

Alchip™ - MVK Series

- Endurance : 1,000 to 2,000 hours at 105°C
- Suitable to fit for downsized equipment
- Solvent resistant type
- RoHS Compliant
- MVK series will be discontinued, strongly recommended MVE series

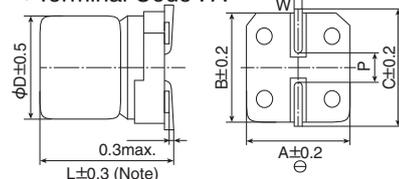


◆ SPECIFICATIONS

| Items | Characteristics | | | | | | | |
|---|--|--------------------------------------|--------------|--------------|--------------------------------------|--------------|--------------|------------------|
| Category Temperature Range | -40 to +105°C | | | | | | | |
| Rated Voltage Range | 6.3 to 50V _{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 (tanδ) | Rated voltage (V _{dc}) | 6.3V | 10V | 16V | 25V | 35V | 50V | (at 20°C, 120Hz) |
| | tanδ (Max.) | D55 to F55 H63 to JA0 | 0.30 0.40 | 0.24 0.30 | 0.20 0.26 | 0.16 0.16 | 0.14 0.14 | |
| Low Temperature Characteristics (Max. Impedance Ratio) | Rated voltage (V _{dc}) | 6.3V | 10V | 16V | 25V | 35V | 50V | (at 120Hz) |
| | Z(-25°C)/Z(+20°C) | 4 | 3 | 2 | 2 | 2 | 2 | |
| | Z(-40°C)/Z(+20°C) | 10 | 8 | 6 | 4 | 3 | 3 | |
| Endurance | The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for the specified period of time at 105°C. | | | | | | | |
| | Case code | D55 to F55 | | | H63 to JA0 | | | |
| | Time | 1,000hours | | | 2,000hours | | | |
| | Capacitance change | ≤±30% of the initial value | | | ≤±20% of the initial value | | | |
| | D.F. (tanδ) | ≤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 the specified time 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. | | | | | | | |
| | Case code | D55 to F55 | | | H63 to JA0 | | | |
| | Time | 500hours | | | 1,000hours | | | |
| | Capacitance change | ≤±25% of the initial value | | | ≤±20% of the initial value | | | |
| | D.F. (tanδ) | ≤200% 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



Note : L±0.5 for H63 to JA0

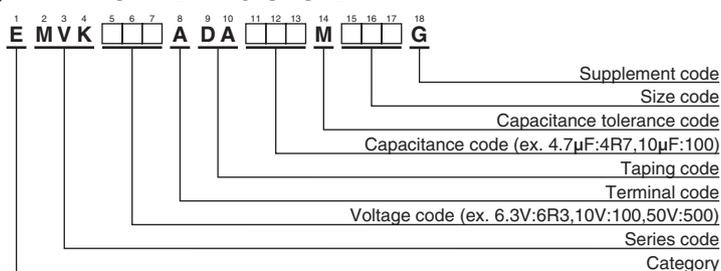
| Size code | D | L | A | B | C | W | P |
|-----------|-----|------|------|------|------|------------|-----|
| D55 | 4 | 5.2 | 4.3 | 4.3 | 5.1 | 0.5 to 0.8 | 1.0 |
| E55 | 5 | 5.2 | 5.3 | 5.3 | 5.9 | 0.5 to 0.8 | 1.4 |
| F55 | 6.3 | 5.2 | 6.6 | 6.6 | 7.2 | 0.5 to 0.8 | 1.9 |
| H63 | 8 | 6.3 | 8.3 | 8.3 | 9.0 | 0.5 to 0.8 | 2.3 |
| 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 |

◆ MARKING

EX) 6.3V100μF



◆ PART NUMBERING SYSTEM



Specifications in this bulletin are subject to change without notice.

