

ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UBH

Chip Type, High Temperature Range,
Vibration Resistance
Low temperature ESR specification



- Highly dependable reliability withstanding load life of 1500 to 2000 hours at +150°C, Low temperature ESR.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).
- AEC-Q200 Qualified. Please contact us for details.

UBH

Long Life

UBC



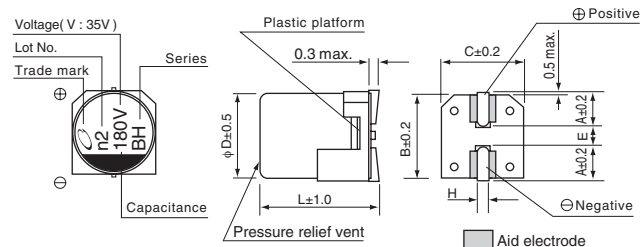
Specifications

| Item | Performance Characteristics | | | | |
|-------------------------------|---|---------------------|------|--------------------|---|
| Category Temperature Range | -40 to +150°C | | | | |
| Rated Voltage Range | 25 to 35V | | | | |
| Rated Capacitance Range | 100 to 270μF | | | | |
| Capacitance Tolerance | ±20% at 120Hz, 20°C | | | | |
| Leakage Current ※ | After 2 minute's application of rated voltage at 20°C, leakage current is not more than 0.01CV . | | | | |
| Tangent of loss angle (tan δ) | Rated voltage (V) | 25 | 35 | 120Hz at 20°C | |
| | tan δ (max.) | 0.16 | 0.14 | | |
| Stability at Low Temperature | Rated voltage (V) | 25 | 35 | 120Hz | |
| | Impedance ratio ZT/Z20 (max.) | Z-(40°C) / Z(+20°C) | 6 | | |
| Endurance | The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 150°C (φ8 = 1500 hours) . | | | Capacitance change | Within ±40% of the initial capacitance value |
| | | | | tan δ | 400% or less than the initial specified value |
| | | | | Leakage current | Less than or equal to the initial specified value |
| Shelf Life | After storing the capacitors under no load at 150°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above. | | | | |
| Resistance to soldering heat | The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C. The capacitors shall meet the characteristic requirements listed at right when they are removed from the plate and restored to 20°C. | | | Capacitance change | Within ±10% of the initial capacitance value |
| | | | | tan δ | Less than or equal to the initial specified value |
| | | | | Leakage current | Less than or equal to the initial specified value |
| Marking | Black print on the case top. | | | | |

※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

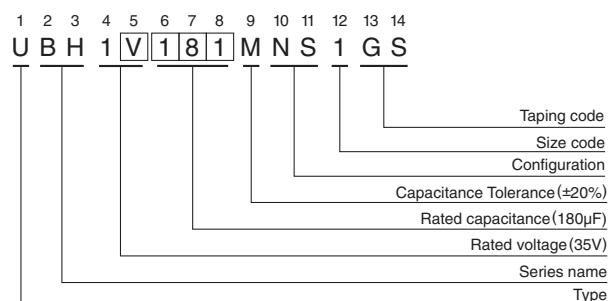
Chip Type

(φ8, φ10) 【Vibration Resistance】



| φDXL | 8x10 | 10x10 |
|------|------------|------------|
| A | 2.9 | 3.2 |
| B | 8.3 | 10.3 |
| C | 8.3 | 10.3 |
| E | 3.1 | 4.5 |
| L | 10 | 10 |
| H | 1.1 to 1.5 | 1.1 to 1.5 |

Type numbering system (Example : 35V 180μF)



| Voltage | | |
|---------|----|----|
| V | 25 | 35 |
| Code | E | V |

Frequency coefficient of rated ripple current

| Frequency | 120 Hz | 300 Hz | 1 kHz | 10kHz or more |
|-------------|--------|--------|-------|---------------|
| Coefficient | 0.67 | 0.79 | 0.91 | 1.00 |

Dimensions

| Rated Voltage (V) (code) | Rated Capacitance (μF) | Case Size φD×L (mm) | tan δ | Leakage Current (μA) (at 20°C after 2 minutes) | ESR (Ω) max. | | Rated Ripple (mAmps) (150°C/100kHz) | Part Number |
|--------------------------|------------------------|---------------------|-------|--|---------------------|----------------------|-------------------------------------|----------------|
| | | | | | Initial 20°C 100kHz | Initial -40°C 100kHz | | |
| 25 (1E) | 150 | 8×10 | 0.16 | 37.5 | 0.26 | 4.5 | 80 | UBH1E151MNS1GS |
| | 270 | 10×10 | 0.16 | 67.5 | 0.15 | 2.0 | 120 | UBH1E271MNS1GS |
| 35 (1V) | 100 | 8×10 | 0.14 | 35.0 | 0.26 | 4.5 | 80 | UBH1V101MNS1GS |
| | 180 | 10×10 | 0.14 | 63.0 | 0.15 | 2.0 | 120 | UBH1V181MNS1GS |

- For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.

CAT.8100M