

Alchip™-MVK-BP Series



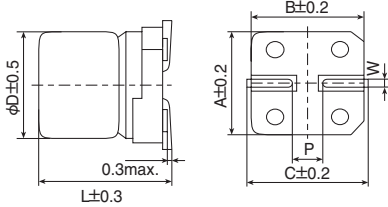
- Bi-polar chip type for the circuit, of which polarity is frequently reversed
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS Compliant

◆ 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=0.05CV or 10μA, 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 |
| | tan δ (Max.) | 0.35 | 0.26 | 0.24 | 0.20 | 0.18 | 0.18 |
| Low Temperature Characteristics (Max. Impedance Ratio) | Rated voltage (V _{dc}) | 6.3V | 10V | 16V | 25V | 35V | 50V |
| | 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 1,000 hours at 105°C, however the polarization shall be reversed every 250 hours. | | | | | | |
| | Capacitance change | ≤ ±30% of the initial value | | | | | |
| | D.F. (tan δ) | ≤ 300% of the initial specified value | | | | | |
| | Leakage current | ≤ The initial specified value | | | | | |
| Shelf Life | The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 500 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. | | | | | | |
| | Capacitance change | ≤ ±25% of the initial value | | | | | |
| | D.F. (tan δ) | ≤ 200% of the initial specified value | | | | | |
| | Leakage current | ≤ The initial specified value | | | | | |

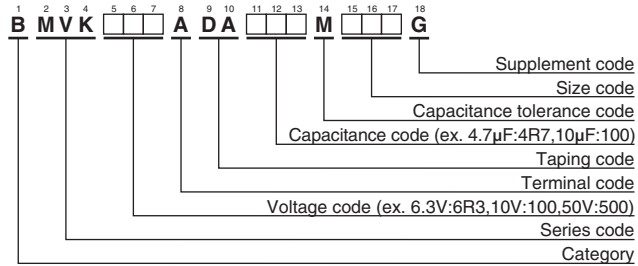
◆ DIMENSIONS [mm]

● Terminal Code : A



| Size code | D | L | A | B | C | W | P |
|-----------|-----|-----|-----|-----|-----|------------|-----|
| D60 | 4 | 5.7 | 4.3 | 4.3 | 5.1 | 0.5 to 0.8 | 1.0 |
| E60 | 5 | 5.7 | 5.3 | 5.3 | 5.9 | 0.5 to 0.8 | 1.4 |
| F60 | 6.3 | 5.7 | 6.6 | 6.6 | 7.2 | 0.5 to 0.8 | 1.9 |

◆ PART NUMBERING SYSTEM



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

◆ MARKING

EX) 35V4.7μF



◆ STANDARD RATINGS

| WV (V _{dc}) | Cap (μF) | Size code | tan δ | Rated ripple current (mArms/105°C, 120Hz) | Part No. |
|-----------------------|----------|-----------|-------|---|--------------------|
| 6.3 | 10 | D60 | 0.35 | 14 | BMVK6R3ADA100MD60G |
| | 22 | E60 | 0.35 | 25 | BMVK6R3ADA220ME60G |
| | 47 | F60 | 0.35 | 39 | BMVK6R3ADA470MF60G |
| 10 | 33 | F60 | 0.26 | 35 | BMVK100ADA330MF60G |
| 16 | 4.7 | D60 | 0.24 | 12 | BMVK160ADA4R7MD60G |
| | 10 | E60 | 0.24 | 20 | BMVK160ADA100ME60G |
| | 22 | F60 | 0.24 | 32 | BMVK160ADA220MF60G |
| 25 | 3.3 | D60 | 0.20 | 10 | BMVK250ADA3R3MD60G |
| 35 | 2.2 | D60 | 0.18 | 8.8 | BMVK350ADA2R2MD60G |
| | 4.7 | E60 | 0.18 | 15 | BMVK350ADA4R7ME60G |
| | 10 | F60 | 0.18 | 23 | BMVK350ADA100MF60G |
| 50 | 1.0 | D60 | 0.18 | 5.5 | BMVK500ADA1R0MD60G |
| | 2.2 | E60 | 0.18 | 10 | BMVK500ADA2R2ME60G |
| | 3.3 | E60 | 0.18 | 13 | BMVK500ADA3R3ME60G |
| | 4.7 | F60 | 0.18 | 16 | BMVK500ADA4R7MF60G |