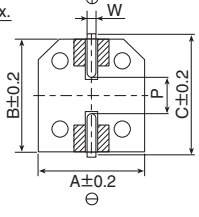
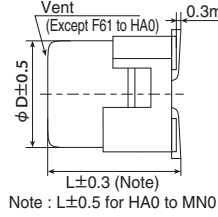
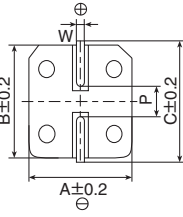
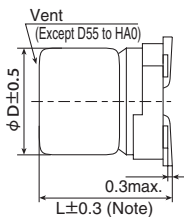
SPECIFICATIONS

| Items | Characteristics | | | | | | | | | | | |
|---|---|---|------|------|------|------|--------------------------------------|------|-----|------|--|---|
| Category | -55 to +105°C (6.3 to 63V _{dc}) -40 to +105°C (80 & 100V _{dc}) | | | | | | | | | | | |
| Temperature Range | | | | | | | | | | | | |
| Rated Voltage Range | 6.3 to 100V _{dc} | | | | | | | | | | | |
| Capacitance Tolerance | ±20% (M) (at 20°C, 120Hz) | | | | | | | | | | | |
| Leakage Current | I=0.01CV or 3μA, whichever is greater. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 2 minutes) | | | | | | | | | | | |
| Dissipation Factor (tan δ) | Rated voltage (V _{dc}) | 6.3V | 10V | 16V | 25V | 35V | 50V | 63V | 80V | 100V | When nominal capacitance exceeds 1,000μF, add 0.02 to the value above for each 1,000μF increase. (at 20°C, 120Hz) | |
| | tan δ (Max.) | D55 to F80 | 0.24 | 0.20 | 0.16 | 0.14 | 0.12 | 0.12 | — | — | | — |
| | | HA0 & JA0 | 0.28 | 0.24 | 0.20 | 0.16 | 0.14 | 0.12 | — | — | | — |
| Low Temperature Characteristics (Max. Impedance Ratio) | Rated voltage (V _{dc}) | 6.3V | 10V | 16V | 25V | 35V | 50V | 63V | 80V | 100V | (at 120Hz) | |
| | Z(-40°C)/Z(+20°C) | D55 to JA0 | 3 | 2 | 2 | 2 | 2 | 2 | — | — | | — |
| | | KE0 to MN0 | 10 | 8 | 6 | 4 | 3 | 3 | 3 | 3 | | 3 |
| Endurance | The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for specified time at 105°C. | | | | | | | | | | | |
| | Time | D55 to F80 : 1,000 hours HA0 & JA0 : 2,000 hours KE0 to MN0 : 5,000 hours | | | | | | | | | | |
| | Rated voltage | 6.3V _{dc} (D55 to JA0) | | | | | 6.3 to 100V _{dc} | | | | | |
| | Capacitance change | ≤ ±30% of the initial value | | | | | ≤ ±20% of the initial value | | | | | |
| | D.F. (tan δ) | ≤300% of the initial specified value | | | | | ≤200% of the initial specified value | | | | | |
| | Leakage current | ≤The initial specified value | | | | | ≤The initial specified value | | | | | |
| Shelf Life | The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4. | | | | | | | | | | | |
| | Rated voltage | 6.3V _{dc} (D55 to JA0) | | | | | 6.3 to 100V _{dc} | | | | | |
| | Capacitance change | ≤ ±30% of the initial value | | | | | ≤ ±20% of the initial value | | | | | |
| | D.F. (tan δ) | ≤300% of the initial specified value | | | | | ≤200% of the initial specified value | | | | | |
| | Leakage current | ≤The initial specified value | | | | | ≤The initial specified value | | | | | |

DIMENSIONS [mm]

- Terminal Code : A
- Size code : D55 to MN0

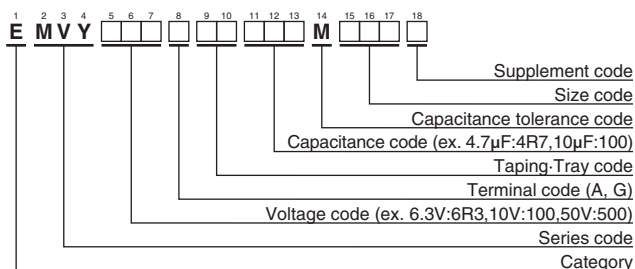
- Terminal Code : G (Vibration resistant structure)
- Size code : F61 to MN0