◆STANDARD RATINGS

| WV (Vdc) | Cap (μF) | Case code | tanδ | Rated ripple current (mA _{rms} /105°C,120Hz) | Part No. | WV (Vdc) | Cap (μF) | Case code | tanδ | Rated ripple current (mA _{rms} /105°C,120Hz) | Part No. |
|----------|----------|-----------|------|---|--------------------|----------|----------|-----------|------|---|--------------------|
| 6.3 | 22 | D55 | 0.30 | 21 | EMVK6R3ADA220MD55G | 35 | 4.7 | D55 | 0.14 | 15 | EMVK350ADA4R7MD55G |
| | 47 | E55 | 0.30 | 36 | EMVK6R3ADA470ME55G | | 10 | E55 | 0.14 | 25 | EMVK350ADA100ME55G |
| | 100 | F55 | 0.30 | 56 | EMVK6R3ADA101MF55G | | 22 | F55 | 0.14 | 40 | EMVK350ADA220MF55G |
| | 330 | HA0 | 0.40 | 290 | EMVK6R3ADA331MHA0G | | 33 | H63 | 0.14 | 80 | EMVK350ADA330MH63G |
| | 1,000 | JA0 | 0.40 | 410 | EMVK6R3ADA102MJA0G | | 220 | JA0 | 0.14 | 375 | EMVK350ADA221MJA0G |
| 10 | 33 | E55 | 0.24 | 34 | EMVK100ADA330ME55G | 50 | 1.0 | D55 | 0.12 | 5.6 | EMVK500ADA1R0MD55G |
| | 100 | H63 | 0.30 | 90 | EMVK100ADA101MH63G | | 2.2 | D55 | 0.12 | 10 | EMVK500ADA2R2MD55G |
| | 220 | HA0 | 0.30 | 180 | EMVK100ADA221MHA0G | | 3.3 | D55 | 0.12 | 14 | EMVK500ADA3R3MD55G |
| 16 | 10 | D55 | 0.20 | 16 | EMVK160ADA100MD55G | | 4.7 | E55 | 0.12 | 19 | EMVK500ADA4R7ME55G |
| | 22 | E55 | 0.20 | 30 | EMVK160ADA220ME55G | | 10 | F55 | 0.12 | 29 | EMVK500ADA100MF55G |
| | 47 | F55 | 0.20 | 48 | EMVK160ADA470MF55G | | 22 | H63 | 0.12 | 70 | EMVK500ADA220MH63G |
| | 470 | JA0 | 0.26 | 460 | EMVK160ADA471MJA0G | | 33 | HA0 | 0.12 | 140 | EMVK500ADA330MHA0G |
| 25 | 33 | F55 | 0.16 | 45 | EMVK250ADA330MF55G | | 47 | HA0 | 0.12 | 170 | EMVK500ADA470MHA0G |
| | 47 | H63 | 0.16 | 80 | EMVK250ADA470MH63G | | 100 | JA0 | 0.12 | 310 | EMVK500ADA101MJA0G |
| | 100 | HA0 | 0.16 | 180 | EMVK250ADA101MHA0G | | | | | | |
| | 330 | JA0 | 0.16 | 450 | EMVK250ADA331MJA0G | | | | | | |

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

United Chemi-Con (UCC):

[EMVK500ADA470MHA0G](#) [EMVK250ADA470MH63G](#) [EMVK100ADA101MH63G](#) [EMVK350ADA330MH63G](#)
[EMVK500ADA330MHA0G](#) [EMVK500ADA4R7ME55G](#) [EMVK6R3ADA102MJA0G](#) [EMVK100ADA101MH60G](#)
[EMVK100ADA330ME55G](#) [EMVK160ADA100MD55G](#) [EMVK160ADA220ME55G](#) [EMVK160ADA470MF55G](#)
[EMVK160ADA471MJA0G](#) [EMVK160ADB470MF60G](#) [EMVK250ADA101MHA0G](#) [EMVK250ADA330MF55G](#)
[EMVK250ADA331MJA0G](#) [EMVK250ADA470MH60G](#) [EMVK350ADA100ME55G](#) [EMVK350ADA101MJA0G](#)
[EMVK350ADA220MF55G](#) [EMVK350ADA221MJA0G](#) [EMVK350ADA330MH60G](#) [EMVK350ADA470MHA0G](#)
[EMVK350ADA4R7MD55G](#) [EMVK350ARB220MF60G](#) [EMVK500ADA100MF55G](#) [EMVK500ADA101MJA0G](#)
[EMVK500ADA1R0MD55G](#) [EMVK500ADA2R2MD55G](#) [EMVK500ADA3R3MD55G](#) [EMVK500ADA470HA0G](#)
[EMVK6R3ADA101MF55G](#) [EMVK6R3ADA331MHA0G](#) [EMVK6R3ADA470ME55G](#) [EMVK6R3ADB101MF60G](#)