

BDA Series

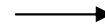
● 105°C 2,000Hrs assured

- Vertical SMD type
- Long life of MVK Series.
- Ecological capacitors are also available

Solvent-
proof



MVK



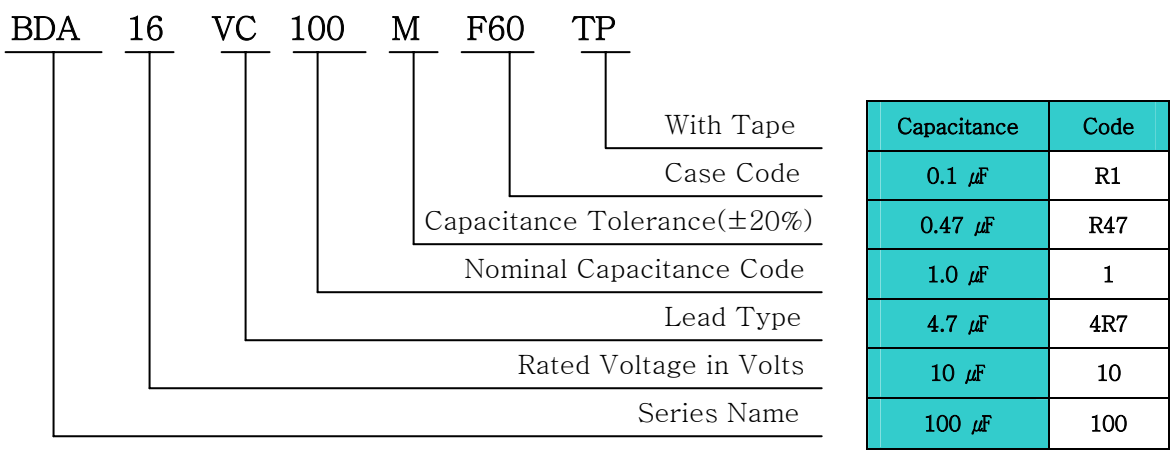
BDA

Long life

SPECIFICATIONS

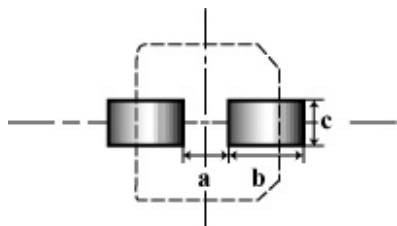
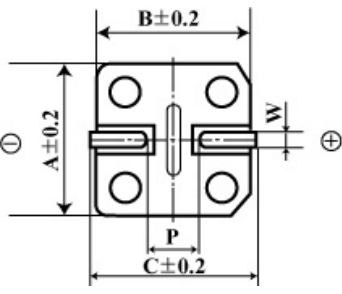
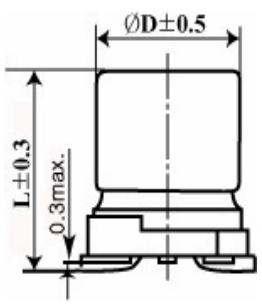
| Item | Characteristics | | | | | | | | |
|---|---|---------------------------------------|------|------|------|-----------------------------|------|------|--|
| Rated Voltage Range | 4 ~ 35V _{DC} | | | | | | | | |
| Operating Temperature Range | -40 ~ + 105°C | | | | | | | | |
| Capacitance Tolerance | ±20% (M) (at 20°C, 120Hz) | | | | | | | | |
| Leakage Current | I = 0.01CV(μA) or 3μA, whichever is greater Where, I : Leakage current(μA), C : Nominal capacitance(μF), V: Rated voltage(V _{DC}) (at 20°C, 2 minutes) | | | | | | | | |
| Dissipation Factor Tanδ(Max.) | Rated Voltage(V _{DC}) | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | |
| | Tanδ(Max.) | 0.37 | 0.28 | 0.24 | 0.20 | 0.16 | 0.13 | 0.12 | |
| (at 20°C, 120Hz) | | | | | | | | | |
| Temperature Characteristics (Max. Impedance ratio) | Rated Voltage(V _{DC}) | 4 | 6.3 | 10 | 16 | 25 ~ 50 | | | |
| | Z(-25°C)/Z(20°C) | 6 | 3 | 3 | 2 | 2 | | | |
| | Z(-40°C)/Z(20°C) | 12 | 8 | 5 | 4 | 3 | | | |
| (at 120Hz) | | | | | | | | | |
| Load Life | The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied for 2,000 hours. 105°C. | | | | | | | | |
| | Rated Voltage(V _{DC}) | 4 ~ 16 V _{DC} | | | | 25 ~ 50 V _{DC} | | | |
| | Capacitance change | ≤ ±25% of the initial value | | | | ≤ ±20% of the initial value | | | |
| | Tanδ | ≤ 200% 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 1,000hours at 105°C without voltage applied. The rated voltage shall be applied to the capacitors for a Minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements. | | | | | | | | |
| | Rated Voltage(V _{DC}) | 4 ~ 16 V _{DC} | | | | 25 ~ 50 V _{DC} | | | |
| | Capacitance change | ≤ ±25% of the initial value | | | | ≤ ±20% of the initial value | | | |
| | Tanδ | ≤ 200% of the initial specified value | | | | | | | |
| Leakage current | ≤ The initial specified value | | | | | | | | |
| Others | Satisfied characteristics W of KS C 6421 | | | | | | | | |