▨ : Dummy terminals

| Size code | D | L | A | B | C | W | P |
|-----------|------|------|------|------|------|------------|-----|
| D55 | 4 | 5.2 | 4.3 | 4.3 | 5.1 | 0.5 to 0.8 | 1.0 |
| E55 | 5 | 5.2 | 5.3 | 5.3 | 5.9 | 0.5 to 0.8 | 1.4 |
| F55 | 6.3 | 5.2 | 6.6 | 6.6 | 7.2 | 0.5 to 0.8 | 1.9 |
| F61 | 6.3 | 5.8 | 6.6 | 6.6 | 7.2 | 0.5 to 0.8 | 1.9 |
| F80 | 6.3 | 7.7 | 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 |
| KE0 | 12.5 | 13.5 | 13.0 | 13.0 | 13.7 | 1.0 to 1.3 | 4.2 |
| KG5 | 12.5 | 16.0 | 13.0 | 13.0 | 13.7 | 1.0 to 1.3 | 4.2 |
| LH0 | 16 | 16.5 | 17.0 | 17.0 | 18.0 | 1.0 to 1.3 | 6.5 |
| LN0 | 16 | 21.5 | 17.0 | 17.0 | 18.0 | 1.0 to 1.3 | 6.5 |
| MH0 | 18 | 16.5 | 19.0 | 19.0 | 20.0 | 1.0 to 1.3 | 6.5 |
| MN0 | 18 | 21.5 | 19.0 | 19.0 | 20.0 | 1.0 to 1.3 | 6.5 |

PART NUMBERING SYSTEM



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

MARKING

D55 to JA0
EX) 6.3V100μF

KE0 to MN0
EX) 16V1,000μF





Alchip™-MVY Series

◆STANDARD RATINGS

Table with columns: WV (Vdc), Cap (µF), Size code, Impedance (Ω max./20°C, 100kHz), Rated ripple current (mA rms/105°C, 100kHz), Part No. The table is organized into multiple sections based on WV (6.3, 10, 16, 25, 50, 63, 80, 100) and Cap values.

□ : Enter the appropriate terminal code.
Production of the products shown in [] is scheduled to be discontinued.
*1: Assembly boards with the designated products attached cannot be cleaned.

◆RATED RIPPLE CURRENT MULTIPLIERS

● Frequency Multipliers

Table with columns: Size code, Capacitance(µF), Frequency(Hz), 120, 1k, 10k, 100k. Rows include D55 to JA0 and KE0 to MNO.

The deterioration of aluminum electrolytic capacitors accelerates their life due to the internal heating produced by ripple current. For details, refer to Section "5-3 Ripple Current Effect on Lifetime" in the catalog, Technical Note.

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.



- Always read "Notes on Use" before using the product in order to enable you to use the product correctly and prevent any faults and accidents from occurring.
- Request the Product Specification on the product of NIPPON CHEMI-CON CORPORATION to refer to it as well as this brochure prior to the order of the products. Some specific notes on use of the ordered product may be described in the specifications.
- The products listed in this catalog are designed and manufactured for general electronics equipment use and are not intended for use in applications that can adversely affect human life; where the malfunction of equipment may cause damage to life or property. In addition, our products are not intended to be used in specific applications that may cause a major social impact. Please consult with us in advance of usage of our products in the following listed applications. ① Aerospace equipment ② Power generation equipment such as thermal power, nuclear power etc. ③ Medical equipment ④ Transport equipment (automobiles, trains, ships, etc.) ⑤ Transportation control equipment ⑥ Disaster prevention / crime prevention equipment ⑦ Highly publicized information processing equipment ⑧ Submarine equipment ⑨ Other applications that are not considered general-purpose applications.
- The circuits described as examples in this catalog and the "delivery specifications" are featured in order to show the operations and usage of our products, however, this fact does not guarantee that the circuits are available to function in your equipment systems. We are not in any case responsible for any failures or damage caused by the use of information contained herein. You should examine our products, of which the characteristics are described in the "delivery specifications" and other documents, and determine whether or not our products suit your requirements according to the specifications of your equipment systems. Therefore, you bear final responsibility regarding the use of our products.
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In addition, we have an established system with enhanced traceability, therefore we will limit the applicable lot items for any potential compensation.

[Part Numbering System](#)

[Part Numbering System \(Appendix\)](#)

[Standardization](#)

[Available Items by Manufacturing Locations](#)

[Environmental Measures](#)

[Technical Note](#)

[Precautions and Guidelines](#)

[Recommended Soldering Conditions](#)

[Taping, Lead-preforming and Packaging](#)

[Available Terminals for Snap-in and Screw Mount Type](#)

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