

ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

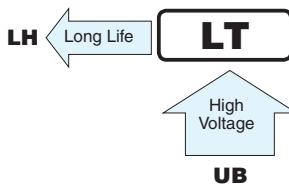


Chip Type, High Voltage.
High Temperature Range.
series



Upgrade

- Chip type, high voltage and high temperature range.
- Load life of 2000 hours at +125°C.
- Applicable to automatic mounting machine using carrier tape.
- Compliant to the RoHS directive (2011/65/EU).



■ Specifications

| Item | Performance Characteristics | | | | | |
|-------------------------------|---|--------------------------------|------|--------------------------------|--------------------|---|
| Category Temperature Range | -40 to +125°C | | | | | |
| Rated Voltage Range | 160 to 500V | | | | | |
| Rated Capacitance Range | 1.8 to 33μF | | | | | |
| Capacitance Tolerance | ±20% at 120Hz, 20°C | | | | | |
| Leakage Current | Rated voltage (V) | 160~450 | | 500 | | |
| | - | 0.04CV+100(μA)max.(1 minute's) | | 0.04CV+200(μA)max.(1 minute's) | | |
| Tangent of loss angle (tan δ) | Rated voltage (V) | 160 | 200 | 250 | 400 | 450 |
| | tan δ (MAX.) | 0.20 | 0.20 | 0.25 | 0.25 | 0.30 |
| Stability at Low Temperature | Measurement frequency : 120Hz | | | | | |
| | Rated voltage (V) | 160 | 200 | 250 | 400 | 450 |
| | Impedance ratio ZT / Z20 (MAX.) | Z-40°C / Z+20°C | 6 | 6 | 10 | 15 |
| 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 125°C. | | | | Capacitance change | Within ±30% of the initial capacitance value |
| | | | | | tan δ | 300% 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 125°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 and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the characteristic requirements listed at right when they are removed from the plate. | | | | Capacitance change | Within ±10% of the initial capacitance value |
| | | | | | tan δ | Less than or equal to the initial specified value |
| Marking | Black print on the case top. | | | | | |

■ Chip Type

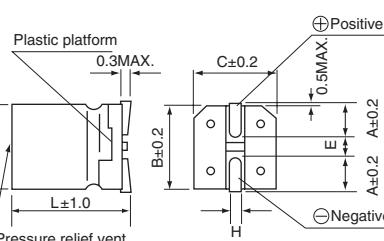
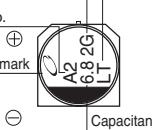
(φ8 × 10L, φ10)

Voltage(2G : 400V)

Lot No.

Trade mark

Capacitance



| (mm) | 8x10 | 10x10 | 10x13.5 |
|------|------------|------------|------------|
| A | 2.9 | 3.2 | 3.2 |
| B | 8.3 | 10.3 | 10.3 |
| C | 8.3 | 10.3 | 10.3 |
| E | 3.1 | 4.5 | 4.5 |
| L | 10 | 10 | 13.5 |
| H | 0.8 to 1.1 | 0.8 to 1.1 | 0.8 to 1.1 |

| Voltage | V | 160 | 200 | 250 | 400 | 450 | 500 |
|---------|----|-----|-----|-----|-----|-----|-----|
| Code | 2C | 2D | 2E | 2G | 2W | 2H | |

■ Dimensions

| Cap.(μF) | V | 160 | 200 | 250 | 400 | 450 | 500 |
|----------|-----|---------|-----|---------|-----|---------------------------|--------------|
| Code | | 2C | 2D | 2E | 2G | 2W | 2H |
| 1.8 | 1R8 | | | | | | |
| 3.3 | 3R3 | | | | | | |
| 3.9 | 3R9 | | | | | | |
| 4.7 | 4R7 | | | | | | |
| 5.6 | 5R6 | | | | | | |
| 6.8 | 6R8 | | | | | | |
| 7.5 | 7R5 | | | | | | |
| 8.2 | 8R2 | | | | | | |
| 10 | 100 | | | | | | |
| 12 | 120 | | | | | | |
| 15 | 150 | 8x10 | 45 | | | | |
| 18 | 180 | | | 10x10 | 45 | | |
| 22 | 220 | 10x10 | 60 | 10x13.5 | 50 | | |
| 27 | 270 | | | 10x13.5 | 65 | | |
| 33 | 330 | 10x13.5 | 65 | | | | |
| | | | | | | Case size φ D × L (mm) | Rated ripple |

Rated ripple current (mA rms) at 125°C 120Hz

● Frequency coefficient of rated ripple current

| Frequency | 50 Hz | 120 Hz | 300 Hz | 1 kHz | 10 kHz or more |
|-------------|-------|--------|--------|-------|----------------|
| Coefficient | 0.70 | 1.00 | 1.17 | 1.36 | 1.50 |

- Taping specifications are given in page 23.
- Recommended land size, soldering by reflow are given in page 18, 19.
- Please refer to page 3 for the minimum order quantity.

CAT.8100D