PART NUMBERING SYSTEM



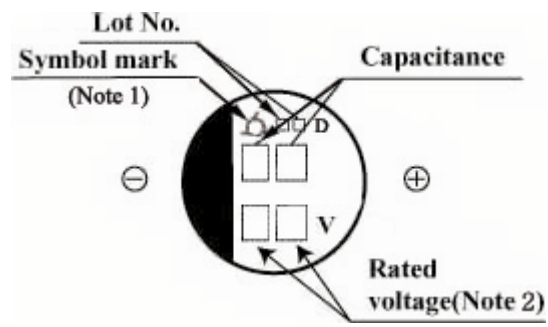
DIMENSIONS OF BDA Series (Type : VC)

DIMENSIONS



Solder pad on PC board

MARKING



Note 1: 4 × 5.2(D55), 5 × 5.2(E55) is excluded symbol mark.

Note 2: 6.3WV is marked by 6V.

Note 3: Case Color ; Clarity Green

| Case code | Ø D | L | A | B | C | W | P | a | b | C |
|-----------|-----|-----|-----|-----|-----|---------|-----|-----|-----|-----|
| D55 | 4 | 5.2 | 4.3 | 4.3 | 5.1 | 0.5-0.8 | 1.0 | 1.0 | 2.6 | 1.6 |
| E55 | 5 | 5.2 | 5.3 | 5.3 | 5.9 | 0.5-0.8 | 1.4 | 1.4 | 3.0 | 1.6 |
| F55 | 6.3 | 5.2 | 6.6 | 6.6 | 7.2 | 0.5-0.8 | 1.9 | 1.9 | 3.5 | 1.6 |
| F60 | 6.3 | 5.7 | 6.6 | 6.6 | 7.2 | 0.5-0.8 | 1.9 | 1.9 | 3.5 | 1.6 |

RATINGS OF BDA Series

| V_{DC} | 4(0G) | | 6.3(0J) | | 10(1A) | | 16(1C) | | 25(1E) | | 35(1V) | | 50(1H) | |
|----------|-------|----|---------|----|--------|----|--------|-----|--------|----|--------|----|--------|-----|
| μF | | | | | | | | | | | | | | |
| 0.1 | | | | | | | | | | | | | D55 | 1.3 |
| 0.22 | | | | | | | | | | | | | D55 | 2.6 |
| 0.33 | | | | | | | | | | | | | D55 | 3.2 |
| 0.47 | | | | | | | | | | | | | D55 | 3.8 |
| 1 | | | | | | | | | | | | | D55 | 5.6 |
| 2.2 | | | | | | | | | | | | | D55 | 10 |
| 3.3 | | | | | | | | | | | | | D55 | 14 |
| 4.7 | | | | | | | | | D55 | 13 | D55 | 15 | E55 | 19 |
| 10 | | | | | | | D55 | 16 | E55 | 25 | E55 | 25 | F55 | 29 |
| 22 | D55 | 19 | D55 | 21 | E55 | 30 | E55 | 30 | F55 | 40 | F55 | 40 | | |
| 33 | E55 | 30 | E55 | 34 | E55 | 34 | F55 | 45 | F55 | 45 | | | | |
| 47 | E55 | 34 | E55 | 36 | F55 | 48 | F55 | 48 | F60 | 52 | | | | |
| 100 | E55 | 45 | F60 | 56 | F60 | 90 | F60 | 110 | | | | | | |

▲ Permissible Ripple Current(mArms/105°C, 120Hz)

▲ Case Code